

**DEVELOPING STRATEGIES FOR TEACHING AURAL MUSICIANSHIP IN
KENYAN SECONDARY SCHOOLS**

**BY
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DECLARATION

I declare that this is my work and that it has not been presented elsewhere for the award of any degree whatsoever.

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DEDICATION

This work is dedicated to my family for all their support and encouragement: To my beloved parents, the late Ibrahim Mbeche and Monica Nyabiya, who were a source of encouragement to me; to my brothers, the late Felix and Donald who encouraged me to soldier on and to my husband George and my children, Derrick, Wesley and Debra for all their support when I was doing this work.

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DEFINITION OF TERMS

In this study, the following terms assumed the definitions accorded to them below.

Aesthetic Awareness: The ability to appreciate the beauty of music which is made possible as a result of having a thorough knowledge of music. This comprises theoretical music knowledge as well as a developed inner ear.

Audition: Having a comprehensive understanding of music which involves theoretical knowledge and a developed inner hearing.

Aural Musicianship: A process involving music activities where learners engage in identification and discrimination of sounds, thereby exercising their mental hearing.

Aural Perception: The ability to understand and interpret music as a result of developed inner hearing.

Aural Training: A conscious and deliberate effort on the part of the teacher in helping learners to be sensitive to musical sound by engaging them in music activities that lead to the development of sound identification and discrimination skills culminating in the development of the inner hearing.

Hand signs: Hand movements, developed by John Curwen (1870) is a method where particular gestures are used to denote certain pitches. Hand signs enable students to visualize the distance in pitch between two notes.

Mental Hearing: The ability to hear in the mind sounds printed on paper. It involves 'seeing' with the ears and 'hearing' with the eyes.

Music Education: A process in which students learn through music making and engaging in their own music as well as that of other people's cultures. They become sensitive to the beauty of music and are able to create their own music due to formal knowledge and skills (for example musicianship skills) imparted to them.

Teaching Model: A template that could be used to structure students' learning activities in a sequence to ensure that their aural acuity improves.

ACRONYMS AND ABBREVIATIONS

ABRSM:	Associated Board of the Royal Schools of Music
ANCOVA:	Analysis of Covariance
KNEC:	Kenya National Examinations Council
KCPE:	Kenya Certificate of Primary Education
KCSE:	Kenya Certificate of Secondary Education
KIE:	Kenya Institute of Education
KMF:	Kenya Music Festival
NHST:	Null Hypothesis Statistical Technique
SPSS:	Statistical Package for Social Sciences
TTC:	Teachers Training College

ABSTRACT

Many scholars, for example Kodaly, Dalcroze and Campbell would argue for the important role of aural musicianship in Music Education. One of the purposes of Music Education is the creation of an environment in which the human potential is nurtured to bring forth and understand a variety of musical experiences. Music is a phenomenon that is experienced through the ear so the basis of all instructional programmes should be the cultivation of an acute musical ear, which is developed when emphasis in music is focused on auditory discrimination and analysis. The ability to discriminate aurally between sounds leads to aesthetic growth and sensitivity, which enables one to respond to music aesthetically, intellectually and emotionally, thereby gaining deeper meaning from musical experiences. The main aim of this study was to develop strategies for teaching aural musicianship in Kenyan secondary schools. It was noted that a majority of candidates taking the Kenya Certificate of Secondary Examination (hereafter KCSE) consistently perform poorly in aural musicianship, a situation that warrants further investigation to determine the causes. Purposive sampling was used to select schools offering music as a subject. Out of twenty schools, six were selected to form the sample. The study was conducted using quasi-experimental method of research. Selected experimental groups were exposed to newly-developed teaching strategies while the control group continued with the current methods used by teachers (described later in the document). In terms of data organization, the randomized pre-test post-test control group experimental design was used for generation of appropriate data. Among data collection instruments used were interview schedules, questionnaires, attitude scales and non-participant observation. Data from the questionnaires were coded using Statistical Package for Social Sciences. Descriptive and inferential statistics were used; descriptive statistics used were tables, graphs and charts while inferential statistics used included the T-test for independent means, Analysis of Covariance, effect size index and the Null Hypothesis Statistical Technique. Findings from the study revealed that systematic teaching or sequential instruction has great potential for improvement of aural musicianship performance. Established teaching strategies employed by the teachers gave little empowerment to the students to do aural work on their own. A variety of teaching resources for aural musicianship were available but teachers lacked

essential skills for their use in teaching aural skills. Unfortunately, data showed that some of the teachers did not understand the importance of, or what aural training entailed. This may have led to their negative attitude towards aural training, which in turn spread to some students. To counter this, the study generated a learning sequence based on readily available song material for teaching aural musicianship to secondary school learners in Kenya but the approach is applicable in similar circumstances elsewhere. Some of the recommendations made after the study were that methods used should be informed by current research trends and approaches; that curriculum developers should design the course in a way that music knowledge acquired in other areas of the curriculum is synthesized; and above all, since music education develops in the social, cultural and economic context within a society, the rich cultural heritage of available folk music should be used consistently to teach music concepts and procedures in the classroom, commensurate with modern trends in music education. While music is no longer being offered as an examinable subject at KCSE level, it is critical for those music teachers who have the opportunity to participate and teach aural musicianship with the serious approach it deserves, to have this as a mind set and a way of conducting instructional activity.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Aural training is part of any meaningful music education program. It forms part of general music education and is consequently an important component of the Kenyan Secondary School Music syllabus. Hoffer (1964:156) argues that in connection with language, aural experience is a necessary antecedent to visual experience. Since understanding music involves work with sound, teaching music should proceed from aural to printed symbols and should be learnt in the same manner as language:

By the time a child enters first grade, he has an understanding vocabulary of twenty thousand words and three to four years' practice in speaking the language. It is after all this experience that he begins to see the printed symbols that represent what he has been saying.

It is the contention of this study that aural musicianship ought to be constructed and approached in a similar fashion.

Leonhard and House (1972) state that musical learning depends upon the impressions received by the senses. It involves hearing, sight and kinaesthetic feel and hearing merits primary emphasis. However, they regret that much musical learning goes on without due emphasis on musical hearing. They argue that music learning should focus on ear training and the other aspects like sight and kinaesthetic feel ought to be realized after the establishment of aural concepts.

In addition, fully developed aural skills are essential to a performer who needs to understand the aural forces that interrelate to produce the music he or she is performing. This is especially true for singers and performers of woodwind and brass instruments who have to 'hear' the right pitches before singing or playing them. Aural skills are also useful for composers who need to 'hear' in their mind the music they ultimately have to put down in their scores. Without a 'developed ear' one can not be a critical listener of music, neither can one respond and relate intimately to music as an aesthetic entity. Sight singing, which is very useful to the life of every musician, depends upon one's ability to 'hear' the pitches in the

mind, especially for woodwinds and brass instruments. The ability to sight sing enables a musician to hear errors in a piece of music that is being performed. Peters and Miller (1982) conclude that if one can not sight sing then one can not hear well enough to be called a musician.

This researcher's experience as a teacher of aural musicianship at the university has shown that a good number of students who enrol to pursue music **studies** perform poorly in aural musicianship classes. With regard to their aural musicianship grounding, the majority have had very little, if any, exposure to aural musicianship before joining the university. A Research study carried out by Mbeche (2003) confirms that university students have difficulties in performing aural tasks.

The present study is an outgrowth of a previous study (Beech, 2000) validated by concern regarding music performance, for instance Digolo (1997), Njoora (2000), Mwangi (2000) and Akuno (2005). The study by Mbeche (2000) focused on factors affecting student performance of aural tasks at Kenya Certificate of Secondary Education (KCSE) examinations in Nairobi secondary schools. The main focus of that study was to investigate the reasons for consistent poor performance in aurals and practical musicianship as expressed by Digolo (1997) and later echoed by Auma, (2005). Similar sentiments had been expressed earlier in the Kenya National Examinations Council (1994) report which showed that a majority of music candidates portrayed weaknesses in practical and aural music.

Some of the objectives of Mbeche's (2000) study were to find out:

a) Whether aural training was provided for secondary school music students; b) Which teaching resources were used in aural training; and the c) Methods applied by the teachers;

While there were several significant findings, conclusions drawn from the study revealed that there was:

- i) Limited and irregular instruction in aural musicianship;
- ii) Inconsistent application of teaching strategies that did not meet students' learning needs; and

- iii) Lack of adequate resources, in terms of music literature, outlining how aural training should be carried out.

Other studies, for instance, Mwangi (2000) and Wanjala, (2004) observe that part of the problem is inadequate training at the Teacher Training Colleges (TTCs), while some teachers are not proactive in the development of requisite instructional skills. However, many of the teachers that took part in that study (Mbeche, 2000) were formally (professionally) trained, so the apparent dismal performance in aurals raised disturbing questions. In an effort to provide possible solutions, the study made the following recommendations:

- i) Provision of more learning resources for aural musicianship;
- ii) Development and adaptation of a practical approach to teaching music to ensure better student learning outcomes.

Given the background of unacceptable aurals performance, it was natural to follow up the Mbeche (2000) study by probing deeper into the causes of poor performance. Therefore the purpose of this current study was to advocate for improvement in performance of aural skills by developing a systematic mode of instruction for aural musicianship at secondary school level in Kenya.

1.2 Statement of the Problem

Music as an art appeals to human emotions through the aural sense. A fully developed sense of aural perception is essential to the musician in the same way that developed visual sense is essential for appreciation and discrimination of colour for the artist (Langley, 1976).

The present Kenyan Secondary School Music Syllabus (KNEC, 2004), documents that aural work consists mainly of rhythm, pitch and harmony. Learners are expected to notate melodies and rhythms dictated to them, identify various intervals, cadences and modulations. Unfortunately there has been poor performance in this area, yet no tangible measures have been put in place to ensure that instruction is enhanced.

Music educators and other musicians agree that one of the goals of music education should be to help people develop what is sometimes called the ‘inner ear’, a library of musical possibilities which people draw on in performance (Swanwick, 1994). Music learning is

cumulative and requires that previously mastered skills be employed in new situations. Some of the research studies that have focused on aural musicianship are; Factors affecting students' performance in aurals in Kenyan secondary schools (Mbeche,2000); Problems of teaching aurals and music literacy in Kenya (Katuli, Ogalo and Kahindi,2003) and Music aural performance in Kisumu and Nyando districts in Kenya (Auma,2005). These studies focused on the challenges of teaching and learning aurals. The development of strategies that specifically address aural training has not received scholarly attention.

Given the background and poor performance of aurals, the main problem of the current study was to develop specific teaching strategies which would ultimately assist with learners' assimilation of music concepts and development of requisite aural skills, which would ultimately lead to the development of the inner ear.

1.3 Research Questions

- a) This study posed the following research questions:
- b) What instructional strategies and resources do teachers use in teaching aural musicianship?
- c) What learning activities do students engage in to enhance development of the inner
- d) How can aural skills be taught to raise efficiency in musicianship?

1.4 Objectives of the Study

The main objective of this study was to develop teaching strategies for aural musicianship for use in Kenyan Secondary Schools. The specific objectives were to:

- a) Identify instructional strategies used in teaching aural musicianship;
- b) Assess music students' attitudes towards aural training;
- c) Identify learning activities that students engage in to enhance development of aural skills.
- d) Develop instructional strategies that could enhance the development of aural skills.

1.5 Assumptions of the Study

The study was based on the following assumptions:

- a) Well grounded aural concepts lead to an overall better musician;

- b) Students are capable of developing good aural techniques with requisite instructional strategies;
- c) Students' sight reading ability is an important indicator of their aural musicianship.

1.6 Rationale of the Study

Many researchers (see background information) have underscored the importance of aural musicianship which is essential for the development of every musician. However music students continue to perform poorly in this important area. (Leonhard and House, 1972; Brocklehurst, 1971; Stowasser, 1991; Szabo, 1996; Kelly, 2002 and Green, 2005).

Recent research on aural training has focused on various issues: the development of a model of pitch discrimination which is essential to the selection of an appropriate curriculum design and pedagogy (Bahr, 1998); factors affecting students' performance in aurals (Mbeche 2000); problems of teaching aurals and music literacy in Kenyan schools (Katuli, Ogalo and Kahindi, 2003) and music aural performance in secondary schools (Auma, 2005). Inference drawn from these researches is that aural skills are very important and pertinent to a musician's training. This study was undertaken to provide direction for the improvement of teaching of aural musicianship which none of the earlier studies developed. The experience of this researcher in teaching music at the Teacher Training Colleges (TTC-Primary level) and at the university re-affirms a situation where no aural training is given in the TTCs. Lack of music teachers at the secondary school led to the promotion of primary school music teachers who were lacking in aural skills (Wanjala,2004). As part of the curriculum requirements, learners should be able to read and write music and express their own ideas and experiences through composing music. It is therefore important for the teachers to be equipped with these skills to enable them to impart the same knowledge to the students and to develop students' aesthetic sensitivity.

In Kenya today, many young people are venturing into the entertainment industry, by composing and performing music to the public. Swanwick (1979) states that the activities of composition, audiation and performance are inter-related and an improved performance of one of them would lead to improvement in the others as well. A good foundation in aural musicianship would enhance learners' compositional skills and enable them to compose creatively. It is hence necessary to develop programmes that will ensure efficient learning

and boost individual's overall musicianship. Furthermore, Ondieki (2003) indicates that due to the aural nature of music for the hotel/entertainment industry, there is need to develop the inner ear for those who play by ear, for better performance. This study was necessary in order to find a way towards complete development of the musician.

1.7 Significance of the Study

One of the aspirations of this current research was to develop strategies for the teaching of aural musicianship in the secondary schools. The strategies would act as a template for the teachers in structuring the learning activities which could raise the efficiency and quality of their instructional input and fill the gap experienced by teachers who are at a loss on how to handle the subject area. Resultant teaching strategies were based on a theoretical framework which would guide its implementation. This information should be useful and available for music teachers who can then decide on how to sequence instruction in music classrooms. The information should serve as a guide to curriculum planners in the improvement of curriculum development and instruction.

The study proposed a framework that should guide Kenyan teachers on the implementation of the aural component of the secondary school curriculum. The framework is based on sequential learning which leads to a knowledge of music where learners not only acquire an understanding of the theory of music but also play music instruments and develop their inner ear, which would then enable them to listen to music critically.

The study advocated for the use of indigenous music in teaching aural musicianship because this music is available and can be used in classroom settings to explain various music concepts. Indigenous music is useful for transmission of cultural values and traditions to ensure that there is promotion and continuity of culture. Promoting and enhancing national unity by appreciating and performing indigenous music is one of the objectives of music education in Kenya. Learners would easily identify with this music and they would be able to connect experiences in the music class to the music outside class.

1.8 Scope and Limitations

This study was conducted in two urban areas, that is, Nairobi and Nyanza Provinces of Kenya. These two provinces have schools where music is taught at O level (KCSE) and they provided a rich social/cultural/economic background for the study. Due to limitations of time and resources, only two provinces were considered for the study. As a result of observed similarities in provision for learning nationally, it was hoped that results can be applicable to other provinces.

Another limitation that was beyond the researcher's control was the interruptions on the school timetable by events such as drama festivals and other school activities which had an impact on the administration of the experiment. Despite the inter-relatedness of all areas of music, the study focused on aurals. The only aspect of literacy which was incorporated was translation of music symbols to sound and sight reading because the aural component of the curriculum requires learners to sight sing and read melodies in both staff and sol-fa notation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

Aural musicianship teaching in secondary schools in Kenya has faced many challenges in the past. There have been inadequate teaching resources and lack of proper teaching strategies to enable learners assimilate the required knowledge and skills (Digolo, 1997; Mbeche, 2000 and Auma, 2005). This chapter reviews literature and findings of other studies that provided a rationale for the present study. The literature was reviewed under the following headings:

- a) Music Education: Some Basic Principles;
- b) Music Education in Kenya: From Pre-Colonial to Post-Independence Period;
- c) Music Education in the Secondary School;
- d) Aural Musicianship in the Secondary Schools;
- e) Theoretical Framework.

2.2 Music Education: Some Basic Principles

History will show that no human culture appears to be without music. In most cultures, music has functions other than entertainment and aesthetic expressions for individuals: for example the use of music by political parties and its role in social institutions, military and sporting functions, weddings, funerals and its pivotal role in almost all dance performances (Hallam, 2001). Among the ancient Greeks and during the Renaissance and Baroque periods, basic knowledge of music was expected as part of total human socialization. Another example given by Sifuna and Otiende (1992) is in India where music was largely taught for recreational, moral and religious formation and was also included in the elementary school curriculum.

Music Education has been defined and conceptualized in various ways and its functions articulated by a number of authors. Hoskyns (1996) defines music education as a process in which a human being becomes aware of and is sensitive to music, develops an understanding of its functions and meaning and at the same time enjoys being involved with it in a discriminating way. This process, he says, should stimulate and encourage the development

of the imagination as well as the emotions. This perspective supports the study's move to equip learners with discrimination skills.

Reinforcing this perception, Bowman (2002) adds the dimension of instruction and defines music education as the business of helping students to understand, appreciate, respond to, create and engage meaningfully in music. He further notes that musical instruction consists of techniques and methods for developing aspects like musicianship, literacy and music appreciation. However, he insinuates that there are those who equate education with schooling and see the role of music education as 'schooling' children in musical 'subject matter'. All teaching and learning activities directed to that end are seen to be instances of music education. In this study, instruction was enhanced by using strategies that incorporated the aural, visual and kinesthetic activities to develop the learners' aural musicianship.

However, Durrant and Welch (1995) argue that music education needs to be concerned with the contribution music can make to the development of the individual irrespective of cultural and societal influences. On the other hand, Swanwick and Taylor (1982) advocate for an approach to music education that emphasizes, among other things, the development of skills, information and musical understanding through the activities of composition, performance and listening. These three musical experiences, they argue, are observable and interrelated. These activities are practical in nature and they promote aural perception, music imagination, sensitivity and discrimination. In contrast Hoskyns (1996) regards 'musical education' as a process by which an individual develops an understanding of music, which is highly concentrated and professional, occurring as a result of performing on an instrument or being involved in composing as an active pursuit. The results of an effective musical education should be a highly developed musical awareness and the potential to become a musician.

Elliot (1995) supports these definitions and he categorises the meaning of music education into four areas. These are:

- a) Education *in music* which involves teaching and learning of music making and music listening;

- b) Education *about music* which involves teaching and learning formal knowledge about music making, music listening, music history and music theory;
- c) Education *for music* which may be taken in two ways; either teaching and learning as preparation for beginning to study music or preparation for a career as a performer, composer, historian, critic researcher or teacher; and
- d) Education *by means of music* which overlaps with the first three.

These paradigms highlight a number of important areas, ways in which music permeates our everyday life especially in a learning environment. All these categories were relevant to the study in that the proposed teaching strategies involved music making, listening and music theory in the hope that learners would derive pleasure from engaging in classroom music and ultimately be musically educated.

Bebey (1975) describes music as an integral part of African life from the cradle to the grave while Nketia (1975) observes that in traditional African societies, the cultivation of a musical life is promoted through active participation in group life rather than through the creation of special music institutions. Omibiye-Obidike (1992) observes that the traditional music of the African communities, has two stages, the first being music education that is received at birth and goes on throughout an individual's life, providing the individual with a relevant cultural identity. The second is a professional music education whose aim was to produce skilled performers for the community. Bessom (1980) concurs with this idea and he states that the role of music education in secondary schools is to develop music understanding and appreciation through the ability to perceive and react that is, to experience music aesthetically which is done by providing opportunities for all students' musical growth and discovering those that are musically talented and furnishing them with experiences that extend beyond those in the core of general education.

Nketia (1988) describes the learning process where the learners rely on their imitative ability. They use their own eyes, ears and memory and acquire their own technique of learning. An inference made from this statement is that in traditional African societies learning techniques are acquired through aural and visual senses. This study was aimed at using teaching

strategies that incorporate aural and visual activities to equip learners with skills aimed at developing their aural acuity using the locally available African indigenous music materials.

Leonhard (1982:23) sums up the importance of music education, stating that:

The strength of music as an art and the reason every society has nurtured and valued its music lie in the strong appeal of music to the life of feeling and to the imagination. The potential strength and value of the music education programme lie in the development of responsiveness to the expressive import of music. Without its expressive function and its aesthetic quality, music has nothing unique to offer to the education of children, young people or adults.

The implication of this statement is that music is the vehicle through which individuals activate their creativity and use it to express themselves. The intention of the study was to encourage creativity among the learners once they have grasped the music concepts taught.

There is an agreement by various authors about the need for embracing music education in its cultural context. A study by Allsup (2003) indicates that advocates for music education have begun to look closely at the links between culture and music and ideals that detach music from its cultural context are being discarded in favor of a new philosophy that is praxial. Allsup (2003) goes on to say that there is a relationship of culture to musical learning and understanding cultural practices through musical performance. To this end, music education serves to support culture. Kelly (2002) supports this view by arguing that enculturation is one of the primary purposes of education in most societies and music education plays a role in the enculturation process by using music to transmit cultural values, norms, skills and traditions. Others who subscribe to this view are Lundquist (2002), Herbst, Nzewi and Agawu (2003), Akuno (2005), Njooa (2000) and Green (2005). This view supports the study whose aim was to use teaching strategies which would make use of African songs in imparting music knowledge and developing music skills in students.

2.3 Music Education: From Pre-Colonial to Post- Independence Periods

Before the colonial period, music was learnt as part of the process of growing up and becoming an acceptable member of the society. There was music in every phase of life. And children learnt music informally, by imitating adults or older children in singing. In the evenings children would converge around the fire and listen to stories and songs. They would then learn the songs by rote. Formal music education had not been established by then. There

was ‘indigenous education... parents taught their children practical arts, health and sanitation, farming, fishing, trading, folklore, rituals and other aspects of education that related to day to day living’ (KIE 1969:83). In the training of African musicians, Nketia (1988:58-59) particularly notes that:

The traditional instruction is not generally organized on a formal institutionalized basis; for it is believed that natural endowment and a person’s ability to develop on his own are essentially what is needed.

Nketia (1988) argues that traditional music in social life is organized in a way that enables the individual to acquire his traditional music in slow stages and to widen his experience of his culture’s music. This training of African musicians involved engagement in musical practices that helped to develop their inner hearing. Green (2005) observes that vernacular musicians who have acquired their practical skills through aural learning practices have very ‘good ears’. This is in reference to aural musical acuteness and awareness. Green (2005) reiterates that there are aspects of musicianship that arise from aural learning practices and a good ear is developed through listening, copying and improvisation.

In the 19th century, Christian missionaries began to settle along the coast and the interior of Kenya. They moved and occupied the fertile regions of the country and their main objective was to win converts to their faith. Mission centers were established and the converts were taught how to read and write. The coming of the missionaries and the western religion created among Africans the so called “Asomi” who imitated western ways and looked down upon any indigenous cultural practices (Gachathi Report, 1976). Kavyu (1974) and Akuno (2005) concur that the young who were learning at mission stations were exposed to western music and were uncomfortable with their own indigenous music.

Between the establishment of Kenya as a British colony (1890) and the start of World War II (1939), the provision of schooling for Africans was pioneered by the missionary organizations. During this time, main activities in singing were purely restricted to religious songs in schools (Odwar, 2005). In the primary schools the pupils sang during the music lessons. Odwar (2005:14-15) further quips that:

When it was time for music, it was singing of different songs and nothing else. I can not forget the song ‘London’s burning and Look Yonder Fire...’ Such were the songs we used to sing. None of us knew where London was and whether it was really

burning. Such songs were far removed from our experience physically, mentally and socially. As such the songs had no meaning for us.

Akuno (2005) regrets that the missionary school curriculum lacked content in African music. She reports that the products of the mission school were educated Africans who lacked knowledge of their cultural music and preferred western music.

The missionaries who controlled education then asked the respective governments in East Africa to help in founding the schools. Two problems that they faced were that education was far too academic and not practical and secondly, teacher training was not yet well developed (Hodges, 1971). In music, the students were taught music notation which had nothing in common with the African or Kenyan music that they had previously experienced.

The Phelps-Stokes Commission (1923-1924) noted that the curricula in the village schools in Kenya did not include the teaching of indigenous music until the launching of the Jeannes experimental school (presently Kabete Technical Training Institute) in 1925. King (1971:150) observes that the members of the Phelps-Stokes Commission had formed a certain impression of the village schools of Kenya:

Children are not playing games or doing things they would do out of school. The music you hear will not be a native song but the parody of a familiar European hymn... The chorus of unintelligible sounds is the sing-song of the syllables as they follow one another in meaningless succession.

Along similar thoughts, Lewis (1960:154) notes that the commission recommended that some subjects be included in the secondary school syllabus. These subjects included business methods, music and art which were of special importance: 'Music is described by one school as the natural heritage of the African and it is pointed out that it is the aim of the school to turn this heritage to practical account'.

Commenting about the music in African schools, Weman (1960:115) notes that the type of education that was given to Africans was to enable them work for the Europeans, for them to learn to think and speak like westerners and to sing like them. He further notes that:

The African can not be blamed either for a lack of interest or for a lack of musical ability. He does best to attune himself to a musical culture which has nothing whatever in common with the music which formed such an important background to his home life.

Further to this, the teaching methods used were based on the Curwen system of tonic sol-fa which should have been a precedent to learning staff notation but it fell short of that. The limitations of the system were experienced by both teachers and students when text was added to the music. It was difficult to coordinate text and melody. Weman (1960) regrets that the tonic sol-fa system which was used inhibited both teachers and pupils in their search for a sound means of musical expression. In the same vein, Denyer (1979) agrees that the different forms of European music that became important tools in the colonialist process were ultra standardized in form and content thereby minimizing any kind of creative originality.

This music that was alien and hardly understood by the Africans could not be performed spontaneously, as Weman (1960:121) notes:

How different it is when the European repertoire is exhausted and they go over to their native songs...at first neither the teacher nor the pupils admit that they are able to sing any such songs. They are shy of performing their own music! But once they are underway, they are transformed; their broad grins appear on every face, eyes begin to sparkle. Arms and legs begin to move, bodies sway gently and freely and hands start to clap the free rhythms. Now they can be themselves, and express themselves in that kind of music which they feel instinctively to be right.

This statement implies that African music was performed with a lot of enthusiasm and involvement. The performers freely expressed themselves because of familiarity with the music which formed part of their lives.

Kenya attained full independence in 1964 and in the same year, the Ominde Report (1964) recommended a much greater use of traditional artistic resources in schools. This was in the hope that highly trained musicians could recreate traditional material in ways that could have permanent aesthetic importance. Prior to 1967, there were four distinct education syllabi used in Kenyan primary schools. These were; a) European b) Asian c) Arabic and d) African syllabi. All these accommodated the musics of the respective cultures and were applied to pupils from those cultural backgrounds. In the African syllabus, students were subjected to Sunday school songs, church hymns and Western folk songs, prohibiting the singing and performing of tribal music. Today, some thinkers would find this approach appalling and credit it (the approach) with historical dominance and misdirection.

In 1967 the four syllabi were merged and called Primary School Syllabus. There was an attempt to introduce music as a subject in schools that were formerly African but its content was biased towards Western Music and it required teachers to use books and read music notation, a practice for which most teachers had no prior training. To counter this development, a new syllabus was drafted in 1974, the Creative Arts Project which emphasized on music literacy as well as a call for concentration on traditional music, both vocal and instrumental within the stated objectives. However, there was a scarcity of instructional materials and teachers versed in traditional Kenyan music and music literacy (Akuno, 2005).

Music was not taught at the primary level until 1985 (nine years later). The Mackay Report (1981) recommended the introduction of the 8-4-4 system where music was introduced as an academic and examinable subject in primary schools nationwide (Odwar, 2005). With music having been made a compulsory subject, schools struggled to implement the syllabus. Many teachers had to be trained and this could not be accomplished within a few years. (Malm and Wallis, 1992). This situation resulted in teachers who could not completely impart musical skill and knowledge to the students, thereby creating challenges that continue to be experienced today in music teaching and learning.

In the secondary school there was a difference between what happened at the European and African schools. The European schools had musical activities organized by European teachers. Only the Alliance schools for both boys and girls had similar musical activities. These were confined to school choirs and inter-house choir competitions organized by European teachers. (Hyslop, 1964).

At the Teacher Training Colleges (TTCs), there was no systematic music education and most music teacher training courses were offered through the vacation music courses. However, a few bursaries from the British Council were given and some teachers were able to attend short term music courses in the United Kingdom (Hyslop, 1964). Since their training was based on the Western music curriculum, they could not help but teach the type and style of music for which they had received training.

However, on current international perspective, the deliberations of the world conference of the International Society of Music Education (ISME, 1998), show that little has been done to improve music teaching since its introduction as an examinable subject in Kenya in 1985. The continuing trend of theoretical approach to music, coupled with the non-productive tendencies is likely to ultimately erode music making as an essential component of practical involvement in schools. It is on this account that the ISME seminar underscored the need to have the music syllabus revised and a balance between local and foreign music theory and practice established (Wanjala, 2004).

On her part, Akuno (2005:19-20) describes four main factors that have shaped music education in Kenya, historically:

- a) The impact of formal education on an oral tradition where knowledge had previously been passed on informally from generation to generation;
- b) Elitism and a dislike for cultural practices which were seen as primitive and uneducated;
- c) Religious conflict that denied the Kenyan teachers' participation and the opportunity to learn their traditional music heritage. These same teachers failed to adapt aspects of African music into their music. When they later became policy makers they failed to direct musical education towards an African content and practice;
- d) Cultural conflict caused by going to school where new musical concepts were emphasized at the expense of indigenous traditions.

The change from informal to formal education had a negative impact on music education because theory of music was emphasized at the expense of practical music. Students were given no opportunities to work with music sounds and this situation led to poor grasping of music concepts. Failure to adapt African music into music teaching meant that readily available and familiar indigenous music repertoire would not be used to explain music concepts. This study made use of indigenous music and students interacted with music before gaining theoretical knowledge on the same.

2.4 Music Education in Secondary School

Some of the music teaching practices in Kenya today can be traced back to factors arising from cultural, missionary and colonial influences (Akuno, 2005). In the early days, music as a subject was offered in selected schools which were economically advantaged with qualified staff and relevant equipment. However, many years later in 1985, music was offered as an examinable subject and with this introduction a number of problems emerged. Akuno (2005) reveals that music had been considered as an extracurricular activity hence it became difficult for the teachers and institutions to implement it when the current syllabus was launched. This partly contributes to the current status of aural musicianship teaching in the secondary schools. This study aimed at improving the teaching of aural musicianship by proposing tangible teaching strategies.

Malm and Wallis (1992:95-96) recount the development of Music Education in the 1980s:

Recommendations concerning music education resulted in a music syllabus for Kenyan schools in 1985. Prior to that, music had not been a compulsory subject. The new syllabus mirrored the struggle between African and European elements, but it definitely represented a shift of emphasis in favour of traditional Kenyan music. The syllabus 'painted' music as a performing cultural art whose main element was expression of feelings and ideas. It explored both local and international culture with three main areas covered throughout the course at graded levels that is. Basic Skills, History and Analysis and Practicals.

The report goes on to say that even in the late 1980's, schools were struggling to implement this ambitious syllabus. About 15,000 teachers versed in both western and African music had to be trained, which was an impossible task to accomplish in a few years. There was also a clash between traditional concepts of music and the teaching of music as a subject. In very significant ways this reveals the origin of the problems experienced in the teaching of music in Kenya and which have spilled into current attempts at music education, necessitating this various studies, including the current one, to try and understand what the issues are and how to pose solutions for apparent problems.

A study by Wanjala (2004) raises fairly worrying trends, that is, teachers who had done music at the TTCs (where no aural training was given as part of their course) were promoted to teach in the secondary schools as a result of their participation and good performance in the Kenya Music Festival (KMF). This gave rise to teachers who had no prior training on

aural skills, yet they were required to teach and impart aural and other skills to their students. Szabo (1996) says that if prospective teachers are given neither adequate training nor pedagogical approaches for teaching a skill, it is unrealistic to expect that they will emphasize these areas in their future teaching, part of what was neglected as part of their own musical background. In Kenya today, many teachers have a theoretical as opposed to practical approach to teaching music as observed by Akuno (1997:22)

In schools today, Kenyan teachers have adopted a theoretical pedagogy, resulting in a number of music students who are unable to behave musically, be it in the area of performing, listening or composing.

This current study was ultimately undertaken to articulate teaching strategies that have an aural as opposed to a theoretical approach, for an effective teaching of aural skills. Contributing to this notion, Elliot (1995) argues that without a prior sense of the nature and significance of music, it is impossible to justify the place of music teaching and learning in any educational scheme. Herein lies the challenge of conceptualising music education in a manner that portrays the subject as exciting and one that can be used to impart knowledge and skills to learners to enable them express themselves musically.

The beliefs, assumptions and values in music teachers' practice is particularly stressed as it is now acknowledged that music teachers' philosophical orientation (either articulated or not) influences their practice (Swanwick, 1988; Elliot, 1995; Reimer, 1989; Chokera, 2005). Bessom (1980:20) underscores the importance of a teacher's perspective on music education:

A teacher understands the unique contribution of music to education. He should pursue a course of teaching that recognizes essential principles of child growth and development, the teaching of aesthetic sensitivity, and the process of learning.

With reference to who should be trained in music, Schafer (1975) emphasises that only the student with high musical qualifications and aptitudes should be encouraged to undertake the extensive training programme necessary for music teaching. Essentially this means that in addition to attending a music school at the university, he/she should be a professional musician who has earned a living and a reputation through proficiency in a profession that is competitive. In the Kenyan situation, Wanjala (2004) notes that there are teachers who have little training in music and are required to teach music in secondary schools.

Several authors have related musical learning to the learning of a language. Sloboda (1985) observes that both music and language are performed through the dimension of time, have their own rules of structure and grammar and in some cases, can be written using special signs and symbols. Bamberger (1991) admits there is a close relationship between language and music in that music learning, like language learning is an active process by which individuals organise the sound/time phenomena as they occur. Lovelock (1978) gives reasons why people have no difficulty in mentally hearing the words that they read. This is because they are continually dealing with those words from time to time and have no trouble imagining the sound of those words when they see them either written or printed. These views support the study which incorporates the idea of using rhythms of familiar words to explain the concept of rhythm.

Miell (2003:2) reveals that in the United Kingdom, young people perceive music in the secondary school curriculum as ‘increasingly specialist, exclusive, technical and dull’ and few choose to continue after the age of 14:

The young people in our study criticized many things about it, including the way in which the teaching never got to grips (in their view) with the different ability and experience levels in the class where some have been having keyboard lessons for more than 8 years and are working with those who’ve never had a chance to play...

This study aimed at assessing music students’ attitudes towards aural training. It also aimed at introducing strategies that were learner-centred where all learners participated actively in the music learning activities. Earlier on, Wooddell, (1982:58) explained children’s experiences with music, noting that:

The child who begins to study music is not initially interested in learning and duplicating. He wants to create what he has heard and appreciated as music. But what his ears have heard is a far cry from what the music teacher assigns.

He (1982) further says that since music is a subject that involves and evokes emotion and feeling, great caution should be taken in planning related musical activities. Westbury (2002) also asserts that ‘it is the task of pedagogy to make the world that is being mirrored in the classroom compelling and accessible’ (2002:110). Earlier on, Hyslop (1971) had raised similar issues, saying that effective study of music springs best from music making itself. These thoughts give credence to this study whose aim was to suggest music making activities

which would enhance the development of the inner ear. It is important for teachers to incorporate new ideas and to consider new methods throughout their teaching career, otherwise their techniques remain underdeveloped during their tenure as teachers (Mark, 1996). Benner (1975:35) in referring to music educators notes that:

Our knowledge, our insights into musical behaviour, and our resources can not go unintended, un-revitalized or un-stretched. Each of us must gain the capability to meet the challenges of music education in changing social and instructional settings.

This view supported the study's move to equip teachers with teaching strategies that would help in raising efficiency in aural musicianship.

Elliot (1995:134) highlights the role of music education programmes in schools and the role that teachers ought to play in empowering their learners to be musically competent. He observes that:

Music education programs ought to favour musical depth over musical breadth, if self-growth and musical enjoyment depend on learning how to meet increasingly complex musical challenges, then enabling all students to achieve self growth and enjoyment depends on developing the depth of their musicianship by moving students from beginning levels to competent, proficient and expert levels of musicianship through progressive musical problem solving, problem finding and problem reduction, caring deeply about one's students means enabling and promoting their efforts to fashion the key to lifelong musical enjoyment: musicianship.

Elliot's view of teaching students by focusing on the depth rather than the breadth of their musicianship supports this study whose objective is to propose teaching strategies where music concepts are introduced systematically thereby enhancing the development of aural skills.

2.5 Aural Musicianship in Secondary Schools

Aural skills have been assumed to be pertinent to a musician's training, such that assessment of performance ability, musicality and musicianship all incorporate tests to assess aural ability and oral response to aural stimuli. In particular, aural acuity is an expected part of a performer's ability, demonstrated through the variety of aural tests present in the assessment of performing musicians (McNeil, 1996). Traditional definitions of aural musicianship almost always include music dictation and sight singing, which are important aspects of musical training. Other aspects of aural musicianship include conversion of music

symbols to appropriate sound. Aural musicianship forms the basis of music literacy, as Brocklehurst (1971:109) explains:

Music literacy implies cultivated aural perception gained through perceptual experiences and music making activities which are varied, a conceptual understanding, a sympathy of eye and ear, well developed tonal memory and imagery and the ability to hear inwardly, as well as a functional knowledge of the symbols and terminology of music.

McNeil (1996), and Leonhard and House (1972) state that aural musicianship is an essential part of musical training, and that the basis of all instructional programmes must be the cultivation of an acute musical ear. Aural awareness is the key to all musical learning and the musical learning situation should be constantly focused on ear training. Further specifications of aural musicianship described by Seashore (1967) as fundamental things to be learned in musical hearing are pitch, intensity, time and timbre. Unless a teacher recognizes these four components, the teaching task may seem endless and unreasonable. Teachers should emphasize on students' attention to these four factors. This research deviated from Seashore (1967) by focusing only on aural pitch and rhythm patterns.

In Kenya, musicianship is generally taught under aurals. In rhythm, note values, note groupings and time signatures are identified for use. Melody or melodic dictation includes pitch and time accuracy while intervals and cadences spell out melodic and harmonic intervals and cadences to be identified by the pupils (Akuno, 2005). With particular reference to aurals, Auma's research (2005) on aural training in Kenya observed that only 10% of sampled teachers taught melodic dictation while 90% concentrated on teaching rhythmic patterns. None of the schools taught intervals, cadences, modulation or sight reading. Cadences were not taught due to lack of instrumental skills on the part of the teacher and lack of resources like keyboard which is used in playing cadences. Auma (2005:94) further states that:

Most teachers complained of an insecure background and inadequate instructional strategies and skills in aural teaching. Some aural facts in rhythmic patterns were faulty and instructional strategies used were confusing and hence misunderstood by students.

Mark (1996) outlines four issues which represent the essence of all contemporary music programmes:

- a) The first is that the role of the teacher transcends mere technical training of the students, encompassing the development of their inner musicality.
- b) Secondly the teacher must provide an enabling environment where a student is encouraged to assume responsibility for his own musical growth (while developing that inner musicality).
- c) The third is that the development of the teacher's musicality must be accomplished in his or her own schooling and must continue in the career as a teacher.
- d) Finally teachers should also develop an interest in new ideas and methods throughout their teaching career. If this were laid aside, then their teaching techniques would remain under-developed during their tenure as teachers.

According to Njui (1989), Mwangi (2000) and Auma (2005), teachers have not upgraded their skills and consequently lag behind, especially in instrumental skills.

Learners' ears must be aurally trained to develop their mental hearing. Davies (1978) points out that each musical skill poses its own training problems and has a long pedagogic tradition. Musical hearing, according to Szende (1977) develops only as a result of conscious pedagogical work. The first thing to be realized is that aural training is fundamentally based on memory, thus making repetition and frequent renewal of impressions essential (Lovelock, 1978). This view supports this study whose aim is to discover the learning activities used to develop the inner hearing. The study also made use of repetition at every level for the assimilation of concepts by the students.

2.6 Aural Musicianship Teaching Strategies

There are various strategies for teaching music that have been advocated for the assimilation of music concepts. Bowman (2002:77) suggests one approach to music teaching and learning:

It requires that we learn to see musical instruction not as a technical means to ends wholly musical, but as a process that provides students with experiences replete with opportunities to exercise such dispositions themselves.

The strategies used in the study focused on fostering creativity among the learners with the hope that the creative power could be transferred to other areas of learning. Barrett (1996:69)

suggests that it is the teacher's responsibility to foster independent learners capable of identifying problems, determining courses of action and subsequently implementing appropriate strategies in order to seek resolutions to problems. She further notes that:

In order to promote learning, individuals need to be given opportunities to operate independently. Children need to be placed in situations where it is necessary to make decisions independently of the teacher.

One of the objectives of this study was to investigate ways in which aural skills could be taught to raise learners' levels in musicianship.

In terms of practical approach, Brocklehurst (1971) emphasizes that any course in aural training should take into account the importance of tonal memory and the attention span of the learners. This is because there is physical and mental demands made by attentive listening. The implication is that teachers need to carefully consider the duration of the musical illustrations selected, directing the learners' listening and developing their powers of musical observation and concentration. This is done by directing their attention to particular features of music and by making use of well-planned and purposeful repetition. These thoughts led to the development of teaching strategies that involve lots of listening to familiar music and breaking down its components to teach various music concepts to learners.

Pratt (1998) observes that programmes of aural training have laid heavy emphasis on identifying letter names of notes and identifying various pitches but such skills are best developed by the learners. They should play a tuneful recording repeatedly then write it down. The printed score acts as the guide and a student can adapt the difficulty of the task by shortening or lengthening the extract and playing it a dozen times. This method will provide the learners with all the practice they need to learn to write from dictation not only melodies but also harmony, recognition of structure and modulations. The teaching strategies developed as a result of this study incorporate this procedure where learners use pre-recorded music to practise melody writing out of class. The strategies also emphasize learners' internalizing melodic patterns through repetition and rote learning to achieve musical learning and development.

Szende (1977) explains that in the teaching of aural musicianship, teaching of each skill (for example Pitch discrimination, and melodic perception) should be based on an appropriate curriculum design. In planning a curriculum of music learning, the teacher must be aware of the concepts that need to be developed within the framework of the musical activities. Bahr (1998) suggests that there are a number of ad hoc approaches to aural training in schools, which tend to be founded on popular opinion rather than research evidence. This study devised strategies for enhancing the development of aural skills based on a music learning theory. The strategies ensure that systematic teaching and sequential learning takes place in the classroom.

According to Hoffer (1983), one technique for furthering aural skill is the taking of melodic dictation where dictation is taught by using numbers instead of notation. By writing scale step numbers the students gain experience in writing down what they hear without the mechanics of music notation. However his system is limited to tonal music and phrases that do not modulate. Another technique is listening to music intently before writing down to develop the musical memory or singing back to gain a concrete experience with it. The study differs with this idea because music should first be audiated before it can be sung or written down. Audiation skills are developed by singing or clapping pre-determined pitch and rhythm patterns.

One of the ways of helping learners is to give them literacy skills whose benefit, according to Brocklehurst (1971) would be to provide a key to musical understanding, aid in the formation of requisite aural concepts, develop auditory imagery and awareness, observation, concentration and memory. Music literacy also promotes self reliance and enables learners to experiment with the basic materials of music, and to explore its literature independently. The study differs with this idea and begins with the formation of aural concepts as the foundation for music learning. Music literacy skills are imparted later when the learners' inner hearing has been developed. Hoffer (1983) adds that ear training can be promoted with especially designed tapes and books that provide exercises that have been carefully developed and graded.

Some of the teaching methods outlined by Mark (1996) will be discussed briefly, highlighting the pertinent points of the methods and their relation to the study. These are: the Orff Approach, the Kodály method and the Carabo-Cone Method.

2.6.1 The Orff Approach

This approach was developed by Carl Orff (1895-1982) whose interests lay in utilization of folksongs in the classroom, leading to a comprehensive theory for music pedagogy. It recognizes children's speech as the basis for musical development (Bessom, 1980). The method is characterized by:

- a) Music evolving from speech, movement and dance to form the basis for early childhood music education;
- b) Rhythm and improvisation and building on what the children find natural such as rhythms of strolling, skipping and running. Speech patterns familiar to children were used;
- c) Instructional guidance given by the teachers and musical knowledge grow from the children's experiences.

This approach was useful for the study since it advocates for the use of speech patterns familiar to the learners as a basis for learning the concept of rhythm. The rhythms learnt evolved from speech patterns already familiar to the learners.

2.6.2 The Kodály method

This method was advocated by Zoltán Kodály (1882-1967) who was a Hungarian. He advocated for the use of nationalistic music and folk songs in teaching music in the schools. This was aimed at developing individual musicality and national music culture (Mark, 1996). The components of this method are:

- a) A system of rhythm duration symbols;
- b) The movable *doh* system, in which *doh* is the home tone in major modes while *lah* is the home tone for minor modes;
- c) A series of hand signs showing different pitches in the scale which aid in the development of tonal relationships.

Kodály method advocates for the use of folk music. This study found this aspect important for musicianship training as the songs used were familiar to the learners and enabled them to

experience the melodic and rhythmic concepts that were taught. The use of hand signs helps to visualise the distance between the pitches and enabled the learners to match the pitches given to the right sound.

2.6.3 The Carabo-Cone Method

This method was advocated for by Madeleine Carabo-Cone. It is based on the belief that structured cognitive learning can be introduced to preschool children if integrated into their actions and environment at an early age (Mark, 1976). A concrete representation of an abstract idea is presented through visual and tactile experiences which are reinforced and coordinated with the auditory and the kinaesthetic. Aural training is based on memory, and visual, aural and kinaesthetic activities help in retention of information. Carabo-Cone method was used as the representation of various music concepts, and was reinforced through aural, visual and kinesthetic experiences.

2.7 Theoretical Framework.

In the field of Music Education, theories of learning have contributed to an understanding of how the learner processes information and how corresponding instructional theories have caused change in instructional practice (Taetle, 2002). This study was grounded on the concept that music teaching and learning is similar to language learning, proceeding from sound to symbol. This approach was advocated by among others, Hoffer (1964), Perrin (1970), Lovelock (1978) and Jordan-Decarbo (1986). This study was informed by two theories which are discussed below:

The Theory of Music Learning

The theory of music learning by Gordon (1994) postulates that learners progress through an eight-stage process that begins with aural/oral reception, finally leading to an understanding of music theory. The main objective is inner hearing or ‘audiation’, a term that he coined to refer to the goal of music instruction. The key component to Gordon’s approach to music learning is the idea and role of instructional sequencing. Music learning is sequenced into two major areas, music skills and music content, culminating in an eight-step learning hierarchy, which begins with discrimination learning and proceeds to inference learning.

First, Discrimination Learning involves Aural/oral, Verbal Association, Partial Synthesis, Symbolic Association and Composite Synthesis. Second, Inference learning which involves Generalization, Creativity or Improvisation and thirdly, Theoretical Understanding. Which involves learning about music notation. According to the theory of music learning there are two main categories of skill learning sequences. The first is discrimination learning which, according to Abeles (1984) and Hansen (2005) is rote learning. It takes place when learners are conscious of what they are being taught because someone else is teaching them.

According to Abeles et al (1994), the 'aural/oral' which is part of rote learning involves activities such as hearing or moving, chanting and singing. In 'Verbal association' learners are required to associate words, tonal and rhythm syllables with sound. Partial synthesis enables learners to recognize characteristics of wholes (series of patterns rather than isolated patterns) that are heard. In symbolic association, syllables and sounds are associated with music notation. In composite synthesis characteristics of wholes (series of patterns rather than isolated patterns) are recognized. These are seen in notation and translated to sound in audiation. The hierarchy of musical skill building is shown in Figure 2.1 (next page).

Inference learning involves learning of concepts. This takes place when a student is unconscious of what he or she is learning because he is teaching himself (Hansen, 2005). This begins with generalization which involves identifying the unfamiliar on the basis of similarities to and differences from the familiar. In creativity/improvisation, learners use the skill and content learned at lower levels of learning to improvise and create music. Theoretical understanding denotes learning the mechanics of music notation.

Discrimination learning precedes inference learning because learners can not make inferences unless they have learned how to make discriminations. The activities involved in the two categories are aural/kinesthetic and visual/kinesthetic activities. In both cases the learners hear or see a musical phrase or rhythmic exercise and respond to it by singing or clapping (Hansen, 2005). The theory suggests sequential learning and was useful to the study because it acted as a guide for developing strategies that would enhance the development of aural skills in the experimental phase of the investigations.

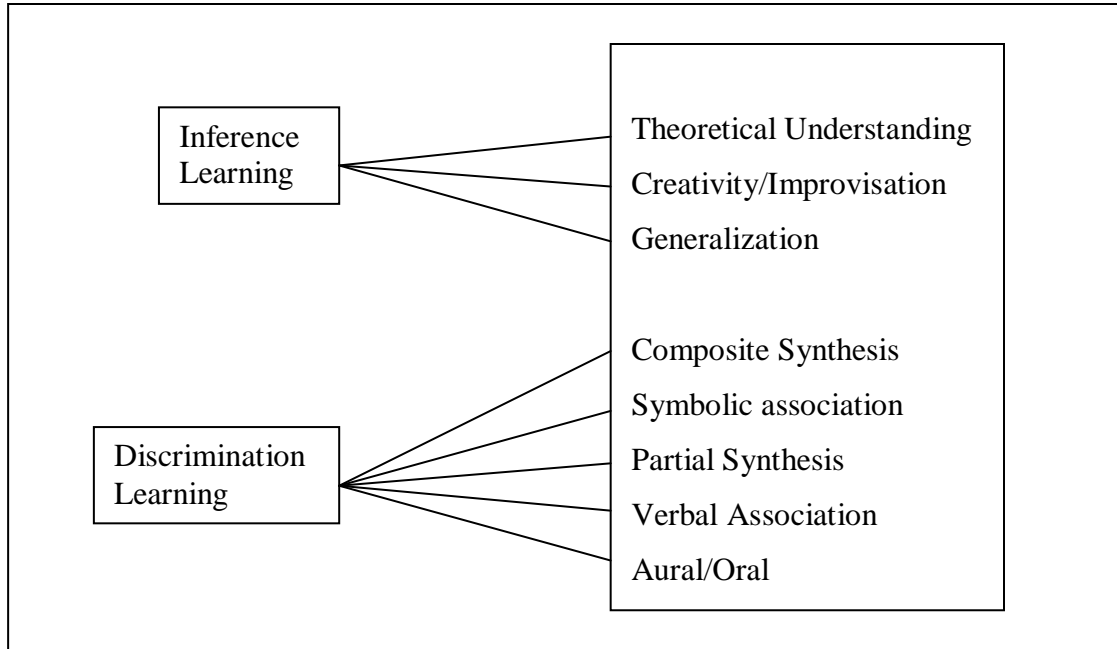


Figure 2.1: Hierarchy of Musical skill building. Source: Campbell and Scott-Kassner (1995)

In support of similar argument, Lovelock (1978) argues that the first thing to be realized is that aural training is based on memory, thus repetition and frequent renewal of impressions is essential. Each of the eight steps in the hierarchy of Gordon's sequence incorporates activities carried out in previous steps and this repetition is useful for proper understanding of musical concepts. The theory of music learning acted as a guide in designing procedures for instruction where the teachers played a guiding role in providing useful musical activities for the enhancement of musical skill.

However, the theory of music learning posed limitations for the study. Aural musicianship involves perception of pitch and timbre. According to Davies (1978) learners' ears must be aurally trained to develop acute or discriminatory mental hearing. This theory does not state how the learner processes information after its reception. This kind of information is useful for the music instructor to enable him/ her structure learning activities appropriately, thus meeting the learners' needs adequately.

The theory of learning modalities as advanced by Barbe and Swassing (1979) postulates that a learner processes information most efficiently through one of three sensory channels:

Visual, Auditory and Tactile/Kinesthetic. On one hand, visual learners absorb information by seeing, reading or observing while auditory learners benefit from oral examples presented by the teacher or through recordings (Campbell and Scott-Kassner, 1995). Conversely, the kinesthetic learner processes information by touching, moving and physically acting on his/her environment. Barbe and Swassing (1979) advocate that the best teaching involves interaction between the three sensory channels as expressed in Figure 2.2.

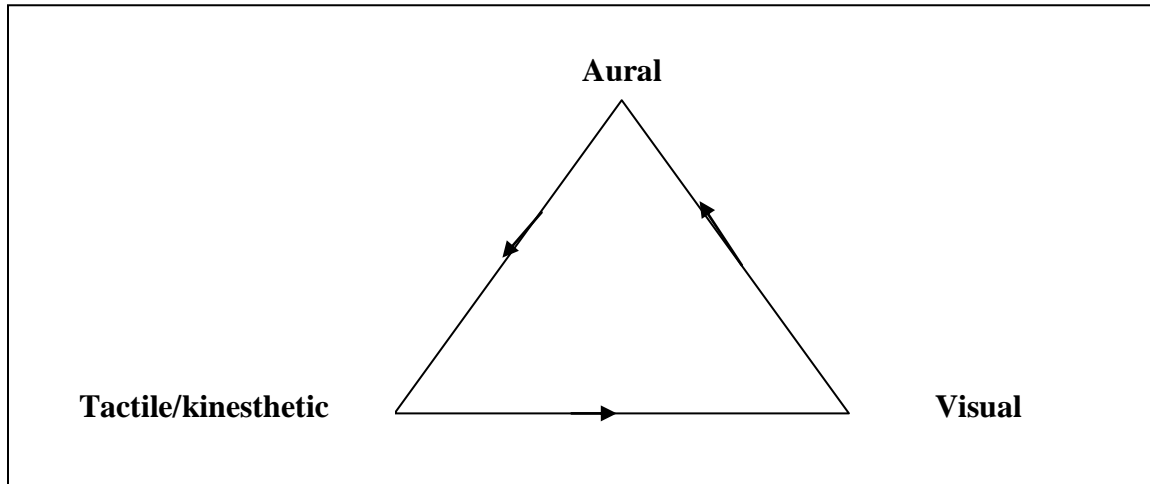


Figure 2.2: Learning modalities independent yet able to be integrated. Source: **Campbell and Scott-Kassner (1995)**.

A more graphic oriented Figure 2.3 was modified to show the interaction between the three learning modalities. It is a representation of the aural, visual and kinesthetic activities which together, lead to the development of the inner ear. The theory of music learning is a characterisation of how we learn music. It is concerned specifically with the tonal and rhythm dimensions of music. The teaching strategies are designed to enable learners develop their ability to audiate tonal and rhythmic content.

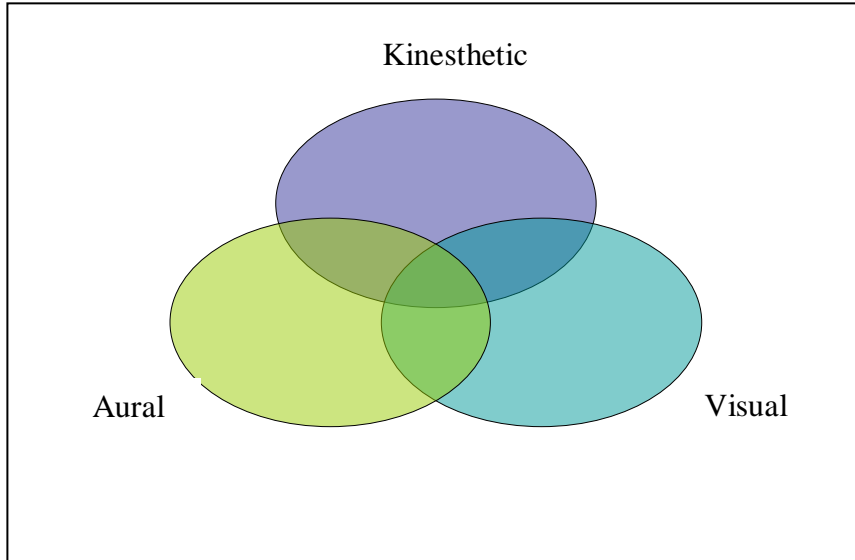


Figure 2.3: Modified Representation of the Integrated Learning Modalities

Inner hearing or audiation is the conscious activation of neuronal connections. According to Gordon, this is the goal of music instruction. It develops or takes place when neuronal representations are activated in thinking, listening or music-making. Therefore, for inner hearing to take place one has to experience music. Once inner hearing has been developed then learners are able to see the printed music and hear the sound of the notes or sing without having them played on an instrument. Therefore in music teaching and learning, inner hearing and theoretical understanding must go hand in hand for a holistic development of the musician. This is so especially for creativity (performance and composition) so that the output of the musical exercise is meaningful. The model of music knowing was formulated from the two theories (theory of musical learning and the theory of learning modalities) and the literature reviewed.

The modalities of learning associates with types of learning to facilitate music knowing which involves inner hearing and theoretical understanding. As illustrated in figure 2.4, music teaching and learning should incorporate various activities whose main goal is to acquire music knowledge and develop inner hearing. The theoretical framework facilitated the designing of the experiment whose target was to find out whether the proposed teaching strategies had a positive effect on students' aural musicianship performance. The experiment helped to identify the type of teaching model (presented in chapter six) that would be useful

in teaching aural musicianship in Kenyan secondary schools. Consistent with the music learning theory and the theory of learning modalities, the teachers used instructional strategies where they performed tonal and rhythm patterns which were echoed by the learners. The learning activities were organized in a way that tonal patterns were taught in a context free of rhythm and rhythm patterns were chanted rather than sung. The strategies and teaching techniques used helped students in developing tonal and rhythm audiation. Figure 2.4 illustrates a combination of the two theories and was modified in the current study to illustrate the two categories of music knowing.

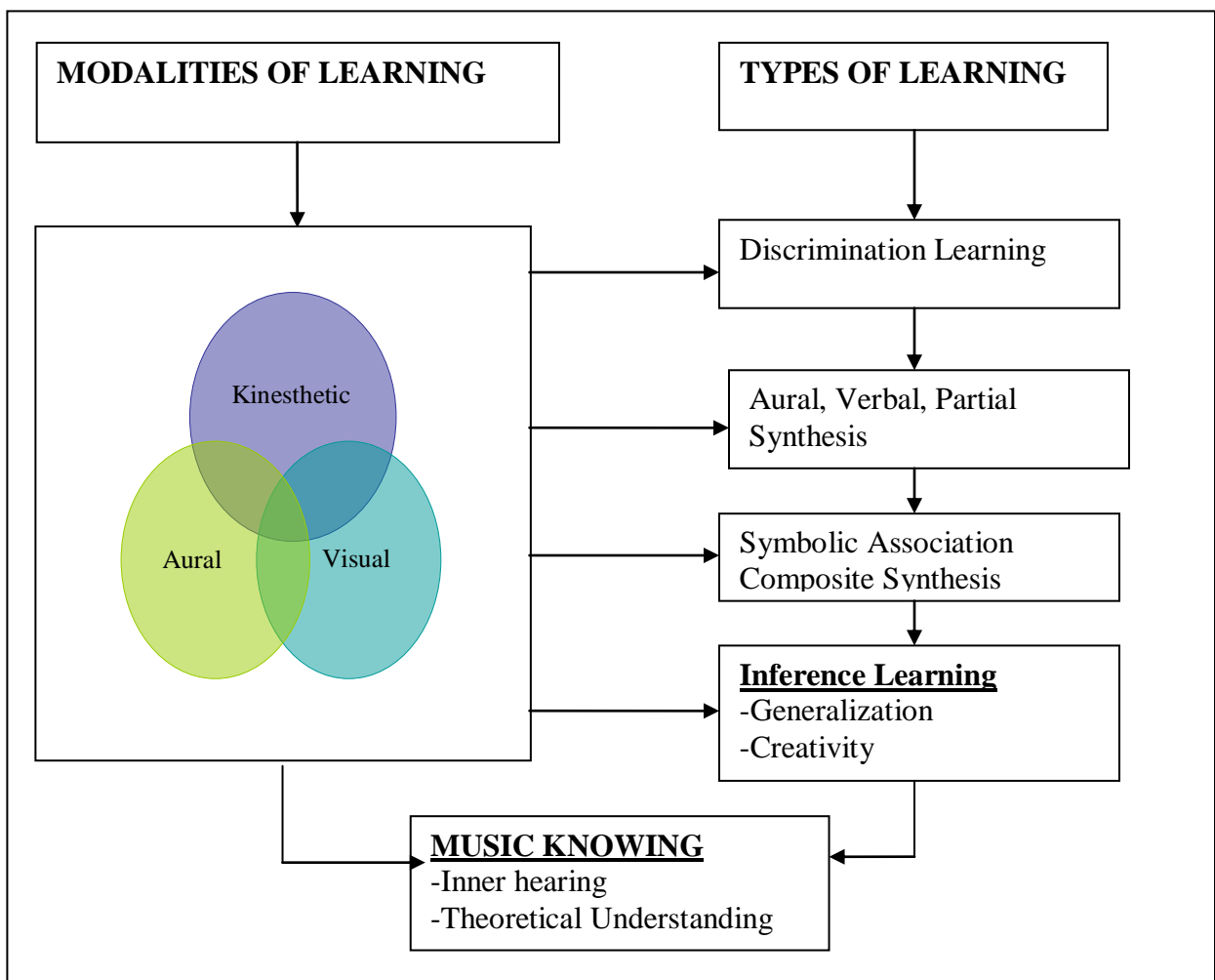


Figure 2.4: Model of Music Knowing (Synthesized from literature review and theoretical framework)

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter outlines the methods and procedures that were used in the study. Beyond providing the rationale and justification of the methods used for the current study, it describes the piloting process, research design, the target and accessible populations, sample selection procedures, research instruments and tools, data collection and analysis procedures.

3.2 Research Design

The study employed the quasi-experimental research design in which the Pre-test Post-test Non-Equivalent Group Design was used. In this design, two groups were formed by randomly assigning three schools to the experimental group and three to the control group. The two groups were measured twice. The first measurement served as the pre-test while the second was the post-test. In both tests the learners were assessed on pitch and rhythm identification and notation. The pre-tests and post-tests were administered at the same time for both groups as Figure 3.1 indicates. Over and above this design, the descriptive design and survey methodology was also carried out to probe deeper into the issues.

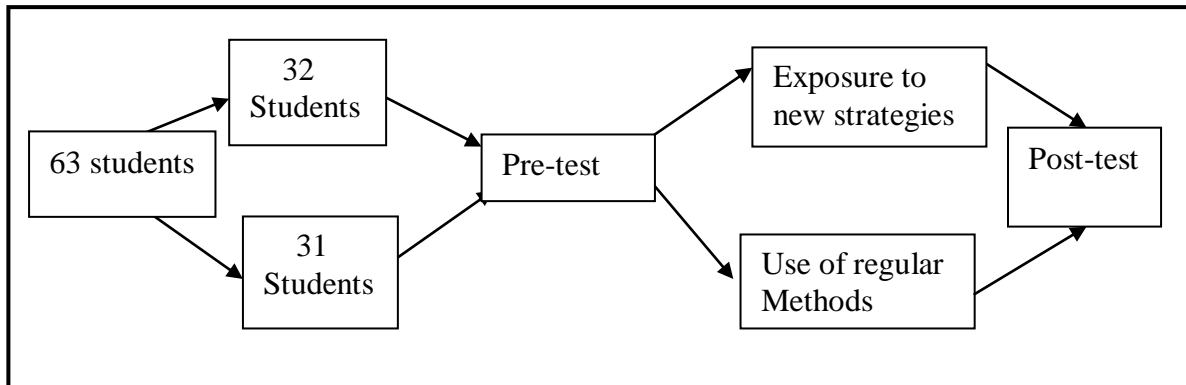


Figure 3.1: A Diagrammatic representation of the experimental study design

To control for extraneous variables, Analysis of Covariance was used to equate the groups statistically on the basis of a pre-test. The control group was used for purposes of comparison with the experimental groups in terms of their overall mean scores.

3.3 Population and Sampling

The target population consisted of music students and teachers selected in secondary schools in Kenya. However, the accessible population was made up of secondary school music students and teachers in Nairobi and Nyanza provinces, chosen based on their mean performance in music at KCSE in 2002 and 2003. Data showed that Nairobi and Nyanza provinces' overall mean was higher compared to other provinces in those two years (refer to Table 3.1)

Table 3.1: KCSE Music Performance of Secondary Schools by Province 2002 – 2003

	2002			2003			
Province	Entry (Male)	Entry Female	Mean	Entry (Male)	Entry (Female)	Mean	Average Mean
Nairobi	70	50	123.40	74	77	110.29	116.85
Western	132	163	105.08	143	196	100.20	102.64
Rift Valley	102	144	103.14	90	136	100.54	101.84
Central	132	211	99.44	93	195	96.67	98.06
Nyanza	119	147	99.34	117	167	115.15	107.25
Eastern	115	112	98.32	131	92	86.13	92.23
Coast	17	63	97.86	15	53	93.57	95.72
N. Eastern	-	-	-	-	-	-	-
Private	-	1	76.00	1.00	-	-	N/A

Source: Kenya National Examinations Council (2003)

Table 3.1 shows the performance of the students who sat for the KCSE music examinations in the years 2002 and 2003 respectively. Columns two, three, five and six indicate the number of males and females who sat for the music examinations in each province. The fourth and last columns show the mean scores of both the males and females in each province. For example in Nairobi province, seventy males and fifty females sat for the music examination in the year 2002 and their mean score was 123.40. In the following year there were seventy four males and seventy seven females and their mean score was 110.29. The

second last row indicates North Eastern Province where no student took the music examination while the last row indicates only one female student from a private school who sat for the music examination.

After selecting the two provinces, purposive sampling was used to select the schools that offered music as a subject. The population consisted of twenty schools. From a total of twenty schools, 30%, that is, six schools were randomly chosen to take part in the experiment. Preference for this sample size is perceived as representative by Gall, Gall and Borg (2007) who suggest that a 30% sample size is adequate in the selection of a sample from a homogeneous population. Due to the nature of the study, schools rather than students were sampled. Students from three schools were assigned to the experimental group while students from three others were assigned to the control group. The schools that participated formed the following categories: a) Three boys' boarding schools, two from Nairobi Province and one from Nyanza Province and b) Three girls' boarding schools, two from Nyanza Province and one from Nairobi Province.

Form two students were then selected for the study. This was because they already had some exposure to aural training as opposed to students in Form one since data was collected in first term. Form three and Form four students were left out because their numbers were rather small in all the schools. A total of six teachers and sixty-three students (thirty-two in the experimental group and thirty-one in the control group) took part in the experiment.

3.4 Research Instruments and Equipment

The research instruments that were used in collecting data were: Observation and interview schedules; questionnaires; pre and post-tests; attitude statements; a battery operated tape recorder and the experiment.

3.5 Data Collection

Data was collected in the following ways:

i) **Observation Schedule** (Appendix V)

An observation schedule was used to obtain information regarding the instructional strategies and resources used and the learners' activities and responses during aural musicianship training on five concepts; melody writing, intervals, rhythms,

cadences and modulation. Research assistants helped to collect information by observing activities in aural musicianship classes. The information obtained was coded and emerging themes were noted.

ii) **Interview schedule** (Appendix II)

Teachers from the sampled schools were interviewed by the researcher using an interview schedule. The schedule was used to obtain information regarding the teaching strategies used and the challenges faced by teachers. English language was used as a medium of communication. This information was compared to that of the questionnaires to authenticate the information on the questionnaires.

iii) **Questionnaires** (Appendix I and III):

Questionnaires were distributed to all teachers and students in the accessible population. A total of twenty-seven students from Nyanza province and forty-one from Nairobi province completed the questionnaires while a total of sixteen teachers (six from Nairobi and ten from Nyanza Province) completed the same. Teachers wrote down answers regarding their instructional strategies while students answered written questions concerning how they were taught and their perception of aurals.

iv) **Pre and Post-tests** (Appendix VII):

The pre and post-tests were tests consisting of rhythmic and melodic dictation and identification of intervals and cadences. They were administered to all sampled students before and after the experiment to find out the performance of the students.

v) **Attitude Statements:**

These were given to the students in both the experimental and control groups to measure their attitude regarding aurals. The other equipment used for data collection was a battery-operated tape recorder to capture the proceedings of the interviews.

vi) **The Experiment**

The purpose of the experiment was to find out whether students who were trained using the developed teaching strategies incorporating the aural, visual and kinesthetic models and based on the music learning theory by Gordon (1994)

performed better than those who were taught using the traditional strategies. The researcher had developed teaching strategies based on the model of music knowing (illustrated in the theoretical framework). The experimental group was taught using these strategies while the control group were taught using other methods. With the help of the student teachers who doubled up as the research assistants, these strategies were applied with the teachers providing guidance in carrying out appropriate music activities. The student teachers were used to ensure that the experiment was carried out objectively. The lessons were divided into three steps incorporating the aural, visual and kinaesthetic modalities of learning respectively (see appendix VI).

Form II students from six schools participated in the experiment. They were divided into two groups and given a pre-test before the beginning of the experiment. The pre-test and post-test had the same content (refer to Appendix VI). They consisted of four exercises. Below is a summary of the pre-test;

- a) Monotone rhythms were played on tape recorder and students were required to notate the rhythms with the correct time signature.
- b) Students were required to identify five different intervals played to them.
- c) Students were required to notate two melodies which were in different keys and time signatures.
- d) Students were required to listen and identify cadences played through a recording.

To allow for a realistic learning environment, the instructional period was scheduled for ten weeks. The teaching strategies employed by the teachers in the experimental group included echo and imitation, where the teacher played or sung music and students sang back what they had heard. Students only wrote down what they had heard, memorised and imitated. This was done during the introduction of pitch and rhythm (refer to appendix vii.). Students in the control group continued with the traditional teaching strategies where the symbols were introduced before clapping rhythms and singing melodies. The instructional materials used in the experimental group were sheet music, piano, rhythm exercises and flash cards. Pre-recorded music was used in administering the pre- and post-tests. In the control group, piano, drums, recorder and pre-recorded music were used both in teaching and administering the

pre-tests and post-tests. The books used by the experimental group were ‘Aural Awareness’ by George Pratt (1998), Aural Culture (no author) and the KIE Music Series Book for Form II. The control group used the KIE music book, ‘Basic Music Knowledge’ (1967) and ‘Graded Aural Tests’ (Warburton, 1971)

3.6 Pilot Study

A trial of the proposed procedures was carried out to help in refining the instruments before the actual study was carried out. Form II students from two schools in Nairobi Province participated in the pilot study. One school was assigned to the experimental group while the other was assigned to the control group for a period of twelve weeks. The teachers in the experimental group taught using the developed procedures while the ones in the control group used the traditional strategies. Questionnaires and attitude statements were mailed to twenty five schools in two provinces and the responses given helped to refine the instruments. Data collection instruments were validated to ensure their suitability and validity. The questionnaires, attitude statements and interview schedules were given to four music specialists in the department of music to offer constructive ideas on how they could be improved to increase their validity. They were further reviewed after the pilot study. The reliability of the questionnaires was ascertained by using the test-retest method where a group of students and teachers were given the same questionnaires after a three month period. Individual responses to the questionnaires indicated slight variations in the answers that were given. The consistency in the responses given was sufficient evidence of test-retest reliability.

3.7 Data Analysis

Different types of data were collected and analyzed using descriptive and inferential statistics. Specifically:

- a) Categorical data was summarised using tables, graphs and histograms. Responses from the teachers’ and students’ questionnaires were coded and quantified in order to make the data suitable for analysis using the Statistical Package for Social Sciences (SPSS). This helped in finding out the teachers’ qualifications, their instructional methods and other factors regarding aural training;

- b) The students' attitude statements were measured using the Likert scale. First an item pool (comprising nine items) was composed and the respondents were asked respond to one of the five positions ranging from 'strongly agree' to 'strongly disagree'. The following procedure was used to score the responses on the Likert scale;

Attitude	Scale Value
a) SA-Strongly Agree	5
b) A-Agree	4
c) U-Undecided	3
d) D-Disagree	2
e) SD- Strongly Disagree	1

However, three statements advocated for a negative response, thus they were scored as below:

Attitude	Scale Value
a) SA-Strongly Agree	1
b) A-Agree	2
c) U-Undecided	3
d) D-Disagree	4
e) SD- Strongly Disagree	5

Table 3.2 shows the attitude statements that students responded to:

Table 3.2: Attitude Statements

	Attitude Statements	SA	A	U	D	SD
		5	4	3	2	1
1	Learning of music would be more exciting without aural.					
2	I wish the aural lesson would be conducted in a way that is easy for me to understand.					
3	Aurals are an important part of the music lesson because they enable the music student to become a better musician.					
4	I often find it difficult to recognize intervals played by my teacher during the aural lesson.					
5	I am able to identify the cadences played by my teacher.					
6	Writing down melodies that have been dictated by the					

	teacher is usually a difficult exercise.					
7	Rhythmic dictation is not difficult for me because I am able to identify the rhythms clapped by my teacher.					
8	The aurals lesson is very exciting and I usually look forward to attending the class.					
9	I am content with how aurals are taught and wish that more time could be allocated for aurals.					

All responses to each attitude statement were noted and consistencies that were discerned helped the researcher to generalize about students' attitudes towards aural training.

- c) Qualitative data was analyzed using the following procedure; i) codes were assigned to information obtained from interviews and observation schedules ii) patterns were established and emerging themes noted iii) consistencies that were discerned in the data helped in making generalisations and conclusions about aural musicianship training iv) These generalizations were then linked to literature review and the theoretical framework used in the study;
- d) Measures of central tendency (percentages and means) were used to analyze quantitative data;
- e) The standard deviation (SD) was calculated to show the spread of different distributions.

A variety of inferential statistics were used;

- f) The *t*-Test for independent means was used to compare the mean scores of the experimental and control groups. The following formula was used:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{SED}$$

\bar{X}_1 = mean for the control group

\bar{X}_2 = mean for the experimental group

SED = standard error of the difference, calculated as:

$$SED = \sqrt{(SEM_1)^2 + (SEM_2)^2}$$

Where 1 and 2 refer to the respective samples, the control group and the experimental groups, and SEM is the Standard Error of the Mean

SEM is calculated following this formula;

$$\frac{SD}{\sqrt{n-1}}$$

- g) Analysis of Covariance (ANCOVA) was used to equate the two groups statistically on the basis of a pre-test;
- h) Confidence Intervals were used to indicate the boundaries within which the population mean would lie;
- i) Standard Error of Difference was used to calculate differences between sample means;
- j) The Null Hypothesis Statistical Technique was used to carry out procedures for administering the experiment;
- k) The effect size index was calculated to indicate whether there was a significant difference in outcome between the post-test mean scores of the experimental and control groups;
- l) The *t*-test for independent means was used to compare the mean scores of the experimental and control groups;
- m) A one-tailed test of statistical significance was used to reject the null hypothesis.
- n) The responses emerging from the data collected were used to answer stated research questions and objectives.

3.8 Administration of the Experiment

The experiment was carried out with Form II students. Two groups were formed; the experimental group or treatment group which was exposed to the developed teaching strategies for twelve weeks and the control group which was taught using the traditional mode of instruction for the same amount of time. The teachers in the control group were the regular teachers while the experimental group had student teachers who were on teaching

practice. Student teachers were preferred because it was assumed that they would be more objective in carrying out the experiment.

Prior to carrying out the experiment, a pre-test was administered to the two groups and a post-test given at the end of the twelve weeks of learning to measure achievement in aural musicianship performance. Students were tested on rhythmic dictation, melody writing, and interval and cadence identification. The independent variable was the developed teaching strategies while the dependent variable was the post-test results. The covariate was the pre-test. The procedures for the experimental group were carried out using the null hypothesis statistical testing (NHST) technique as outlined by Spatz (2005:194-195), whose statistical tenets are;

- a) Begin with two logical possibilities, the null hypothesis H_0 and the alternative hypothesis, H_1 .
- b) Tentatively assume that Treatment A has no effect. If H_0 is true, the two samples will be alike except for the usual chance variations in samples.
- c) Decide on a α level (usually, $\alpha=.05$). The alpha level is the chance a researcher is willing to take of committing an alpha error, that is, of rejecting a null hypothesis that is true (Vogt,2005)
- d) Choose an appropriate statistical test. For a two sample experiment, a t -test is appropriate. Calculate a t -test value.
- e) Compare the calculated t -test value to the critical value for α
- f) If the data based t -test value is greater than the critical value from the table, reject H_0 . If it is less than the critical value, retain H_0 .
- g) Calculate an effect size index (d). This is a statistic, often abbreviated d , indicating the difference in outcome for the average subject who received a treatment from the average subject who did not (Vogt,2005).
- h) Write a conclusion that is supported by the data analysis.

The Procedure

During the twelve week period, both groups studied the same content material but using different strategies. The following procedures were used:

- a) Hypotheses were formulated and the null hypothesis statistical testing (NHST) technique was used.
- b) The experiment began with two logical possibilities; the null hypothesis, H_0 which stated that the developed strategies, referred to as the treatment A did not have an effect on the students' aural musicianship performance, that is, the mean score of the experimental group would be equal to that of the control group as shown in the formula below;

$$H_0: \mu_A = \mu_{no\ A}$$

Conversely, the alternative hypothesis, H_1 stated that the developed strategies would have an effect on students' aural musicianship performance, that is, the score of the experimental group would be higher than that of the control group. The alternative hypothesis can be two – tailed or one-tailed (Spatz, 2005). For this experiment, a one-tailed alternative was preferred: (see formula below):

$$H_1: \mu_A > \mu_{no\ A}; H_1: \mu_A < \mu_{no\ A}$$

The first one-tailed alternative allows one to conclude that treatment A increases scores while the second permits a conclusion that treatment A reduces scores.

- c) An alpha level was established. ($\alpha = .05$).
- d) The experiment was then conducted (see Appendix VII)

Data Analysis

After the experiment the scores for both the pre-tests and post-tests for both groups were computed. The graphs on page 63 summarize the performance of both groups on the pre-test. Figures 3.2 below shows that six students scored less than ten marks, twelve students scored between 10 and 30 marks, there were no students who scored between 30 and 45 marks whereas the remaining fourteen students scored between 45 and 65 marks. Slightly more than half the class (18) scored less than fifty percent with only 14 students scoring fifty percent and above. The mean score for the experimental group was 33.1 while the standard deviation was 22.15.

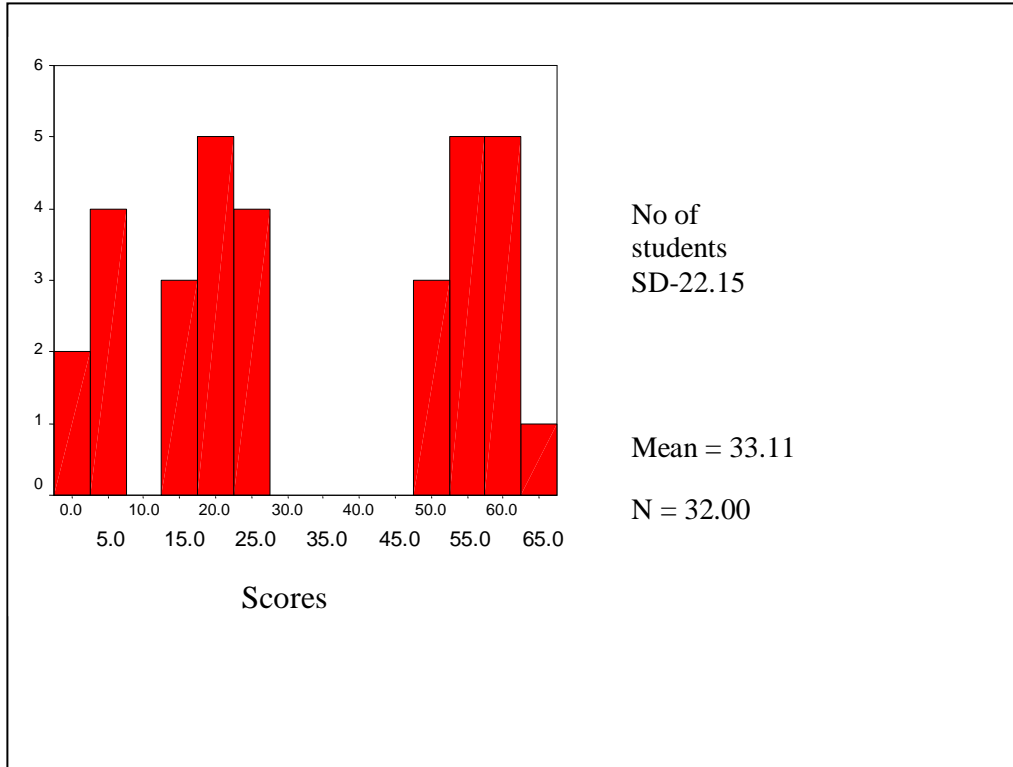


Figure 3.2: Experimental Group Pre-Test

Figure 3.3 shows that one student scored less than ten marks, two students scored less than 20 marks, seven scored between 20 and 30 marks, eleven scored between 30 and 40 marks, four scored between 40 and 50 marks while two scored between 50 and 60 marks. Three scored between 60 and 70 marks. The mean and the standard deviation for the control group were 30.9 and 13.59 respectively. Table 4.19 below shows the pre-test scores for both groups.

Table 3.3: Pre-Test Scores for both groups

Pre-Test Scores		
	Experimental	Control
Mean	33.1	30.9
Standard Deviation	22.15	13.59
No of Students	32	31

The post -test was administered to both groups after twelve weeks of learning and the graphs below summarise the performance of each group on the pre-test.

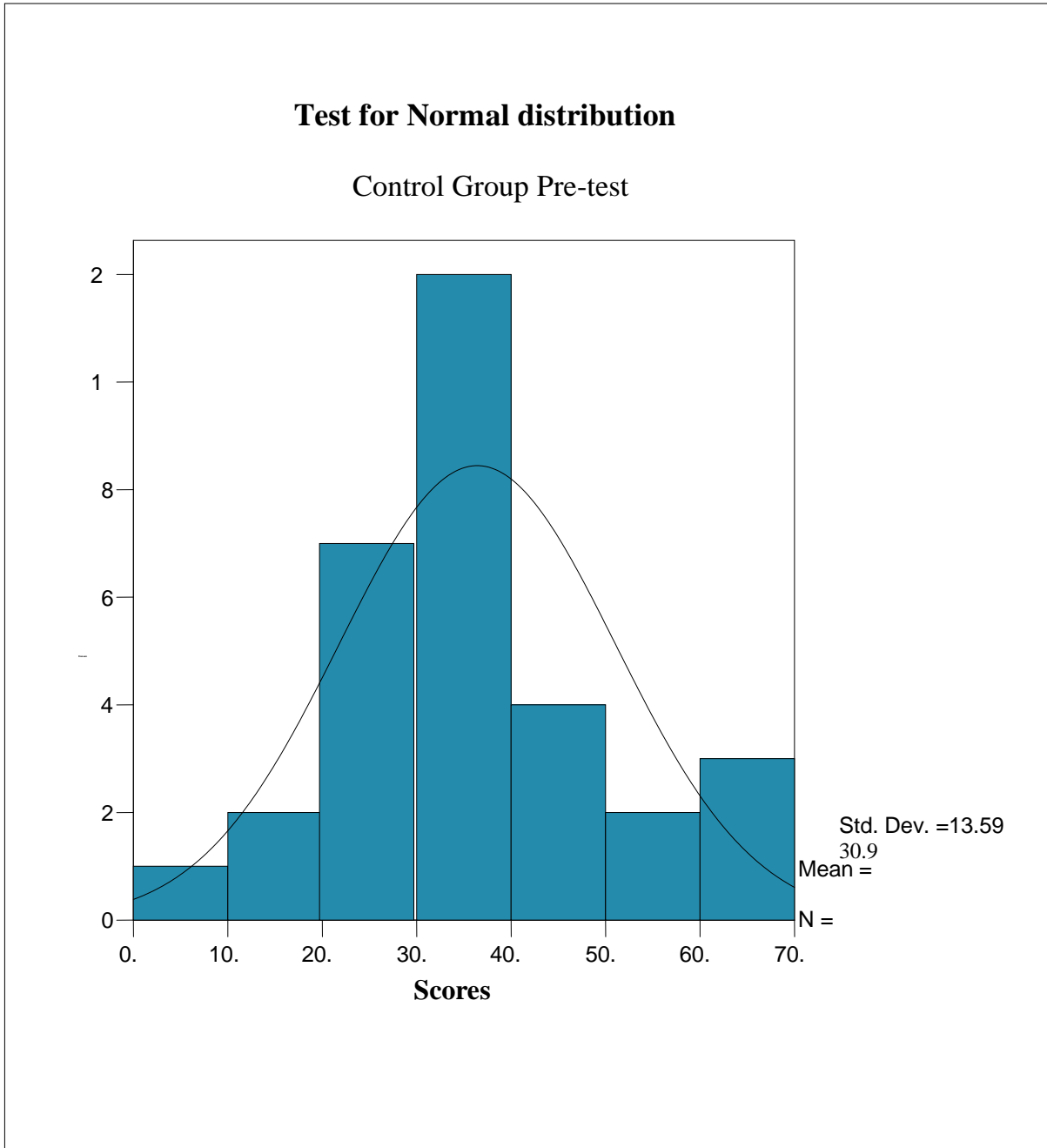


Figure 3.3 Control Group Pre-Test

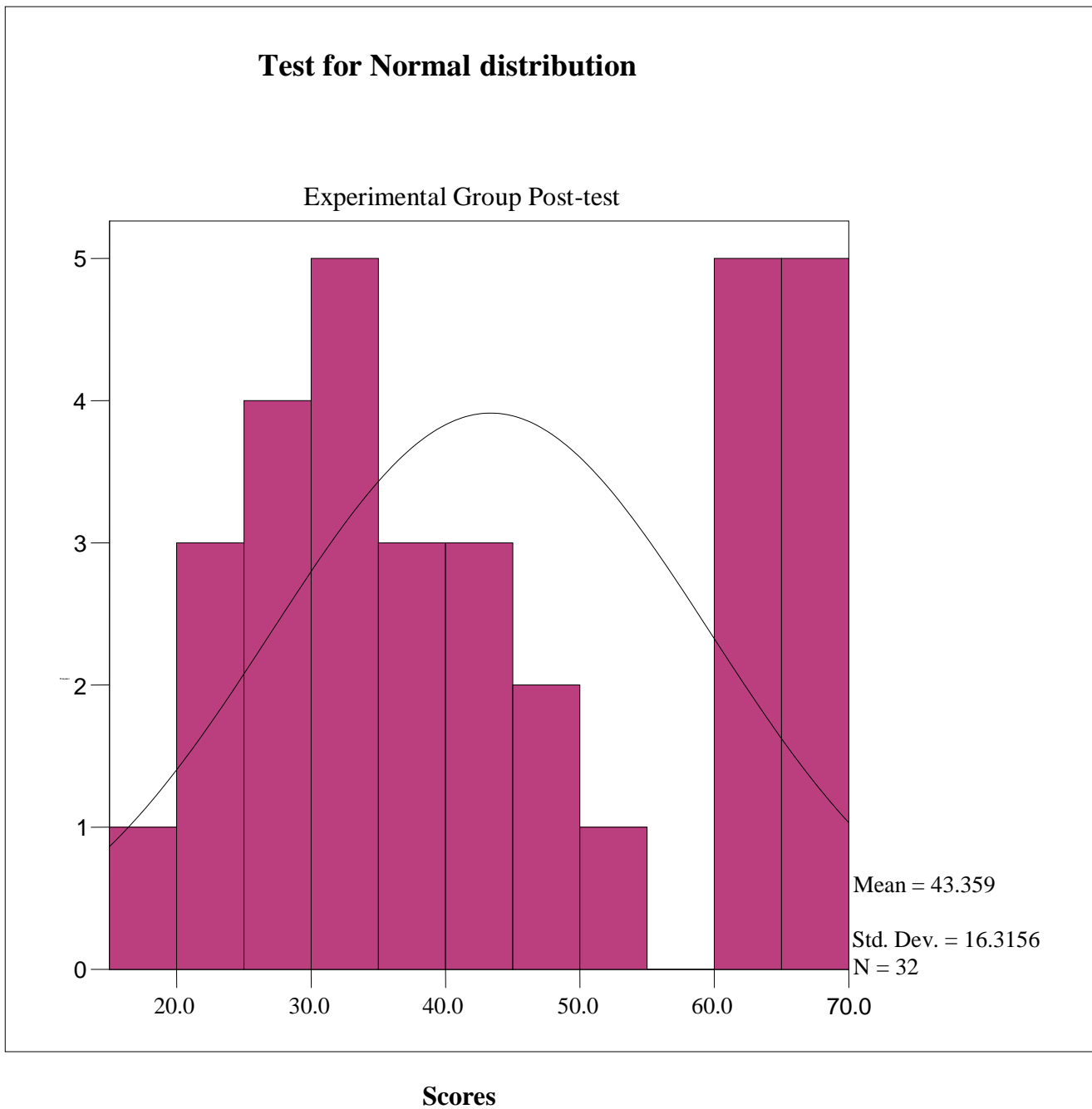


Figure 3.4: Experimental Group Post-test

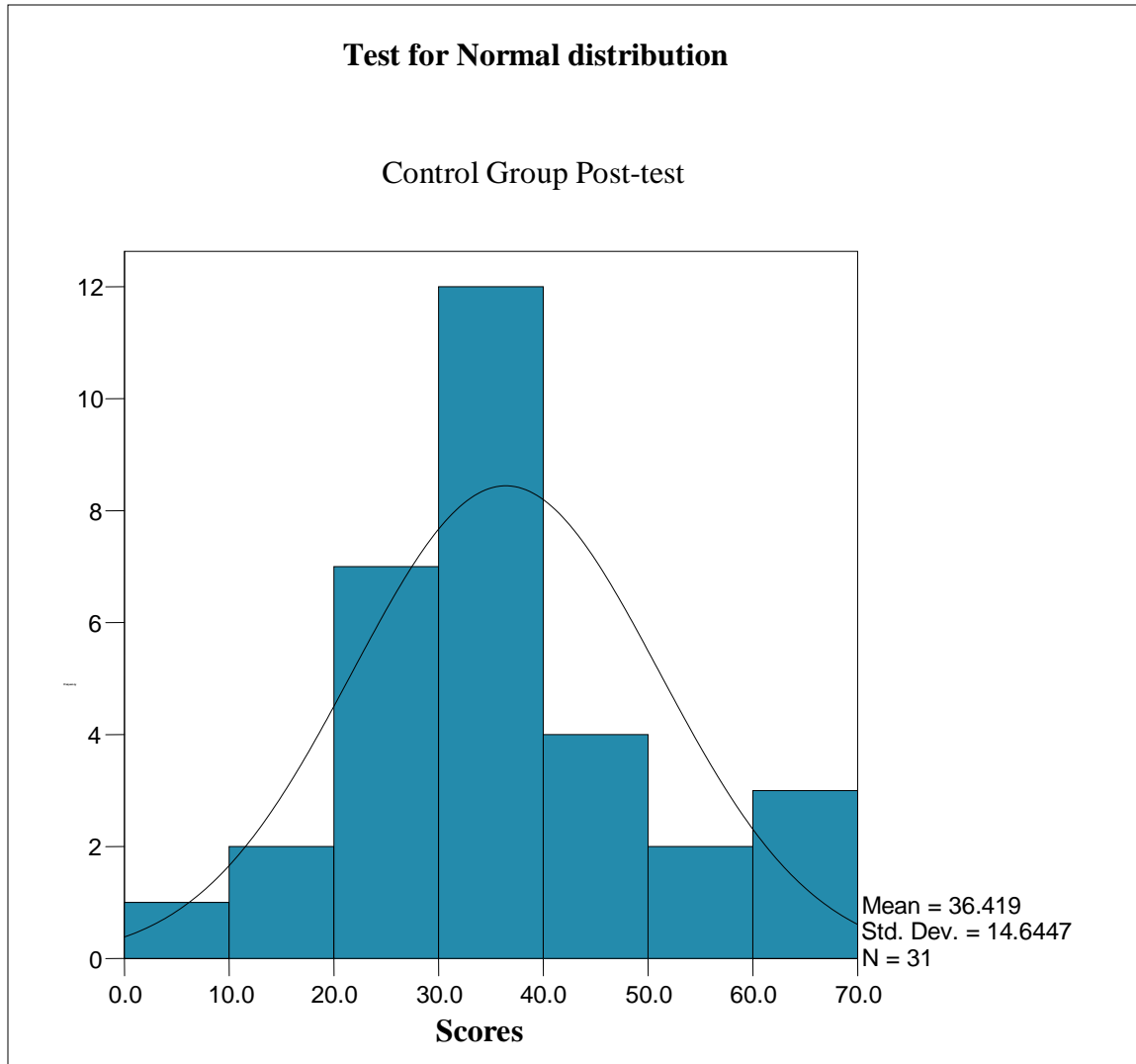


Figure 3.5: Control Group Post-Test

Figures 3.4 and 3.5 show the performance of the experimental and control groups on the post-test respectively. In both figures, the scores are plotted on the horizontal axis while the number of students is plotted on the vertical axis. Figure 4.3 shows that one student scored less than twenty marks, seven students scored between 20 and 30 marks, eight students scored between 30 and 40 marks, five students scored between 40 and 50 marks, one student scored between 50 and 60 marks while ten students scored between 60 and 70 marks. The mean for the experimental group was 43.36 while the standard deviation was 16.32.

Figure 4.4 shows that one student scored less than 10 marks, two scored between 10 and 20 marks, seven scored between 20 and 30 marks, twelve scored between 30 and 40 marks, four scored between 40 and 50 marks, two students scored between 50 and 60 marks while

three scored 60 and 70 marks. The mean for the control group was 36.42 and the standard deviation was 14.64. Table 4.20 below shows the post-test scores for both groups.

Table 3.4: Post-Test Scores for both groups

Post-Test Scores		
	Experimental	Control
Mean	43.36	36.42
Standard Deviation	16.31	14.64
No of Students	32	31

Table 3.4 above shows the post-test results of both groups. The students in both groups were thirty two and thirty one respectively. The mean for the experimental group was 43.36 while the standard deviation was 16.31. The mean for the control group was 36.42 while the standard deviation was 14.64.

The table below shows how the students performed in each of the categories that they were tested on. A t-test was used to pair the samples. From the paired samples above, the following observations were made:

- a) An average of forty three students attempted each question;
- b) The rhythm section had the highest score while the students scored very low on cadences;
- c) The post-test results were higher than the pre-test results in all categories apart from intervals.

From the results of the pre -test, it was noted that there was a difference between the mean scores of the two groups. There was need to equate the two groups statistically, hence ANCOVA (analysis of covariance) was used. This is a statistical technique that is used when two groups are given a pre-test related in some way to the dependent variable and their mean scores on this pretest are found to differ. ANCOVA enables a researcher to adjust the mean scores for each group to compensate for the initial differences between the groups. (Fraenkel and Wallen, 2000).

Table 3.5: Paired Samples Statistics

Paired Samples Statistics					
		Mean	N	Std deviation	S.E.M
Pair 1	Pre-test rhythms A	7.45	48	4.365	.630
	Post-test rhythms A	11.17	48	3.060	.442
Pair 2	Pre-test rhythms B	8.07	46	3.865	.570
	Post-test rhythms B	12.64	46	6.527	.962
Pair 3	Pre-test Intervals	3.30	43	3.012	.459
	Post-test Intervals	2.86	43	2.704	.412
Pair 4	Pre-test Melody A	4.39	44	2.630	.396
	Post-test Melody A	5.74	44	2.794	.421
Pair 5	Pre-test Melody B	5.98	44	3.336	.503
	Post-test Melody B	7.80	44	3.705	.559
Pair 6	Pre-test Cadence	2.01	35	2.074	.351
	Post-test Cadence	2.74	35	2.119	.358
Pair 7	Pre-test overall	22.4365	63	18.22385	2.29599
	Post-test overall	44.6984	63	13.11781	1.65269

According to Vogt (2005), all ANCOVA problems can be handled with multiple regression analysis using dummy coding for the nominal variables. The table below is a summary of the regression fit of the model.

Table 3.6: Parameter Estimates

Dependent Variable: Post-test

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval		Partial Eta Squared
					Lower Bound	Upper Bound	
Intercept	27.538	4.524	6.086	.000	18.478	36.598	.394
Pre	.492	.102	4.813	.000	.287	.696	.289
[treat =1]	2.670	3.062	.872	.387	-3.462	8.803	.013
[treat =2]	0(a)

The third row of table 4.22 shows the value of the intercept. This is the point at which the regression line crosses the vertical (y) axis, when the value of the x (horizontal axis) is zero. The intercept is the expected value of the dependent variable when the value of the independent variable is zero. The third column carries the value of the standard error which is a statistic indicating how greatly the mean score of a single sample is likely to differ from the mean score of a population. Eta squared on the last column is a measure of how much of the variance in a dependent variable can be explained by a categorical independent variable. It tells how much better we can guess the value of the dependent variable by knowing the independent variable.

Parameter estimates are given under the second column (B) and the significance of the contribution is judged from the fifth column headed 'Sig'=Significance' (See table 4.22 on pg 68). The table shows that the intercept is 27.537 that is, the students marks are first recorded at 27.5 and pre-test caused a positive change of 0.492 while the new teaching method contributed a positive change of 2.67.

At the end of the experiment, it was observed that the mean score of the experimental group was higher than that of the control group. A *t*-test for independent means was used to compare the mean scores of the two groups. Fraenkel and Wallen (2000) explain that the *t*-test is a parametric statistical test that is used to establish whether a difference between the means of two samples is significant. The test produces a value for *t* which is then checked in a statistical table to determine the level of significance that has been reached. If the .05 level of significance is reached, the researcher rejects the null hypothesis and concludes that a real difference does exist. The *t*-test value was calculated to establish whether the developed strategies had an effect on students' aural musicianship performance. The following formula was used:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{SED}$$

The experimental group mean score was 43.36 and the standard deviation (SD) was 16.31 while the control group mean score was 36.42 and the SD was 14.64. The difference in the means was 9.66. The standard error of measurement (SEM) for the experimental group was

$$8.75/\sqrt{31}=1.57$$

SEM for the control group was:

$$14.64/\sqrt{30}=2.67.$$

The SED is: $1.57+ 2.67=4.24$. Therefore t - test value was calculated as:

$$9.66/4.24= 2.28.$$

The critical value was checked from the table on Appendix XII. The α value was set at .05 for a one-tailed test and a population of approximately 60 students. The critical value was noted to be 1.671, a figure that was less than the t -test value which was 2.28. The null hypothesis was therefore rejected.

An effect size index was then calculated to decide whether a significant difference was important. For independent samples, the working formula for d is:

$$d= \frac{\bar{X}_1 - \bar{X}_2}{\hat{s}}$$

\hat{s}

\bar{X}_1 = mean for the experimental group

\bar{X}_2 = mean for the control group

\hat{s} = is the standard deviation of the sample.

In the case where samples have different values, the following formula was used to obtain \hat{s}

$$\hat{S} = \frac{\sqrt{(s_1)^2(df_1) + (s_2)^2(df_2)}}{df_1 + df_2} = \frac{\sqrt{(s_1)(s_1)(df_1) + (s_2)(s_2)(df_2)}}{df_1 + df_2}$$

Where s_1 and s_2 are the sample standard deviations and df_1 and df_2 are the degrees of freedom ($N-1$) for each of the two samples. The number of students in the experimental group was 32 with a mean of 43.36 and a standard deviation of 16.31 while the control group had 31 students with a mean of 36.42 and a standard deviation of 14.64:

$$\frac{\sqrt{(16.31)(16.31)(30) + (14.64)(14.64)(29)}}{31+30} = \frac{\sqrt{(266.02)(30) + (214.33)(29)}}{61} =$$

$$\frac{\sqrt{(8246.01) + (6429.60)}}{61} = \frac{\sqrt{14,675.61}}{61} = \frac{\sqrt{240.58}}{61} = 15.51$$

The standard deviation of the sample was 15.51, therefore effect size index was calculated as:

$$\frac{43.36 - 36.42}{15.51} = 0.447 \text{ which was approximated to } 0.45.$$

15.51

The issue of what represents a small, medium or large effect size index was addressed by Cohen (1969) who proposed the following guidelines:

Small effect $d=0.20$

Medium effect $d=0.50$

Large effect $d=0.80$

An effect size index of 0.45 lies between small and medium size effects. Thus the statistical analysis of these data, which included a t -test and an effect size index, supports the conclusion that the developed teaching strategies had a positive or an almost medium effect on aural musicianship performance of the experimental group.

In order to make inferences to the population from which the sample was drawn, the Standard Error of the Mean (SEM) was used to indicate the boundaries within which the population mean was likely to fall. Fraenkel and Wallen (2000) state that in all normal distributions, the 68-95-99.7 rule holds, that is, 68% of the sample means fall between ± 1 SEM; Approximately 95% fall between ± 2 SEM, and 99.7% fall between ± 3 SEM.

Figure 3.6 shows a histogram for the pre-test for both experimental and control groups. The pre-test mean score for the experimental group was 33.1 while the standard deviation was 22.15 (refer to table 3.3) The SEM was calculated using the following formula:

$$\frac{SD}{\sqrt{n-1}} = \frac{22.15}{\sqrt{32-31}} = \frac{22.15}{5.48} = 4.04.$$

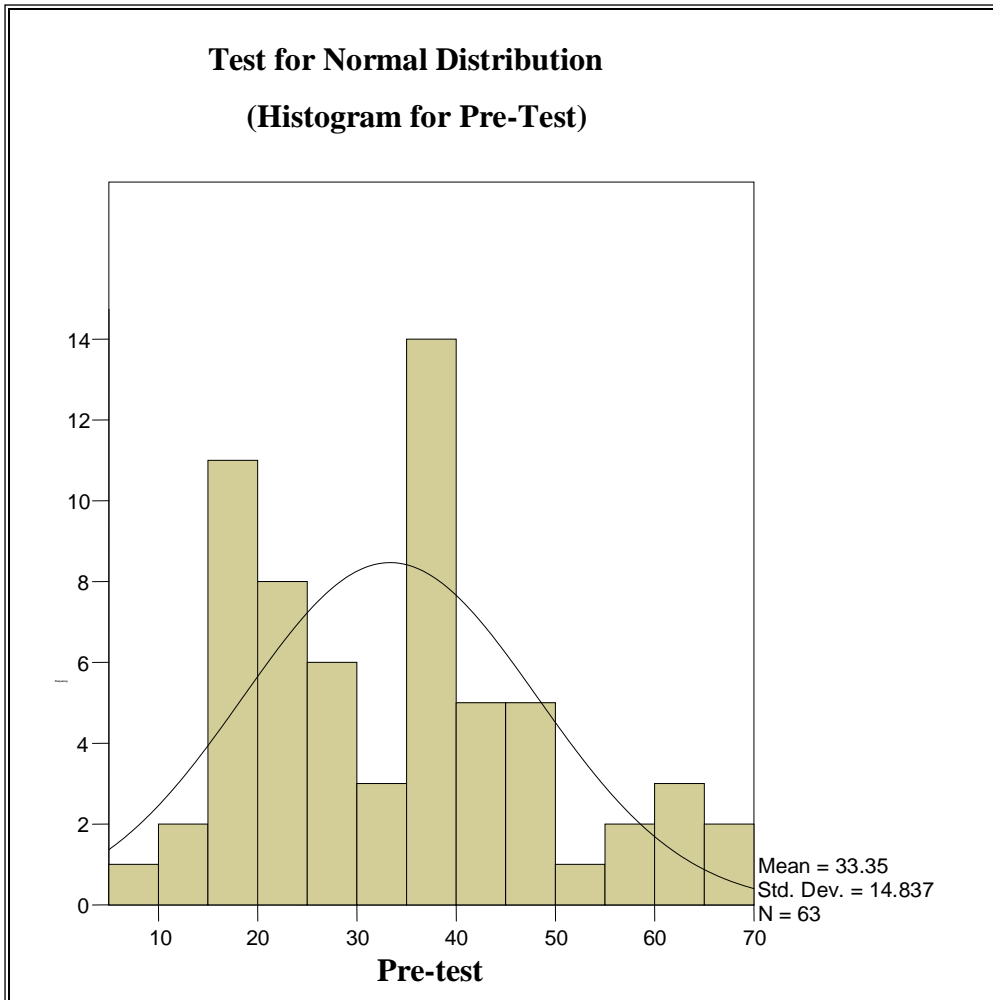


Figure 3.6: Combined Pre-test Mean Score

The pre-test mean score for the control group was 30.9 and the standard deviation was 13.59. the SEM was calculated as:

$$\frac{SD}{\sqrt{n-1}} = \frac{13.59}{\sqrt{31-30}} = \frac{13.59}{5.39} = 2.52.$$

Therefore the SED was calculated using the following formula:

$$SED = \sqrt{(SEM_1)^2 + (SEM_2)^2} = \sqrt{(4.04)^2 + (2.52)^2} = \sqrt{22.67} = 4.76$$

The combined pre-test mean score was 33.35 and the calculated SED was 4.76. Therefore, there is a 68% chance of being right by saying that the pre-test mean score of the population lay between 28.59 and 38.11 (± 1 SEM); a 95% chance of being right by saying the score lay

between 23.83 and 42.87 (± 2 SEM) and a 99% chance of being right by saying the mean score lay between 19.07 and 47.63 (± 3 SEM).

Figure 3.7 shows a histogram for the post-test for both experimental and control groups. The post-test mean score for the experimental group was 43.36 while the standard deviation was 16.31 (refer to table 3.4). The SEM was calculated using the following formula:

$$\frac{SD}{\sqrt{n-1}} = \frac{16.31}{\sqrt{32-1}} = \frac{16.31}{5.56} = 2.93.$$

The post-test mean score for the control group was 36.42 and the standard deviation was 14.64. The SEM was calculated as:

$$\frac{SD}{\sqrt{n-1}} = \frac{14.64}{\sqrt{31-1}} = \frac{14.64}{5.48} = 2.67.$$

Therefore the SED was calculated using the following formula:

$$SED = \sqrt{(SEM_1)^2 + (SEM_2)^2} = \sqrt{(2.93)^2 + (2.67)^2} = \sqrt{13.92} = 3.73$$

The combined post-test mean score was 45.2 and the calculated SED was 3.73. Therefore, there is a 68% chance of being right by saying that the post-test mean score of the population lay between 41.47 and 48.93 (± 1 SEM); a 95% chance of being right by saying the score lay between 37.74 and 52.66 (± 2 SEM) and a 99% chance of being right by saying the post-test mean score of the population lay between 34 and 56.4 (± 3 SEM).

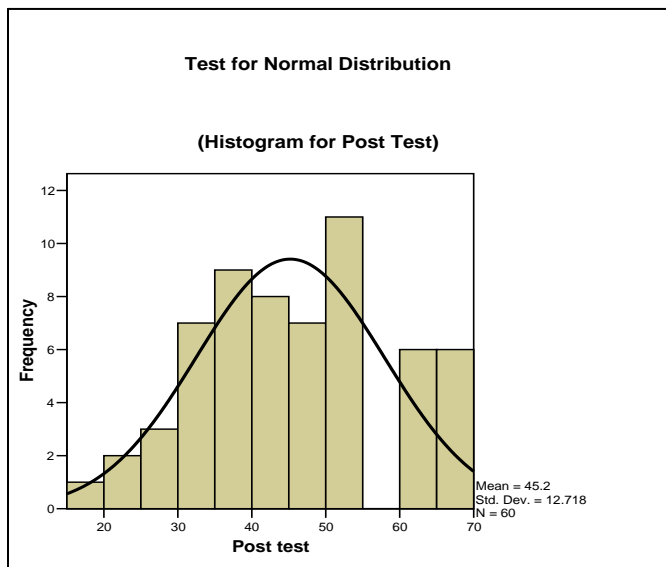


Figure 3.7: Combined Post-Test Mean Score

Generalizability of the study

According to Robson (2002:107-108), generalizability to other settings or client groups has to be done on other non-statistical basis. Two general strategies used are:

- a) Direct demonstration where someone wishing to apply or extend the results carries out a further study involving some other types of participants or in a different setting;
- b) Making a case or putting forward an argument that it is reasonable for the results to be generalised by showing that the group studied is representative.

The second alternative was used by the researcher. The two samples were taken from a target population of Kenyan secondary school music teachers and students. The findings can be generalised to the music teachers and students in secondary schools in Kenya due to the fact that these two samples share certain characteristics with other groups that were not sampled:

- a) The researcher's experience in teaching aural musicianship at the university shows that students who enrol to pursue music at the university come from all parts of the country as the selection criteria is purely on merit but a majority perform poorly in aural musicianship. This is an indication that students all over the country face similar challenges to those that were sampled.
- b) The difference in the mean performance (KCSE music) between the sampled provinces and most of those that were not sampled was small (see table 3.1). So it can be assumed that in terms of ability, the students are more or less at the same level.

3.9 Ethical Considerations

In carrying out the experiment, reasonable precautions were taken to ensure anonymity of the respondents. Students, especially those in the experimental group were informed that they were taking part in a research study and the results were reported correctly, with an honest and truthful account of what took place. Covering letters indicating the purpose of the study were written to the institutions where the experiment was administered and permission was granted. Permission was also sought from teachers to tape-record the interviews.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter articulates the findings of the study based on primary data from both teachers and students. Data analysis is organised in four parts;

- i) Music teachers' questionnaires and information obtained from the interviews;
- ii) Students' questionnaires and attitude statements;
- iii) Observations made on the teaching resources and methodologies used;
- iv) Administration of the experiment.

4.2 Music Teachers' Responses

Questionnaires designed to gather information on teaching strategies were sent to twenty four teachers in Nyanza and Nairobi Provinces. A total of sixteen questionnaires were returned, that is, six from Nairobi and ten from Nyanza Province. These were two thirds of the total questionnaires sent. The response proportion can be computed as follows:

$$R = 1 - \frac{n - r}{n}$$

Where R = response rate

n = sample size.

The sample size (for teachers) was twenty four and the responses obtained were sixteen, representing a response rate of 67% as shown below;

$$R = 1 - \frac{24 - 16}{24} = 0.67$$

This total return rate was about two thirds of the total population of the teachers within the two provinces. This response rate is acceptable, as Nachmias and Nachmias (1996) assert that many mail surveys achieve a response rate no larger than fifty percent. The teachers comprised of eleven males (68.75%) and five females (31.25%). The mean age of the teachers was thirty seven years while the average teaching music experience was 12.8 years.

Fourteen free response questions were posed to the teachers and following are their responses. The first three questions concerning their academic and professional qualifications are summarised in table 4.1.

4.2.1 Teachers' Qualifications

Regarding their academic qualification, two teachers (12.5%) had a Diploma in Education with music as their teaching subject, twelve (75%) had a Bachelor of Education degree while one (6.25%) had a Master of Arts Degree in Music. One respondent however failed to indicate his or her academic qualification. In terms of their professional training, a number of teachers had sat for the Associated Board of the Royal Schools of Music Examinations at different levels. One (6.25%) had Grade One Piano, two (12.5%) had Piano Grade Two while one (6.25%) had Piano Grade Five. One (6.25%) had guitar Grade One. The table below shows the teachers' qualifications.

Table 4.1: Teachers' Qualifications

	Type of Qualification	No of Teachers	% (N=16)
1	Academic Qualification		
	Diploma	2	12.5
	B.Ed Degree	12	75.0
	M.A Degree	1	6.25
	Non-response	1	6.25
2	Professional Qualification (ABRSM)		
	Piano Grade 1	1	6.25
	Piano Grade 2	2	12.5
	Piano Grade 5	1	6.25
	Guitar Grade 1	1	6.25
	Non-response	11	68.8

4.2.2 Teachers' Instrument Qualification

The study, in order to realize its objectives, sought to discover what instruments teachers played. This information is contained in Table 4.2.

Table 4.2: Instrument Played by Teachers

Instrument	No of Teachers	% of cases (n=16)
Voice	14	87.5%
Wind	11	68.75%
Keyboard	13	81.25%
Chordophone	06	37.5%
Percussion	03	18.7%

Table 4.2 above shows that fourteen (29.8%) teachers sing (voice), eleven (23.4%) teachers play wind instruments, thirteen (27.7%) play keyboard instruments, six (12.8%) of them play chordophone instruments while three (6.4%) play percussion instruments. From teachers' responses and the table above, it can be deduced that some teachers played more than one instrument hence the percentage of cases was more than 100%.

4.2.3 Teachers' understanding of the concept of aural training

This question sought to establish the teachers' understanding of this important musical concept. This was a free response question and the teachers' responses were classified in three categories.

Table 4.3: Teachers understanding of the concept of aural training

Aural Concepts/Terms	Number	Percent
Identification of musical sounds and sounding intervals, rhythm	2	12.5
Art of learning and listening to music sounds	9	56.3
Ear Testing exercise	5	31.2
Total	16	100

According to the information in Table 4.3, two (12.5%) defined it as the identification of musical sounds and sounding of intervals and rhythm, nine (56.3%) described it as the art of learning and listening to musical sounds and five (31.2%) said it was an ear testing exercise. This shows that most teachers consider aural training to be the art of learning and listening to musical sounds.

4.2.4 Importance of aural training for students

In this question the teachers were to state how important aural training was for the students. The information on their perception of the importance of aural training to students is contained in Table 4.4.

Table 4.4: Importance of Aural Training for Students

Importance of Aural Training	Frequency	Percentage N=16
Very Important	15	93.8
Unsure	1	6.3
Total	16	100.0

According to information in Table 4.4, fifteen (93.8%) thought that aural musicianship was very important while one (6.3%) was not sure of its importance. Obviously the importance of aural training was highly placed among the teachers.

4.2.5 Introduction of aural training to students

This question sought to know when the teachers first introduced aural training in class. All the sixteen teachers (100%) said they introduced aural training in Form I.

4.2.6 Resources used for Aural Training

This question was set to find out what teaching materials were used by teachers in aural training. Information on resources used for aural training is contained in Table 4.5. It shows that fifteen teachers (93.8%) used the piano and keyboard in helping students with pitch and rhythm identification, four (25%) used pre-recorded music (aural tapes) so that students could practice the different aspects of aural work, while three (18.8%) used rhythm charts for practice of various rhythmic patterns. The recorder was used by three (18.87%) teachers for

pitch and rhythm identification while two (12.5%) used drums for execution of rhythms. The least used instrument was the guitar for identifying chords while one teacher (6.3%) asked students to clap the various rhythms given to them.

Table 4.5: Resources used in Aural Training

Teaching Resource	Function	No of Teachers	Percentage of cases (n=16)
Piano and keyboard	Pitch and rhythm Identification	15	93.8%
Aural test tapes	For practice on the different aspects of aural work	4	25%
Charts	Practice on various rhythms	3	18.8%
Voice	Sight singing melodies	5	31.3%
Recorder	Pitch and rhythm identification	3	18.8%
Drums	Identification of rhythms	2	12.5%
Guitar	Identification of chords	1	6.3%
Body percussion	Practising various rhythms	1	6.3%

4.2.7 Frequency of aural training given to students

This question required teachers to state how many times they offered aural training each week. The responses were recorded per class. There are different numbers of lessons for music at the different levels of secondary school.

Table 4.6: Frequency of Aural Training by Form

Class	Twice a week		Once a week		Once a fortnight		Once a month		Once a term		No training at all	
	No	%	No	%	No	%	No	%	No	%	No	%
Form 1	5	31.3	8	50	2	12.5	1	6.3	0	0	0	0
Form 2	6	37.5	7	43.8	2	12.5	1	6.3	0	0	0	0
Form 3	8	50	7	43.8	1	6.3	0	0	0	0	0	0
Form 4	10	62.5	5	31.3	1	6.3	0	0	0	0	0	0

Information in Table 4.6 indicates the number of teachers who responded and their percentage. Generally, aural classes were taught once a week for the lower classes and twice a week for the upper classes. Apparently aural training was taught in all schools. The Table also shows that for Form I, eight teachers (50%) taught aural training once a week, two (12.5%) offered aural training once a fortnight, five (31.3%) offered it twice a week while one (6.3%) offered it once a month. From the responses, it was generally noted that all teachers offered aural training once a week for lower classes and twice a week for the upper classes. In Forms two, three and four, a majority of the teachers offered aural training once to twice a week; there were thirteen teachers (81.3%) in Form II and fifteen teachers (93.8%) in both Form III and IV.

4.2.8 Aspects of Aural Training offered to students

The question required teachers to tick the technical aspects of aural training that they offered students. Results showed that five areas that is, intervals, melodies, rhythms, cadences and modulation were taught with equal commitment by the teachers who took part in the study.

4.2.9 Methods used in teaching aspects of aural work.

The question sought to find out what teaching strategies were employed when teaching aural musicianship. Following are the responses given showing the percentage of the teachers who used a particular strategy.

a) Identification of Intervals

An interval is the distance between two pitches. This could be a harmonic interval where two notes are sounded together, or a melodic interval where two notes are sounded in succession. There were a number of mixed strategies in use:

- i) Seven teachers (43.8%) used this two-step approach: Singing the major and minor scales and identifying the intervals using the sol-fa names. The second strategy was to teach theoretically by using two notes, the bottom being used as the tonic and using this method to work out the quality of the interval.
- ii) Teaching the theory first then teaching each interval and finally giving exercises for further practice. The notes are first played melodically then harmonically. This was done by five teachers (31.3%).

- iii) Using hand signs so that learners could visualize the sound, and then using the piano to play the intervals for identification. This was done by six teachers (37.5%).
- iv) Using pre-recorded music and familiar songs where learners listened and identified the sounds. Intervals were also sung repeatedly until the sounds were mastered. This was done by eight teachers (50%).

b) Notation of Melodies

Melody is the result of the interaction of rhythm and pitch which has been used as a form of emotional expression in all human cultures (Arnold, 1983). It was noted that there was an overlap of strategies for melody writing. Some of the methods used by teachers in teaching melody were:

- i) Singing a familiar song together, singing the major scale, ascending and descending, using hand signs and allowing learners to find out the notes that were found in the song. This was done by nine teachers (56.3%).
- ii) Seven teachers (43.8%) played the melodies severally while learners tried to figure out the various pitches.
- iii) One teacher (6.3%) Introduced a two bar melody and skipped one note for learners to fill in then gradually skipped more notes until learners could write the whole phrase by themselves.
- iv) Eight teachers (50%) used the following method: Singing scales ascending and descending, sight singing of short melodies, clapping the various rhythms then playing back the melodies for the students to notate.

c) Rhythmic dictation and notation

Rhythm is defined as the temporal aspect of music and includes the effects of beats, measures, accents, note groupings and grouping of measures into phrases (Scholes, 1978). Rhythmic dictation is clapping a set of rhythm patterns after which learners write down what they have heard. Following are some of the strategies that were used in teaching rhythm.

- i) Learning note values and their corresponding time names. Emphasis was on the accented beat as the guide for identification of the various groupings. This was done by six teachers (37.5%).

- ii) Learning the theory first before clapping the various rhythms, playing and clapping the various notes as learners identified them. This was done by ten teachers (62.5%).
- iii) Using familiar songs where learners clapped the rhythm and identified particular rhythmic motifs. This was done by ten teachers (62.5%).
- iv) Learning (by clapping) the duration of various notes before learning the symbols of those notes. This was done by six teachers (37.5%).

d) Cadence Identification

A cadence can be defined as a progression of chords giving an effect of closing a 'sentence' in music (Jacobs, 1977). Cadence identification is a music activity where teachers play a music excerpt and students listen and state the cadences at the ends of the phrases. This is taught in the following ways:

- i) Ten teachers (62.5%) played simple songs and laid emphasis on the end of the songs since they ended in a cadence. Learners were sensitized to the movement of the bass part as it spelled out the cadence;
- ii) Ten teachers (62.5%) engaged learners in sight singing the cadences under their guidance;
- iii) Theory part was done first where the cadences were written out after which students listened to various passages of recorded music with different cadences. This approach was used by six teachers (37.5%);
- iv) Two teachers (12.5%) started with the basics; by teaching the question and answer phrases in melody writing where the first phrase ends with an imperfect cadence and the next with a perfect cadence. Harmonic progression of triads was played and students were encouraged to use the roots of these triads to identify the cadences.

e) Identification of Modulation

According to The New Penguin Dictionary of Music (1977), modulation is the change from one key to another in the course of a composition. Such a change may be accomplished by 'continuous' musical means rather than starting afresh in another key. Modulation was taught in the following ways:

- i) Fourteen teachers (87.5%) taught the theory first and played pieces (either on keyboard or using pre-recorded music) with modulations for the students to identify.
- ii) Three teachers (18.8%) taught the learners about the circle of 5ths and how to identify the leading note in order to establish the new tonal centre.
- iii) Singing and sight reading melodies with modulations and listening to pre-recorded music to identify the same was taught by six teachers (37.5%).

4.2.10 Inclusion of sight singing/reading in aural training.

The teachers were asked how frequently they included sight reading of sheet music in aural training. The results of their responses are shown below.

Table 4.7: Inclusion of Sight Singing/Reading in Aural Training

Regularity of Inclusion	Frequency	Percent
Very Often	11	68.8
Often	5	31.3
Unsure	0	0
Very rarely	0	0
Not at all	0	0
Total	16	100

Majority of teachers responded that they incorporated sight singing in their aural training. Those who incorporated it very often were eleven (68.8%) while five of them (31.3%) incorporated it often.

4.3 Teachers' Responses to Oral Interview

Six teachers from the participating schools were interviewed to corroborate information given in the questionnaires. Pertinent information regarding their qualifications and music experience has already been discussed. Following are other themes that emerged during the interview and were common with all the teachers.

4.3.1 Introduction of Aural Training to Students

Specific questions were asked were to collect information regarding how the teachers introduced aural training to their students, what aspects they included, and the activities the learners engaged in and how those activities helped in the development of their aural skills. All teachers indicated that they introduced aural training to their students when they were in Form I. A few indicated that due to lack of time, they introduced or taught aurals along with the other components of the music course, for example music history and practicals.

4.3.2 Resources used for Aural Musicianship

The teachers were asked whether they had enough resources for teaching aural musicianship and the answer was that the instruments were there but the books were lacking in aural content. The books that they used were the K.I.E music books whose content was inadequate and the teachers had to rely on other books like Basic Music Knowledge and Graded Aural Tests by Annie Warburton.

4.3.3 Factors Leading to Poor Performance in Aurals

Teachers' opinions were sought on the reasons why students performed poorly in aurals. Various responses were given;

- a) Teachers' lack of knowledge and skills, especially in handling music instruments led to poor performance. There were teachers who taught music theory all the time and totally avoided the aurals section because they believed they were not competent in it. This attitude spread to the students who ended up not liking aural training. This subsequently led to their failure in this area.
- b) Students developed a negative attitude towards aurals due to the negative publicity perpetuated by the senior music students in the same school.
- c) Inadequate time to teach aural training. Teachers were required to complete the syllabus at a particular time and this hardly left any time to dwell on ear training.

4.3.4 Strategies for Teaching Aural Musicianship

Teachers were required to state some of the strategies that they had found to be useful in teaching aural musicianship in their career as music teachers. These were methods that they had tried and found practical in imparting aural knowledge and skills.

- a) The teachers began aural training by teaching rhythm because they found that the students grasped it easily and other aspects were delayed until rhythm was mastered to a certain level before introducing pitch. The activities that the learners engaged in were naming and clapping the rhythms given to them. The teachers thought that students developed their aural skills because they could then identify and clap the various rhythms given to them later on.
- b) In cadence identification and modulation they used pre-recorded music as most of them were unable to play the piano efficiently
- c) Limited class time negatively impacted on aural training. Teachers gave their students extra work on pre recorded tapes so they could go and listen repeatedly out of class for all the aspects like identification of rhythms, intervals, cadences and melodic dictation. This proved to be very useful because the students listened out of class and did not feel intimidated when during class time they failed to get the rhythms and melodies correctly. This is because they had ample time to listen over and over again to obtain the right answers.
- d) Using music that was familiar to the learners reinforced familiarity of the melody and therefore students would first concentrate on identifying the rhythm of the piece of music.

4.3.5 Students' Performance in Aurals

The teachers were asked to rate their students' performance in aurals during the music lessons. They responded that their students were of average ability. This was further confirmed by the results of both the pre-tests and post-tests. Majority of the students scored between 30%-50% in the tests.

4.4 Music students as respondents

This section focuses on the presentation and analysis of data provided by students regarding aural training. The data was analyzed using the Statistical Package for Social Sciences (SPSS). Six schools participated in this study; three from Nyanza Province and three from Nairobi Province. There were a total of twenty-seven respondents in Nyanza Province and forty one from Nairobi Province, constituting a total of thirty males (44.1%) and thirty-eight (55.9%) females. A total of seventy questionnaires were sent out and sixty eight (98.7%)

were completed and returned. The table below shows the number and percentage of respondents in each province.

Table 4.8: Distribution of Respondents by Province

Province	No. of schools (n=6)		No. of students(n=68)	
	Number	%	Number	%
Nairobi	3	50%	41	60.3%
Nyanza	3	50%	27	39.7%

i) Introduction to aural training.

To determine the nature of foundational knowledge in aurals, the students were asked when they received their first lessons in aurals.

Table 4.9: Introduction to Aural Training

Form	Frequency	Percentage (n=68)
Form I	57	83.8%
Form II	11	16.2%
Form III	0	0%
Form IV	0	0%

The table above shows that fifty-seven students (83.8%) responded that they were introduced to aural training in Form I while eleven students (16.2%) indicated that they received their first aural lessons in Form II.

ii) Frequency of aural training

To assess instructional intensity, students were asked how frequently they received aural training per term. The results are shown below.

Table 4.10: Frequency of Aural Training

Frequency	No of students	% (n=68)
Once a week	38	55.9%
Twice a week	05	7.4%
Once a fortnight	08	11.8%
Once a month	09	13.2%

Once a term	06	8.8%
No training	01	1.5%
No response	01	1.5%
Total	68	100%

Table 4.10 above shows the students' response to how frequently they received aural training. Thirty-eight students (55.9%) were taught once a week, five of them (7.4%) twice a week and eight of them (11.8%) once a fortnight. Nine students (13.2%) were taught once a month, six of them (8.8%) once a term and one (1.5%) received no training. One student failed to respond to the question.

iii) Aspects of aural training students have been taught

This question required students to tick the aspects of aural training that they had received.

Table 4.11: Aspects of Aural Trainings Taught

Aspects of Aural Training	No of Students	Percentage (n=68)
Identification of Intervals	55	80.9%
Notation of Melodies	41	60.3%
Rhythmic Dictation	51	75%
Cadence Identification	35	51.5%
Identification of Modulation	06	8.8%

Information contained in Table 4.11 shows that students received all aspects of aural training as per the syllabus; fifty-five (80.93%) students were taught how to identify intervals, forty-one (60.3%) were trained on melodic notation, fifty-one (75%) on rhythmic dictation and thirty-five (51.5%) on cadence identification. Another six (8.8%) students were taught how to identify modulation.

iv) Description of methods and teaching resources used in aural training

For this question the students were asked to state the strategies and the teaching resources used in the teaching of aural musicianship.

a) Melodic dictation (teaching method and resources)

Table 4.12: Melodic dictation

Melodic Dictation	No of Students	Percentage (n=68)
Use of pre-recorded music	4	5.9%
Playing the piano, then notation	29	42.6%
Singing the melodies	11	16.2%
Non-response	24	35.3%
Total	68	100%

This question was answered by forty-four (64.7%) students while twenty-four did not respond (35.3%). Below are the answers given and the percentage of the students who responded.

- a) Four students (5.9%) stated the use of radio or pre recorded music which was played to them as they wrote down the notation.
- b) Twenty- nine students (42.6%) noted that the teacher played the piano and students notated what they heard.
- c) Eleven students (16.2%) stated that the teacher sang out the melodies and students notated them.

b) Rhythmic dictation

Table 4.13: Rhythmic Dictation

Rhythmic Dictation	No of Students	Percent (N=68)
Use of pre-recorded music	02	3.0%
Clapping, Drumming, Beating the table	28	41.1%
Playing piano	11	16.2%
Recorder playing	07	10.3%
Non response	20	29.4%
Total	68	100%

Table 4.13 shows the students' responses: Forty eight students responded to this question:

- a) Two students (2.9%) indicated that pre-recorded music was used where the students listened to music and wrote down the rhythms.
- b) Twenty-eight students (41.1%) were taught through the use of a drum, clapping the hands or using a stick to beat the table (to improvise where the drum was missing)
- c) Eleven students (16.2%) were taught using the piano. The piano was played and they notated the rhythm of the melody.
- d) Seven students (10.3%) learnt rhythmic dictation by use of the recorder. The teacher played the melody and they notated its rhythm. Eleven students (16.2%) were taught using the piano.

c) Interval Identification

Table 4.14: Methods of Interval Identification

Teaching Resource/ Teaching Method	No of Students	Percentage N=68
Pre-recorded music	07	10.3%
Piano/keyboard	26	38.2%
Recorder	03	4.4%
Singing	07	10.3%
Non response	25	36.8%

Information in Table 4.14 above indicates that;

- a) Seven students (10.3%) reported that pre recorded music (intervals) was played and they were asked to identify the intervals.
- b) Twenty-six students (38.2%) indicated that intervals were played on piano for their identification while three students (4.4%) reported that intervals were played on recorder while they identified them.
- c) Seven students (10.3%) indicated that the teacher sang the intervals as they wrote them down. Twenty five students (36.8%) did not answer the question.

d) Cadence Identification

Table 4.15: Methods of Cadence Identification

Teaching Resource Or Method	No of Students	Percent N=68
Piano/keyboard	09	13.2%
Pre-recorded Music	01	1.5%
Non response	58	85.3%

The information in Table 4.15 indicates that nine students (13.2%) mentioned that the piano or keyboard was used in playing the cadences after which they identified them. One student (1.5%) reported that pre recorded music was played for him to identify the same. However, fifty-eight students (85.3%) did not answer the question.

On the question about modulation, no student indicated what teaching methods and resources were used.

e) Activities that are carried out during the aurals lesson.

This question focused on the learning activities that are carried out during the aural lesson.

Table 4.16: Activities carried out during Aurals

Aural Activity	No of Students	Percentage
Singing melodies	49	26.8%
Hand signs	32	17.5%
Playing chords	44	24%
Clapping rhythms	58	31.7%

Table 4.16 above shows that students were involved in various aural activities which they selected from the list given; Forty-nine (72.1%) indicated that they sang back melodies after the teacher before writing them down. Thirty-two (47.1%) identified intervals indicated through the use of hand signs. Forty-four (64.7%) identified the different chords played by their teacher on the piano whereas fifty-eight (85.3%) were involved in clapping rhythms given to them before they notated them.

f) Relationship between aural training and out-of-school music activities.

This question sought to establish the actual application of the aural lessons to the other musical activities carried out by the students.

Table 4.17: Aural Training and out of school activities

Answer given	No of students	Percent N=68
Yes	24	35.3%
No	04	5.9%
Very Little	08	11.8%
Not Sure	05	7.4%
Non Response	27	39.7%
Total	68	100

From Table 4.17 above; twenty-four students (35.3%) thought there was a connection between aural and other music activities that they engaged in while four of them (5.9%) saw no connection. Eight students (11.8%) indicated that there was very little connection while five students (7.4%) were not sure. Twenty-seven students (39.7%) did not respond to the question.

4.5 Music Students' Responses to Attitude Statements

This section focuses on the analysis of attitude statements given to students from the six schools that were sampled. The statements were given to the same respondents and out of sixty-eight sets of statements that were sent, sixty-five (96%) were completed and returned. Table 4.18 contains an analysis of statements showing students' attitude regarding aural musicianship teaching and learning.

The following initials used in the table have the following meanings:

Key 1

S1-Statement No 1

S2-Statement No 2

S3-Statement No 3, etc

The following are observations made on the statements whose responses are represented on Table 4.18. Those who ‘strongly agreed’ and ‘agreed’ were grouped together while those who ‘disagreed’ and ‘strongly disagreed’ with the statements were also grouped together.

Table 4.18: Attitude of Students towards Aural Musicianship

Statement	Agree		Disagree		Undecided		Total	
	No.	%	No.	%	No.	%	No.	%
S1 (4.4.1)	45	69	17	26	3	4.6	65	100
S2 (4.4.2)	61	94	3	4.6	1	1.5	65	100
S3 (4.4.3)	56	86	3	4.6	6	9.2	65	100
S4 (4.4.4)	42	65	18	28	5	7.0	65	100
S5 (4.4.5)	21	32	25	39	19	39	65	100
S6 (4.4.6)	30	46	28	43	7	11	65	100
S7 (4.4.7)	43	66	16	25	6	9.0	65	100
S8 (4.4.8)	11	17	44	68	10	15	65	100
S9 (4.4.9)	46	71	12	18	7	11	65	100

4.5.1 The learning of Music as a subject would be more exciting without aurals

Statement 1 required the students to give their opinion about the inclusion of aurals in the curriculum. Forty-five (69.2%) agreed with the statement that learning music would be more exciting without aurals while seventeen (26.2%) disagreed. Three (4.6%) were unsure about the statement. This statement shows that most students do not like aurals and they don’t find the subject exciting. It also shows that the students may not understand the implications for developing competent musicians.

4.5.2 I wish the aurals lesson would be conducted in a way that is easy for me to understand.

This statement sought to find out how aural training was carried out, whether it was simple enough for the students to comprehend. Sixty-one students (93.8%) agreed with the statement, three (4.6%) disagreed while one (1.5%) was undecided. Information obtained from most students was that they did not understand aurals as existing instruction procedures

were not student-friendly. Other studies (for example Wanjala, 2004) confirm that many teachers demonstrated an insecure foundation and training in aural skills which is the bedrock of musicianship and practical understanding of music.

4.5.3 Aural skills are an important part of the music lesson because they enable the music student to become a better musician

For this statement, students' opinions were sought regarding the importance of aural skills in the music curriculum. Fifty-six students agreed (86.2%) while three students (4.6%) disagreed with this statement. Six (9.2%) were undecided. This shows that most students appreciate the connection between aural skills and their own musicianship.

4.5.4 I often find it difficult to recognize the intervals played by my teacher during the aural skills lesson.

This statement required students to give their opinion or view about interval identification. Forty-two students (64.6%) agreed while eighteen (27.7%) disagreed. Four of them (6.2%) were undecided. This statement showed that a majority of students had difficulties in recognizing the intervals played by the teacher.

4.5.5 I am able to identify the cadences played by my teacher.

This statement sought to know the students' ability in cadence identification.

Twenty-one students (32.3%) agreed with this statement while twenty-five (38.5%) disagreed. Nineteen students (29%) were undecided. Information obtained from the students showed that there were fewer students who could identify cadences than those who could not. A significant number of students were undecided.

4.5.6 Writing down melodies that have been dictated by the teacher is usually a difficult exercise.

Melodic dictation was one of the challenging areas for students. Thirty of them (46.1%) agreed with this statement, twenty-eight (43.1%) disagreed while another six (9.2%) were unsure about that statement. This statement shows that even though more students (46.1%) found melody writing a difficult task, a significant number did not think it was difficult. This

means that this is a task that nearly divided the students into two groups; those who experienced difficulty in notating melodies and those who did not.

4.5.7 Rhythmic dictation is not difficult for me because I am able to identify the rhythm played by my teacher.

This statement sought to find out the students' ability in rhythmic notation. Forty-three students (66.1%) agreed with this statement while sixteen (24.6%) disagreed. Four (6.2%) were undecided. In this one, most students found rhythmic dictation easy and did not have problems notating what they heard.

4.5.8 The aural lesson is very exciting and I usually look forward to the class.

This statement was intended to gauge the students' attitude towards aural musicianship and their ability to enjoy the lessons. Eleven students (16.9%) agreed with this statement while forty-four of them (68%) disagreed. Ten (15.4%) were not sure whether they enjoyed aurals. This indicates that a good majority of the students do not enjoy aurals.

4.5.9 I am content with how aurals are taught and wish that more time could be allocated for aurals.

This statement sought to find out how aurals are taught. Forty-six (70.8%) agreed while twelve students (18%) disagreed. Seven (10.8%) of them were undecided. Responses to this statement indicated that students thought that aurals were an important part of the music content and would like to have more time allocated for it.

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.1 Introduction

In this chapter, various aspects of the findings of the study will be discussed in line with the objectives of the study. Teachers' and students' responses to the interviews, questionnaires and attitude statements will be compared and scrutinised in view of findings from other studies.

5.2 Teachers' Professional and Academic Qualifications

Findings from the teachers' responses to the questionnaires and interviews indicated that a majority of the teachers have a Bachelors' Degree with music as their teaching subject. In terms of their professional qualifications, there were those who had done the Associated Board of the Royal Schools of Music (ABRSM) Examinations. The highest level of practical performance attainment among those teachers was grade five in piano examinations. With regard to the playing of instruments, a large percentage of the teachers indicated that they performance major was voice while a few played the keyboard. Those who indicated that they played the keyboard were more than those who had sat for the ABRSM examinations. In order to account for the difference in numbers, it was possible that some teachers had taught themselves how to play the keyboard and had not sat for any music examinations.

Teachers' professional and academic qualifications were two of the factors that affected the teaching of aural musicianship in the secondary schools. With reference to Kenyan teachers, Musungu (1994), Wanjala (2004) and Auma (2005) noted that music teachers were generally lacking in instrumental skills, especially in the playing of instruments which helped to facilitate the learning of concepts like intervals, cadences, solo and choral accompaniment. Mwangi (2000) indicated that tutors in public TTCs had difficulties in playing musical instruments and singing due to lack of skills and knowledge. Reasons given for teachers' lack of performance capacity were; lack of time for practising the skills learnt during their course; failure to master the wide range of techniques required for playing the instruments; and the cost of instruments and availability. It had also been noted that there were teachers who

underwent P1 (primary one) training (where the teaching strategies are appropriate for the primary school curriculum) after which they enrolled for a Bachelor's degree in music. They were then promoted to teach music at the secondary school.

The question of teacher preparation has been addressed by many authors. For example Akuno (1997:53) notes that:

For the teachers to fully and successfully play the roles expected of them, they need to have necessary qualification. The training provided should equip the teacher with the skills to provide learners with education, resources notwithstanding...

Hoffer (1964) points out that gaps in music knowledge and skills must be filled in to round up one's professional training. In the same vein, Mark (1978) reiterates the importance of developing oneself even after attainment of a certain level of education. He says teachers should note that their interest in new ideas and their willingness to consider new methods should be ingrained in them throughout their teaching career. If these are laid aside, teaching techniques remain underdeveloped during their tenure as teachers. Hookey (2002:888) asserts that professional development is a lifelong project. However, he regrets that in-service music teachers' needs have not been adequately addressed:

Despite the current flurry of professional development activity, the music education profession has not given the continuing professional learning of its in service members the same attention it has given to the learning of pre-service students.

This statement concurs with the situation in Kenya. The findings from this study indicate that some teachers, especially those with a Diploma and P1 certificate in Music were pursuing a Bachelor of Education Degree in Music. Observations made by the researcher with regard to those pursuing music courses at the university show that pre-service music students have more practical musicianship and instrumental tuition courses than the in-service teachers who take less courses in music because of limited time.

From these observations, the inference made is that teachers still lack the necessary skills for aural training, despite the fact that they have undergone training. Wanjala (2004) notes that absence of formal lessons during training accounts for teachers' inability to play instruments. Consequently, they also fail to impart the same skill to their students. Instrumental skill is vital for teachers because it enables them to use instruments effectively (for example playing

melodies and cadences) in aural training. It also improves their aural acuity and enables them to impart the same skill to learners. Research by Gearing (2008) revealed that students learning multiple instruments and those learning piano performed better on aural tasks than those who did not learn how to play instruments. His research findings are relevant to this work whose approach encourages the use of music instruments as a resource for aural training.

With regard to University music education, Combs et al (1974) note that many teacher-education programs especially in large universities have little control over the subject matter preparation of their students. The universities and other teacher training institutions have a role to play in ensuring that the pre-service students and those going for continuing education are adequately equipped with instrumental skills to enable them cope with the secondary school music syllabus. Wanjala (2004) notes that aural training is a demanding area that requires creativity and careful interpretation of the KCSE syllabus. Moreover, training at a higher level is required to equip teachers with skills in handling the course. Thus this is a weak area which should be adequately addressed by the music educators in higher institutions of learning.

5.3 Instructional Strategies Used

Instructional strategies play a very important role in the learners' grasping of the content that is taught. The researcher sought to identify specific instructional strategies and resources used for teaching aural musicianship. It was observed that the teachers used mixed strategies in teaching aural skills. In the teaching of intervals, melody writing, rhythm and cadences, teachers' responses to the questionnaires and interview revealed that there was an over reliance on pre-recorded music and use of familiar songs, a factor that had been noted earlier by Auma (2005). There was hardly any playing of instruments either by the teachers or students during aural training.

Teachers' responses in relation to the instruments they played indicated that a good percentage played the keyboard and others played wind instruments. On the contrary, earlier findings (Musungu 1994; Mwangi 2000 and Wanjala 2004) indicated that teachers lacked

instrumental skills for teaching aural concepts. The responses given to the question about their professional qualifications indicated that a few teachers had sat the ABRSM examinations on instrument playing. These examinations are a measure of one's level of proficiency in playing particular instruments. The inference made from these findings is that while teachers indicated that they played instruments, it is possible that some of them taught themselves how to play or were ill-prepared and not confident enough to utilise them during aural training. The theoretical framework used in the study proposed an approach where instrumental playing forms part and parcel of aural musicianship training (refer to pp27-31).

With regard to the importance of possessing instrumental skills, Swanson (2005) states that to play the piano very well is a strong asset and to be skilled in playing many instruments is equally valuable. These abilities are strong assets and indicate a keen ear, a strong sense of rhythm and a feel for harmony and counterpoint in a functional setting. The theoretical framework used suggests an approach where music skill is combined with music content to enhance the music learning experience and to develop aesthetic sensitivity. This is developed through the presentation of music concepts in sequence where learners are actively involved in the learning process and the learning activities are geared towards the simultaneous development of the ear, hand, eye and voice.

Consistent with Gordon's theory of music learning, some teachers indicated that they begun by teaching rhythm with other aspects of music being delayed until rhythm had been mastered, a factor that was also noted by Auma (2005). The pre and post-test results for both experimental and control groups indicated a higher score on rhythm than on other aspects. A few authors have supported and some disputed this approach. Hoffer (1964) argues that while this procedure may be logical, it does not work out psychologically because people learn music by recognising groups or patterns that have meaning for them. Leonhard and House (1972) and Kohut (1985) have supported this approach. The latter states that natural learning processes are successful if one concept is developed at a time, a view that is also supported by Bessom (1980) and Gordon's theory of music learning. In the case of the Kenyan teachers, responses to the questionnaires and interviews indicated that the concept of rhythm

was first introduced before others, but it is not clear from the findings whether a proper sequence was followed to ensure that learners were firmly grounded on other music concepts. Regarding the mode of delivery of content, the findings of this research revealed that the strategies used by teachers in aural training were more teacher than learner-centred whereby the teachers always began by playing the intervals or melody before the learners engaged in any activity. Peters and Miller (1982:119) advocate for a learner-centred teaching and learning process when they state that:

Learning is based on experience and can not occur efficiently without the active involvement of the individual. People learn by undergoing and becoming involved in specific musical experiences and music problem-solving tasks. The order in which these tasks are presented is of crucial importance.

This statement supports the theory of learning modalities that was used in this study. Learning tasks, according to the theoretical framework used, should be ordered sequentially for successful learning to take place. Supporting the same view, Leonhard and House (1972) state that the nature of the subject matter dictates the instructional method to be used and the nature of music education lends itself admirably to student-centred methods. Durrant and Welch (1995:89) note that:

Musical awareness is stimulated by music around us; children then will be eager to explore sounds and form them into music structures. Notation, or learning about notation, in isolation from sound is a fruitless exercise, as it will have no meaning. The essence of musical encounter is not the written symbol, it is to do with our responses and actions and decisions in relation to responses.

This statement by Durrant and Welch (1995) is consistent with the music learning theory by Gordon (1993) where aural pitch and basic rhythmic patterns are introduced before notation.

Swanwick and Taylor (1982) regret that a large proportion of music teaching is devoted to 'knowing how' or 'knowing that' and very little attention goes to knowing the music itself.

This is supported by Akuno (1997:18) who states that:

Music teachers spend most of their time in class with verbal and illustrated lecture while they spend very little time demonstrating their teaching with music (sound), particularly during general and theory lessons... As a result, students do not listen to music or make music in these classes.

Swanwick (1994) prefers to work from musical features drawn from music 'out there' and not initially from abstractions or concepts such as metre, mode or melody, an idea that is also

supported by the music learning theory by Gordon which lays emphasis on the aural rather than the theoretical aspects of music. It is therefore critical that aural experience be a necessary antecedent to other music experiences.

One disturbing trend was the responses given by students regarding the teaching strategies. In all the aspects of aural work covered, more than twenty-eight percent of the students gave no response with eighty-five percent failing to answer the question on methods used in cadence identification. For the other aspects of aural work, the observation made was that teachers were teaching aurals though the procedures were not student friendly and the students may not have been aware that they were undergoing aural training. Except for the multiple choice questions, some of the answers the students gave about the teaching methods were brief. Concerning the teaching of cadences, some of the teachers interviewed responded that cadences were taught much later in the second term. The pre and post-test results on cadence identification revealed very low scores for both groups. Auma (2005) also noted that among the schools that he observed, none of the teachers taught cadences. From the KIE music books that they used, there was an indication that cadences were introduced in Form I, hence their inclusion in the pre and post-tests. This result (little knowledge on cadences) was not anticipated as results from the pilot study indicated that students were taught about cadence identification in Form one. This led to two conclusions: that the students were unable to adequately describe the methods used; and in some cases, aural training was not carried out.

Responses given by both teachers and students indicated that systematic teaching does not go on. It is also highly probable that the strategies employed by the teachers are influenced by the way aural concepts are presented in the music books (refer to table 5.1). Learning is a process involving individual inquiry which leads to discovery (Bessom, 1980). Pupils grow best musically when the teacher provides them with enough materials and experiences for their needs then gets out of the way. This implies that the teacher needs to give guidance to the students and an opportunity to let them work on their own. In this way learners are able to make discoveries on their own and become responsible for the development of their aural acuity. Consistent with the theoretical framework used, this means that resources like

instruments should be made available for learners to use so they can play them and acquire musical skill which can then be honed as they acquire more music knowledge.

Leonhard and House (1972) state that music teaching methods should be considered in relation to the nature of music as an expressive art with those that engage learners in meaningful musical experiences being considered the best. They also add that 'teaching musical techniques, notation, history or theory outside a musical and expressive context is never justified' (p 280). In the teaching of an aspect like cadences, Pratt (1998) suggests that the learners should be involved by first teaching them to play simple scales so they can use the knowledge to play simple chord progressions. They can then improvise a melody on top of the bass. Frequent use of this method ensures that learners internalise the various cadences. This strategy will not only enable them learn about cadences but will also develop their compositional skills. He also suggests that melodic dictation should not take the limited classroom time but learners should be given melodies to listen to at their own time and write them down without due pressure exerted in formal classroom settings.

On the other hand, Mark (1978) states that methods are conditioned by the realities inherent in specific situations and because teacher competencies vary, so the methods must also vary. Referring to the situation in Kenya, there are schools that have resources (for example a keyboard) which are underutilised because the teachers think they must be very skilled at playing to enable them use the instruments for teaching aural musicianship. Wanjala (2004) suggests that teachers need not be virtuoso pianists but they can adopt a facilitative approach where they guide the learners in music making activities aimed at improving their aural acuity. Bowman (2002:77) suggests a similar approach to music teaching and learning. He states that:

It requires that we learn to see musical instruction not as a technical means to ends wholly musical, but as a process that provides students with experiences replete with opportunities to exercise such dispositions themselves.

The implication of this statement is that the process of acquiring musical knowledge through music instruction should be such that at the end of the experience, learners feel challenged and motivated to create and enjoy their own music. In the case of training in aural

musicianship, it means that the learning activities should be pleasurable and enjoyable even as learners assimilate music concepts.

The question of what role the music teacher plays is important. It is through understanding how people learn that teachers can become effective in their teaching (Hohn, 1995). The teacher could either encourage or inhibit the learners' understanding of music concepts. According to Bessom (1980), learning takes place when the learner is actively involved in a personal manner. The role of music teachers therefore, is to understand what aural training entails and to create learning experiences that are relevant, useful and meaningful to the learners. Teachers should also create instructional opportunities for learners and encourage the development of problem solving skills.

According to Hansen (2005) learners bring structures to the learning experience and build on those structures. He therefore advocates for a constructivist theory (Bruner, 1966) which discourages the explaining of music structure to learners and letting them create their own way of knowing it. There is a need to follow a pedagogy that provides learners with opportunities to interact with sounds and construct their own relationships. Dunbar-Hall (1996) emphasizes the need for teachers to have a teaching model. He defines a teaching model as a framework of ideas about a subject through which that subject can be taught. It usually precedes the day to day curriculum planning and in this way influences teaching methods and the selection of content. The teaching model developed from the theoretical framework could be useful for the Kenyan teachers as it would influence and guide their teaching methods.

Following is a summary of the factors noted with regard to the teaching strategies used by some of the Kenyan teachers:

- i.) Absence of a teaching model to help teachers in selecting material to deliver content and appropriate learning activities based on that material;
- ii.) The strategies tend to be more teacher than learner-centred, which denies the learners an opportunity to work with various musical sounds that would lead to a wholesome musical experience;

- iii.) Strategies that are devoid of sequence and are partly influenced by the resources (books) used for aural training. An example is where some books indicate a number of exercises to be clapped by the teacher and notated by the learners without an indication of other learning activities that could enable learners to understand further the concept of rhythm.
- iv.) The teaching materials hardly incorporate indigenous music, yet they are available and can be used in classroom teaching to enhance learning.

Another factor affecting the teaching of aural musicianship in the secondary schools is time allocation for music. Information obtained from the interviews indicated that time allocated for music was very limited, hence teachers were unable to train learners effectively. They explained that they had only three music lessons per week and there was also pressure to cover the syllabus before learners sat for their KCSE examinations. This hindered them from giving adequate lessons in aural. The teachers who experienced success in this area are those who gave learners additional work to be done away from class where the learners sat together and listened to pre-recorded music several times and at their own pace before writing down what they heard. This, according to the teacher, helped to improve their aural acuity. This practice is supported by Dobbs (1966) who says that greater progress is made with regular practice every day for a short time than when the practice is fitted into the same amount of time divided between only two or three periods.

5.3 Instructional Resources

Brown (1964) defines teaching and learning resources as a combination of human and non human resources to bring about learning. The importance of music resources is expounded by Kabalevsky (1988) who states that the musical material on which the syllabus is based plays a most important role in the whole system of school music education. According to him, this material must be artistic and attractive for the pupils; it must be suited to the teacher's purpose (to teach something useful) and it must fulfil a wider educational role, that is, to contribute to the formation of the pupils' ideological convictions, moral ideals and aesthetic taste.

Priest (1996) however regrets that the materials used in schools are inadequate, owing to the imbalance between the overstressed learning of symbols and the more necessary aural discrimination. He further says that:

‘Sound’ before the ‘sign’ seems to be interpreted by some as ‘sound illustration before the inevitable and obligatory sign’. The intention is that sounds should be enjoyed, worked with, chosen and arranged independently of any signs, until all the children/students feel the need to fix their musical ideas graphically.

Brocklehurst (1971) espouses the same idea stating that familiar material should be used for purposes of recognition. He then outlines two roles of the material used: First the use of such material involves the application of known to unknown; sound to symbol principles, thus providing an effective means of developing tonal memory and the ability to recall music silently. Secondly, that familiar material enables the learner to work in a meaningful musical context and can promote concentration, develop confidence as well as provide an interesting framework in which to acquire literacy skills. The selected theoretical framework for this study also supports the idea of starting with basic materials with aural experience of pitch then moving on to more complex material.

From the researcher’s observation, the resources (instruments) used for aural musicianship were available though some teachers did not use them. All the schools that took part in the research had a keyboard appropriate for playing intervals, cadences, melodies and modulations. A drum was used for playing rhythms though in its absence teachers used sticks for tapping on the table. Other useful tools that could have been used were hand signs to indicate pitch distance and rhythm charts or flash cards for practise on rhythms and intervals. The keyboard was also under-utilised as it was not consistently used by learners in playing intervals and melodies. Digolo (1997) regrets that there is a minimum use of instructional resources in the teaching and learning of music in secondary schools. The question that arises is whether the teachers were aware that these resources could be used quiet effectively by learners. The theory of learning modalities (Barbe and Swassing, 1979) which was also used in this study postulates that a learner processes information through the sensory channels through the visual, auditory and kinaesthetic activities. Learners could benefit more from playing the instruments instead of relying on teachers or pre-recorded music.

Inadequate teaching resources (with reference to books) were noted as a factor that affected the teaching of aural musicianship in Kenya. This was earlier observed by Auma (2005) who noted that 76.9% of learners interviewed confirmed that there was lack of music textbooks and that many secondary schools had any books on the teaching of aural musicianship. On the contrary, the researcher noted that there were two books in use, the KIE Music Book Series and ‘Foundation Music,’ a series of books from Form I to Form IV published by the Jomo Kenyatta Foundation. These two books guided teachers on what to teach at each level. The instructional content for aural musicianship was based on pitch and rhythm. The aspects that were taught included identification of intervals, rhythmic and melodic dictation for Form one and two and cadences and modulation in addition to the aspects mentioned, for Form three and four. Table 5.1 shows the content and organisation of the aurals section of each book.

Table 5.1: Content of two selected books

Book	Content	Organization
KIE Music Book	<ul style="list-style-type: none"> a) Rhythmic dictation on monotone b) Sight singing major and minor scales c) Melodic dictation d) Harmonic intervals e) Cadences 	<ul style="list-style-type: none"> -Learners tap each rhythm on the drum and notate it -No indication -Teacher names the key and allows short time for the key signature to be written. The pulse and tonic chord are given and music is played up to four times. -Playing or singing intervals in groups -No indication but from the exercises given, it is assumed that the teacher plays the passages and learners identify the various cadences.
Foundation Music	<ul style="list-style-type: none"> a) Rhythmic dictation b) Melody section c) Harmonic intervals d) Cadences e) Modulation 	<ul style="list-style-type: none"> -Teacher or one of the learners claps or taps rhythms while the others notate what they hear -Learners divide into groups to clap various rhythms. -Teacher gives the key and time signature of the music -Tonic key and the pulse are given and melody given phrase by phrase. Learners notate what they hear. -Identifying and describing intervals by size and quality. -Learners sing Passages and identify the cadences aurally. -Learners sing melodies and identify the keys to which music modulates.

The following observations were made with regard to the content and organisation of the two books:

a) Content

- i) There were several exercises on pitch and rhythm but these were neither artistic nor attractive and there was little evidence to indicate that the learning of these elements was a pleasurable and enjoyable experience. There was no application of sound to symbol principles because learners were first exposed to the symbols then the sound. The theoretical framework proposed an approach where learners first worked with sounds before being introduced to the symbols and notation.
- ii) The content lacked sequence, with each element being presented separately. For example the rhythm exercises were presented first then melody writing exercises followed but there was no relationship between the two exercises in terms of the rhythmic and melodic motifs used, neither were they in the context of a song. Gordon's music learning theory (1994), Bruner's instruction theory (1966) together with other authors for example Abeles et al (2000), Hoffer (1964), Peters and Miller (1982) and Bessom (1980) advocate for an approach in which materials are presented in a sequence for successful learning to take place.
- iii) Any musical idea extracted in order to be discussed or used must be returned immediately to the whole musical context in which it has its meaning (Glover, 1993). According to Bessom (1980), learning is reinforced by a constant process of synthesis, regardless of the amount of analysis. This was not reflected in the content and organisation of the books as there was no real and familiar music used. Learners ended up listening to excerpts alone instead of whole musical works hence; their accumulated experience in music was limited.
- iv) The content portrays a dissection of aural acuity in music into rhythm and pitch leading to the compartmentalization of these elements. Miles (1999) asserts that tasks of question types found in most 'traditional' aural examinations are based on assessment guidelines which are not completely authentic. They have numerous artificial or simulated components not necessarily based upon or generalizable to 'real-world' tasks. The music activities have been broken up according to the syllabus and one section is allocated to aural.

b) Organisation

Learners were involved in tapping or clapping rhythms and notating what the teacher dictated. In melody writing a melody was played a specific number of times as learners struggled to notate what they had heard while for cadence identification, pre-recorded tapes were used. The instructions given for teaching to some extent dictated the method or strategy that was used. Hoffer (1964) points out that the nature of the music curriculum decrees that learners explore every avenue of musical experiences. In order to uncover its variety and scope, such a comprehensive goal requires the use of imaginative and varied tools. Teachers need to explore the resources they can use and take advantage of those that are available for effective teaching and learning.

5.4 Aural training

One of the questions that teachers responded to was the definition of aural training. A majority of teachers defined aural training as the art of learning and listening to musical sound, while others defined it as an ear testing exercise. A few defined it as identification of musical sounds. The study defined the term 'aural training' as a conscious and deliberate effort on the part of the teacher in helping learners to be sensitive to musical sound. This is done by engaging them in musical activities that lead to the development of discrimination skills which then culminates in the development of their inner hearing.

The inference made from the teachers' definition is that aural training has to do mainly with listening to sound. There is little indication of active participation on the side of the learners whether in clapping, singing or playing instruments. The teachers' responses indicated a link between the way they defined aural training and the resources and strategies used. According to their understanding, aural training is the art of learning and listening to musical sound hence the main resource used for this was pre-recorded music and one of the strategies used was listening to some familiar music before explaining the pitch and rhythm elements. This is in contrast with the theoretical framework which proposed an approach where music learning begins not only with listening but also singing back or rote learning and drilling to ensure success in the teaching and learning process.

Overall teachers' definition does not indicate the goal of aural training, which should be the development of the inner ear. Sight singing, which is one of the activities that is central to aural training, was undertaken by five teachers only. Auma's (2005) research findings indicated that there was no sight singing in the schools that he observed. Peters and Miller (1982) state that sight singing is a skill that is useful in the life of every musician and one's inability to sight sing raises doubts as to whether the person can hear well enough to be called a true musician. Teachers' understanding and definition of aural training seemed to define the strategies that they used in teaching.

Learners' responses to the questionnaire indicated that 83.8% received aural training from Form I while 16.2% received the same from Form II. This partly contradicts the responses the teachers gave. All teachers responded that they introduced aural training to their students in Form I. This also included one teacher who was unsure of the importance of aural training. With regard to the frequency of aural training per week, the percentage of responses given by the teachers for each category differed slightly from what the students gave. There was a disparity where 37.5% of the teachers indicated that they taught aural training twice a week while only 7.4% of the students indicated the same. No teacher indicated that they taught aural training once a term but 8.8% of the students indicated they received aural training once a term. From the teachers' responses to the interview, it emerged that there are those who set aside time for aural training while others just integrated it with the teaching of other music aspects. The theoretical framework used in this study advocates for a holistic approach to teaching aural training in the sense that there is simultaneous development of the inner ear, the eye, voice and hand. Music learning should begin with experiencing sound before music knowledge is incorporated. This should be done regularly as frequent renewal of impressions is important for the grasping of aural concepts. It is probable that the students taught using a holistic approach did not realise that they were learning aural training. This partly explains the difference in the teachers' and students' responses regarding the frequency of aural training per week.

In terms of the aspects of aural training that the students had been exposed to, 93.8% of the teachers indicated that they taught intervals, melody, cadences and identification of modulation and all of them indicated that they taught rhythm. On the other hand, the percentage of learners

who responded positively to the same question was significantly lower. Katuli et al (2003) state that most teachers base their approach on the format of the KCSE Aural Paper, which has five questions on rhythm, melody, intervals, cadences and modulation. Teachers concentrate on drilling learners in these areas, a practice that does not genuinely equip the learners with aural skills. Views expressed by the teachers regarding poor performance in aurals indicated that some teachers taught music theory at the expense of teaching aurals, believing that they were not competent enough to handle the instruments used for aural training. Akuno (1997:64) observes the situation in Kenya:

Performance in the context of the music lessons is lacking, as teachers help pupils to solve theoretical problems. Time is spent in deciphering letter names of pitches on the staff and balancing rhythmic equations all in readiness for examinations. Pupils end up knowing about music but lack the skills that would enable them to benefit from musical experience.

This is a challenge for teachers to improve on their own musicianship skills to enable them tackle the aural component of the curriculum. The theoretical framework proposed an approach where learners are equipped with basic skills to enable them participate actively during aural training lessons.

Bruner (1966) proposes a view of constructivist learning theory in which learners are encouraged to discover for themselves instead of relying on the teachers. Combs et al (1974:53) explain the benefits of letting learners assume responsibility for their learning:

In the recent years we have come to see the process of learning as an emerging process. We now understand it as a matter of exploring and discovering on the part of the student rather than a process of injection on the part of the teacher. This shift in thinking has paid vast dividends everywhere in public education.

Another observation made was that there were three lessons per week for Form II students and teachers found this inadequate to cover everything since there was pressure to complete the syllabus before the onset of examinations. It therefore became important for teachers to offer learners opportunities for improving their aural acuity out of class. Pratt (1998) emphasises that aural musicianship is best practised out of class when the learners have more time to listen to the various aspects of the music. The more the learners listen, the more they acquire the music vocabulary that would enable them express themselves through music.

Responses to the question about the relationship between aural training and other activities out of class indicated that only 35% of the students saw connections. The rest saw very little

connection and others were unsure while a good number did not give any response. Inference made from these findings is that learners did not see any connection between aural training and other music activities that they engaged in out of school, a situation which was occasioned by their attitude and interest towards aural. One of the goals of music education is to enable learners develop aesthetic sensitivity which would enable them listen to music with an understanding of how a composer uses the components of sound and the interrelationship between the sounds (Bessom). Hence after undergoing a course in aural training learners should have been able to listen to music with understanding but this was not the case.

Reimer (1989:149) argues that practice in music must be grounded in a secure philosophy. He is sceptical with the rationales for music education presented in the past. He further comments that:

On the philosophy side, music education has offered rationales so puny, so unessential, so political, so tied to values not unique to music, as to convince many that music is little more than a pleasant, recreational hobby.

He then developed a philosophy of music education based on 'the nature and value of the art of music' (1989:1). The core of the philosophy was the importance of sensitivity to the expressive qualities of music. This idea was also supported by Akuno (2005) who states that music must be taught to facilitate artistic development and aesthetic awareness so that people can derive pleasure and satisfaction from the experience of music. The theory used in this study advocated for an approach to music teaching and learning whose aim was to develop aesthetic sensitivity among music learners to enable them understand and appreciate the beauty of music.

5.6 Teachers and Students' Attitude towards Aurals

Attitude is an important factor that determines how one will view phenomena. It has been defined by Evans (1965) as a response to the environmental conditions by an individual. Ajzen (1980) defines it as complex systems comprising the person's beliefs, feelings and action tendencies with respect to the object.

Data provided by the students indicated that a large percentage of students would like aural to be conducted in a way that would be easy for them to understand. A majority dreaded

aurals and indicated that music learning would be more exciting without the aural component. Many students indicated that they had difficulty recognizing intervals, identifying cadences and writing down melodies. This was further supported by the responses given to statements inquiring about the various aspects of aural training that they received. However, for rhythmic dictation, most students found it easier and this was further confirmed from the results of the pre and post-tests. They scored much higher in rhythm tasks than in others. However on the question about modulation, no student indicated what methods and resources were used although six students indicated that they were taught modulation. This is an indication that they may not have been sure of what to say.

There were a few inconsistencies in the responses given concerning aural musicianship. Majority of the students (69% indicated that aural training was not exciting and they wished that they could be taught in a better way for their comprehension. However, 70% of them indicated they were content with the way it was taught. Responses from the teachers' interview indicated that the learners developed a negative attitude towards aural due to the negative publicity perpetuated by the senior music students of the school.

It is possible that some teachers portrayed aural as boring and difficult and so the students perceived it to be so. Stowasser (1991) notes that when material is drawn from other components of the music curriculum (for example music history), many students who found aural classes 'boring, irrelevant and too difficult' became highly motivated and saw that aural skills were useful to them. Responses from the teachers' questionnaire revealed that there were teachers who thought that aural was just a waste of time and students could concentrate more on other aspects of music. This negative attitude by teachers could be due to the way they learnt aural or the total lack of aural musicianship training. Hoffer (1964:6) explains the relationship between the music teaching and learning situation and attitude formation:

Teachers must try to see the subject through the eyes of the pupils. This ability is needed not only to know how to adapt methods and materials but to establish a teacher-class relationship that will encourage a positive attitude in the student. Students are often slow to distinguish between their feelings toward the teacher and their feelings toward the subject. In a subject such as music, in which so much depends on feeling and perception, the students' attitudes are especially important.

Teachers need to overcome their own inhibitions and attitudes towards aural training. For those who view it as a waste of time, their mission in teaching music should be questioned. In summary, four factors that contributed to music students' attitude towards aural training were:

- i.) Difficulty in understanding the various concepts taught which could be attributed to the strategies that are used in teaching;
- ii.) Teachers' negative attitude towards aural musicianship training;
- iii.) Senior music students' attitude towards aural training which is passed on to new music students.
- iv.) A failure to understand the inter-relationships between various music concepts such as theory, aurals, history and music appreciation.

It is important for teachers to understand the importance of aural training to the musical lives of learners. Only then can they view the course positively and seek to develop the learners' inner hearing. Learners should be encouraged to engage in as many musical activities as time can allow so they can have experiences with music because all the elements (for example cadences, modulations, rhythms) are present within the music.

5.7 Discussion of the Experiment

The results of the experiment were interpreted in the light of literature reviewed and the theory used in this study. From the results of the experiment, it was observed that there was a difference in achievement between the experimental and control groups. The experimental group performed better in the post-test than the control group. However, the post-test mean score for both groups was higher than the pre-test mean score. The effect size index calculated indicated that developed teaching strategies had a positive impact on learners' aural musicianship performance. A possible explanation for the effectiveness of the teaching strategies was the learners' active involvement in the learning process coupled with systematic music instruction and the use of varied techniques in teaching. However, the post-test results of the control group also increased despite using the current methods of instruction.

Field (2000) explains that the effect of an experiment is assessed by comparing the amount of variability in the data that the experiment can explain, against the variability that it can not

explain. If some of the ‘unexplained’ variance can be explained in terms of other variables (covariates), then the error variance is reduced allowing for accurate assessment of the effect of the independent variable. In this case, a possible explanation for the performance of the control group was that the skill and experience of the teachers in the control group could have contributed to a good post-test score for the same group. Owing to this outcome, an assumption was made that there was a possibility that some of the teachers (in the control group) were already using some of the teaching strategies that the researcher was using.

A second questionnaire was then developed specifically for those teachers whose schools were part of the control group. The questionnaire was designed to find out whether the regular teachers were using some of the teaching strategies advocated for by the researcher. Three teachers completed the questionnaire and following are the themes that emerged from the responses given by the teachers.

5.7.1 Use of Resources

All the teachers used sheet and non-sheet music that was familiar to the learners so they did not need to learn the songs first before learning the music concepts. In teaching rhythm, the learners listened and imitated patterns of sound that they were familiar with before learning the note names and values. In teaching pitch discrimination they used a familiar piece of music to identify the intervals. One of the teachers did this by choosing a song that had a simple melodic contour or one that had stepwise motion. Cadences were identified by the learners through listening to a familiar song with pauses at the end of each phrase. The teacher then helped in explaining the various cadences while modulation was also explained through the use of familiar music.

5.7.2 Rhythm-Pitch Method

The teachers first taught rhythm (this information was also obtained from their responses to the questionnaire) before introducing pitch. This was done by the use of a drum or through clapping hands. The learners enjoyed the activity because the drum was a familiar instrument to them and later on they learnt the note values of the familiar song or the rhythms that they had created.

5.7.3 Use of Hand Signs

This was an additional resource used by two of the three teachers. The signs were used to denote various pitches which enabled learners to visualize each specific pitch in relation to the tonic given. This facilitated conceptualisation of intervals and once the learners learnt the proper hand signs, they formed groups out of class and practised the intervals by themselves, checking their accuracy using the piano or keyboard.

5.8 Feedback from Teachers/Research Assistants

The music used as a basis for the teaching strategies was Haydn's Symphony (Surprise Symphony) and selected excerpts of folk music which had the characteristic rhythm of a crotchet and two quavers (see Appendix X). The students were expected to listen to the music then identify and clap the rhythm patterns using familiar syllables (e.g Ta, Ta-Te). The teachers were guided by the teaching strategies step by step until the learners learnt how to notate various rhythms, pitches and melodies given to them. Following are the observations made by the teachers and their recommendations, which led to the refinement of the teaching strategies (Refer to chapter six).

- a) There was need to condense the teaching strategies so they could fit within the term's timetable, owing to the fact that music is only taught twice a week;
- b) There was need to use different types of music for explaining the same concepts. Using a variety of music examples ensured that the students were motivated to learn;
- c) The approach for teaching cadences through student participation (in creating their own tunes with chordal accompaniment) was commendable and the learners enjoyed it; teachers welcomed the idea since they did not have to take a leading role because the musical activities were centred on the students.

The experiment had some limitations. The twelve week period was not adequate in teaching effectively due to the demands of the syllabus and other school activities that made it difficult for the teachers to cover the content. The findings from this experiment have theoretical implications and practical applications to music teaching and learning in Kenyan secondary schools:

- i.) Development of teaching strategies based on the theoretical framework that impact teachers' ways of sequencing music instruction in the classroom;

- ii.) A theoretical framework that serves to improve curriculum development and instruction;
- iii.) Acquisition of more music materials and instruments to enable learners perform aural tasks on their own;
- iv.) Restructuring resources, especially books to include music that can be used to explain various concepts taught.

A number of studies have investigated the positive benefits of using Gordon's learning sequences. Two of them are cited below:

- a) McDonald (1991) applied Gordon's learning sequence to teaching recorder to third grade students. The control group received a traditional note reading method while the experimental group received a sound to symbol approach consistent with Gordon's sequence. MacDonald found that Gordon's sound to symbol approach was more effective in terms of superior performance and student enthusiasm;
- b) Belmondo's (1986) findings indicated that partial synthesis instruction serves as an effective readiness for tonal music reading and sight reading in major and minor tonalities for low aptitude students. His specific problems were to find out: the comparative effects of two methods of tonal instruction on high school students' music reading achievement and the effects of music aptitude level on the two methods.

In conclusion, the developed teaching strategies can be adopted in schools since systematic music instruction was used leading to successful learning. Students participated in musical activities actively with the teachers' guidance. In some instances the teachers did not welcome the idea of having strategies to improve aural musicianship teaching and they seemed to be content with how they are teaching despite the fact that students keep performing poorly every year.

CHAPTER SIX

PROPOSED TEACHING STRATEGIES FOR AURAL MUSICIANSHIP

6.1 Introduction

This chapter outlines proposed strategies developed by this study for teaching aural skills. The strategies were developed after analyzing the teachers' responses to the questionnaires and interviews and conducting an experiment with Form II pupils in the study. This approach is guided and validated by the theoretical framework employed for the study. It is referred to as the Rhythm-Pitch Approach and derives its name from Gordon's (1994) identification of rhythmic patterns and aural pitch as the basic vocabulary of music. The basic objective of these teaching strategies is to ensure that learners acquire music skills and knowledge and develop their inner hearing. To provide context and instructional paradigm, this chapter will cover the following areas;

- i.) The theory behind the strategies/approach
- ii.) Rationale for the approach
- iii.) Procedures and learning experiences
- iv.) Materials and resources used
- v.) Assessment procedures

6.2 Theory of Learning

Educators, psychologists, theorists and researchers have given learning theories special attention with a strong belief that they could assist in the improvement of curriculum development and instruction (Taetle et al, 2002). The theory of music learning by Gordon (1994) used in this study focused attention on the aural rather than the theoretical aspects of music. Gordon believed that learning music resulted from building a musical vocabulary of aural pitch and rhythmic patterns through repetition, rote learning and drill (Taetle et al, 2002).

For a teaching theory to be viable and transferable, it must meet the criteria of what must be known about learning (Bruner, 1966:19) as follows;

- a) The subject matter should be organized in such a manner that choice of aspects to be taught is systematic;

- b) After subject matter has been systematically arranged, steps of learning should be sequential;
- c) An instructional theory should specify how and when learning occurs.

Using this approach based on Gordon's theory and supported by Bruner (1966), the subject matter is both systematic and sequential. Learning occurs by drilling and practising pre-determined, cumulative, progressive and sequential pitch and rhythmic patterns. As the music vocabulary becomes ingrained in the learner, three things happen; (Taetle, 2002:384)

- a) Perceptual abilities grow;
- b) Vocabulary becomes richer ;
- c) Ability to audiate becomes refined and musical perception and learning are consequently enhanced.

Informed by Taetle (2002) and other researchers, below are the guiding principles that govern the application of this approach:

- a) This approach is learner-centred whereby learners are provided with opportunities to interact with sound. They are taught basic skills in recorder and other melody instruments and the teacher acts as a guide and facilitator of the learning process;
- b) The approach embraces the concept of teaching from known to unknown and from simple to complex to facilitate learners' co-ordinated assimilation of the concepts taught. The most basic patterns are taught first, followed by increasingly more complex patterns. By utilising music that the students know and pointing out the similarities between it and other music, new music is made less strange to the learners;
- c) The knowledge gained in each stage of learning constitutes aural, vocal and technical ability. Students have opportunities to aurally recognise sounds, sing the music and play the piano to aid in the simultaneous development of ear, eye, and voice and hand coordination. For example in the learning of intervals, students are led to aurally recognize an interval played on keyboard or piano, sing a given interval below or above a given note, play intervals correctly on a keyboard or a melody instrument and understand the formation of intervals and write them out correctly;
- d) The subject matter is organised in a sequence and in two parts: acquisition of musical skills and music content. The content comprises predetermined and sequential pitch and rhythmic patterns;

- e) Learners learn to make inferences once they have learned how to make discriminations. Thus opportunities are provided for adequate listening, singing and playing instruments before involving them in creativity and improvisation;
- f) For purposes of enhancing learners' understanding and maintaining their motivation during delivery of content, learners are not forced to follow a sequential course but a spiral one, where one or more levels are skipped temporarily, to allow for appropriate individual development.

6.3 Rationale for the Approach

Modern needs of music education require a more flexible, relevant and contemporary approach (Elliot, 1984). Some of the general objectives for music education in Kenya include promoting and enhancing national unity by exploring, appreciating and performing indigenous music from all parts of Kenya, as well as using acquired music skills for the learners' well being and that of others in society. This approach ensures that learners acquire the ability to listen and perform music vocally, kinesthetically and instrumentally. It also performs the core recommendation in Njooa's (2000) research on the use of folksongs in the music curriculum.

This approach is based on presentation of materials in a sequence. Learners tend to experience success in learning through sequential instruction. Abeles et al (1984) and Rosenshine et al (2002) agree that when the skills sequence is applied to the mastery of rhythmic and tonal patterns, it forms the foundation for systematic music instruction in music settings from early childhood to young adulthood. Consequently, this systematized knowledge base will act as a foundation on which other musical information can be linked. This also provides for easier recall of information.

One of the characteristics of aesthetic experience, according to Abeles et al (1984) is that it (aesthetic experience) involves focus of attention to gain aesthetic satisfaction, leading to a richer and more meaningful life. This approach focuses on the teaching of rhythm before pitch. On the average, African music is rich in rhythm and learners will have the opportunity to learn, participate and experience African rhythms in class, an experience that was

previously gained outside the classroom, especially during their participation in music festivals.

This approach aims at promoting creativity among the learners. Floyd (1987) observes that for the African child, music is more than singing or listening. It is part of existence at every stage and an expression of that existence. Information-processing skills improve during adolescence and that affects what teenagers can do (Wortman et al, 1999). Teen-age learners in particular need to express their creative impulses through music, and this approach provides an avenue through which they can create their own music. Bessom (1980:142) underscores the importance of creative expression:

Creative expression provides an opportunity for the student to internalize and personalize knowledge. It is a valuable tool for promoting music insight because it emphasizes an element that should be part of every learning experience-personal discovery.

Creative abilities once gained in the music class could be transferred to other areas of learning, including math, science, history and many others.

6.4 Advocacy for Aural Musicianship Curriculum.

Bessom (1980) and Abeles et al (1995) concur that the role of music education in secondary schools is to develop learners' aesthetic sensitivity through understanding of concepts. Aesthetic sensitivity can be defined as the ability to perceive and understand the components of a work of art, how those components are handled by the artist and the interrelationships among them (Bessom, 1980). In the making of a music curriculum, Swanwick and Taylor (1982:5-6) propose three ways:

- a) Teachers amplify their own enthusiasm and work on those concepts that seem to be accepted by their classes;
- b) Identifying particular skills and concepts and developing these through appropriate activities;
- c) Acknowledging that the main objective of music education is to enable people appreciate music and value it as a life-enhancing experience and using this paradigm as a basis for building a curriculum.

Swanwick and Taylor (1982) advocate for the approach where the teachers' role is to develop in learners the ability to respond to music in the fullest possible way. This comes as a result of aesthetic awareness and sensitivity which is developed through vocal and instrumental activities. Abeles et al (1994:275) identify three basic models that can be utilised in planning a curriculum and each is governed by a particular philosophical perspective:

- i) Linear/control model where the goal of teaching is to enable learners to perform delineated responses;
- ii) Consensus model where the needs and concerns of the learners are identified and the teachers' role is to guide learners into gaining understanding, values and skills;
- iii) Dialogue/freedom model which has a minimum control over student outcomes and the teacher just serves as a facilitator and guide.

The proposed aural musicianship curriculum is grounded on the consensus model which ultimately harmonizes well with the conceptual model used in the study. The conceptual model favours an approach where the teacher guides the learners by first involving them in discrimination learning by rote after which learners are able to use the skills and content learned to make inferences and to gain theoretical understanding of music. The music education curriculum takes into account some of the objectives of the music syllabus which are then stated in behavioural terms. These are:

- i) Reading and writing music;
- ii) Expressing own ideas, emotions and experiences through composing music and dance;
- iii) Using acquired music skills for one's well being and of others in society
- iv) Composing music to educate society on issues affecting them.

The objectives are generated from a curriculum outline based on the content of the music syllabus. Instruction in aural musicianship begins with aural pitch and rhythm patterns as the starting point. However, it is important to note that the success and impact of any music program relies heavily on the teacher. Research shows that teacher's qualities, musical background, personality and teaching skills have more to do with the success of the program than any formal curriculum plan (Peters, 1982).

Table 6.1 through 6.4 show curriculum models which indicate how learners' aesthetic sensitivity can be developed through understanding of musical concepts.

Table 6.4 Form I Curriculum Model


CONCEPT	SKILLS		THEORETICAL UNDERSTANDING
	Discrimination	Inference	
RHYTHM Percept a) Meter b) Rhythm Patterns c) Notation	<ul style="list-style-type: none"> -Clapping various rhythm patterns after the teacher. -Reading rhythm patterns such as:  <ul style="list-style-type: none"> -Associating rhythm syllables with sound -Aural and visual identification of different rhythm patterns. 	<ul style="list-style-type: none"> -Using the symbols of rhythm notation to create rhythm patterns -Meter recognition of a piece that is played 	<ul style="list-style-type: none"> -Naming notes that have already been learnt. -Writing down the meter of a given melody -Grouping notes in simple and compound time -Inserting bar lines in an unbarred phrase -Stating the meaning of time signature, bars and barlines, etc
PITCH Percept a) Intervals b) Melody c) Scales d) Triads	<ul style="list-style-type: none"> -Echoing intervals/melodies that are sung by the teacher. -Description of intervals played: Major and minor 2nd, major and minor 3rd and a perfect fifth. -Associating the intervals with the correct sol-fa syllables. -Associating the syllables with music notation -Singing scales correctly -aural recognition of major and minor scales -Aural recognition of major and minor triads 	<ul style="list-style-type: none"> -Translating intervals and melodies heard to music notation and translating music notation into sound Creating/composing melodies based on the knowledge acquired. -Playing by ear, Scales and other familiar melodies on a melody instrument. -Playing chords I, IV and IV of selected keys on keyboard or guitar 	<ul style="list-style-type: none"> -Definition of terms for Example melody, intervals And triads -Writing the technical names of the diatonic scale -Constructing major scales of C, G, D, A,F, B-flat and E flat Major -Writing primary triads of selected major scales in root position

Table 6.2 Form II Curriculum Model


CONCEPT	SKILLS	SKILLS	THEORETICAL UNDERSTANDING
	Discrimination	Inference	
RHYTHM Percept a) Meter b) Rhythm Patterns c) Notation	<ul style="list-style-type: none"> - Clapping various rhythm patterns after the teacher. -reading rhythm patterns such as:  <ul style="list-style-type: none"> - Associating rhythm syllables with sound -Aural and visual identification of different rhythm patterns 	<ul style="list-style-type: none"> -Using the symbols of rhythm notation to create rhythm patterns. -Meter recognition of a piece that is played in simple and compound time. 	<ul style="list-style-type: none"> -Writing down the meter of a given melody. -Grouping notes in simple and compound time. -Inserting bar lines in an unbarred phrase -stating the meaning of time signature, bars and barlines, etc
PITCH Percept a) Intervals b) Melody c) Scales d) Triads	<ul style="list-style-type: none"> -Echoing intervals/melodies that are sung by the teacher -Description of intervals played: major and minor 2nd, major and minor 3rd, perfect 4th, perfect 5th and major 6th. -Associating intervals with the correct sol-fa syllables. -Associating the syllables with music notation -Singing major and minor scales correctly -Aural recognition of major and minor scales -Aural recognition of major and minor triads and their inversions. -Singing triads. 	<ul style="list-style-type: none"> -Translating intervals and melodies heard to music notation and translating music notation into sound Creating/composing melodies in the major and minor mode. -Playing by ear, major and minor Scales and other familiar melodies on a melody instrument. -Playing chords I, IV and IV and their inversions keyboard or guitar 	<ul style="list-style-type: none"> -Definition of terms like melody, intervals and triads. -Description of various intervals: major and minor 2nd, major and minor 3rd, perfect 4th, perfect 5th and major 6th -Constructing major scales of E and A flat Major and the harmonic and melodic minor scales of A, D and E minor. -Writing primary triads and their inversions in major and minor keys.

Table 6.3 Form III Curriculum Model



CONCEPT	SKILLS	SKILLS	THEORETICAL UNDERSTANDING
	Discrimination	Inference	
<p>RHYTHM</p> <p>Percept</p> <p>a) Meter</p> <p>b) Rhythm</p> <p>Patterns</p> <p>c) Notation</p>	<p>Clapping various rhythm patterns after the teacher.</p> <p>-Reading rhythm patterns such as:</p>  <p>-Associating rhythm syllables with sound</p> <p>-Aural and visual identification of different rhythm patterns</p>	<p>-Using the symbols of rhythm notation to create rhythm patterns</p> <p>-Meter recognition of a piece that is played</p> <p>In duple, triple or quadruple time.</p>	<p>-Writing down the meter of a given melody</p> <p>-Grouping notes in simple and compound time signature</p>
<p>PITCH</p> <p>Percept</p> <p>a) Intervals</p> <p>b) Melody</p> <p>c) Scales</p>	<p>-Echoing intervals/melodies that are sung by the teacher</p> <p>-Aural recognition of intervals played: Major and minor 2nd, Major and minor 3rd, perfect 4th, perfect 5th and major 6th.</p> <p>-Associating the intervals with the correct sol-fa syllables.</p> <p>-Associating the syllables with music notation</p> <p>-Singing scales correctly</p> <p>-Aural recognition of major and minor scales.</p> <p>-aural recognition of the</p>	<p>-Translating intervals and melodies heard to music notation and translating music notation into sound</p> <p>-Translating melodies from sol-fa to staff notation and vice versa</p> <p>-Writing melodies to words given.</p> <p>-Creating/composing twelve bar melodies based on previously acquired knowledge.</p> <p>-Harmonising familiar tunes using a melody instrument.</p> <p>-Playing chords I,II, IV,V and VI on guitar</p>	<p>-Description of various intervals on score: major and minor 2nd, major and minor 3rd, perfect 4th, perfect 5th and major 6th</p> <p>-Transposing melodies to any given interval</p> <p>-Constructing major scales of F sharp, D flat and G flat major and the harmonic and melodic minor scales of G,C, B and F minor.</p> <p>-Harmonising a given melody using triads I, II,IV,V and VI.</p> <p>-Identifying cadences .</p>

Table 6.4 Form IV Curriculum Model

CONCEPT	SKILLS	SKILLS	THEORETICAL UNDERSTANDING
	Discrimination	Inference	
RHYTHM Percept a) Meter b) Rhythm Patterns c) Notation	<ul style="list-style-type: none"> - Clapping various rhythm patterns after the teacher. -reading rhythm patterns such as:  <ul style="list-style-type: none"> -Associating rhythm syllables with sound -Aural and visual identification of different rhythm patterns. 	<ul style="list-style-type: none"> - Using the symbols of rhythm notation to create rhythm patterns. -Writing rhythms to given lyrics. 	<ul style="list-style-type: none"> -Writing and using duplets and triplets correctly.
PITCH Percept a) Intervals b) Melody c) Scales d) Harmony	<ul style="list-style-type: none"> -Aural recognition of intervals played: All major, minor and perfect intervals of a major scale. -Associating the intervals with the correct sol-fa syllables. -Identification of chord progressions played 	<ul style="list-style-type: none"> -Writing melodies to lyrics given. Creating/composing eight bar melodies in major and minor keys. -Playing by ear, Scales and other familiar melodies on a melody instrument. -Harmonising a given melody. -Playing chords I,II, IV ,V and VI and their inversions on keyboard or guitar 	<ul style="list-style-type: none"> -Transposition of melodies to the C clef. -Description of various intervals: All major, minor and perfect intervals of a major scale. -Constructing major scales of F sharp, D flat and G flat major and the harmonic and melodic minor scales of G,C, B and F minor. -Stating and applying rules of harmony. -Identification of the four cadences on score.

The four tables, 6.1 to 6.4 contain curriculum models for a four year music education cycle. The first column contains the concepts to be taught and the percepts that will support and contribute to a student's understanding of the broad concept which will lead to the development of aesthetic sensitivity. The second and third column contain the skills to be

developed through the proposed approach that is, discrimination learning where learners learn mostly by rote and inference learning where learners are able to create and improvise unfamiliar patterns as a result of their experience with familiar patterns at various levels of discrimination learning. The last column entitled 'theoretical understanding' is where learners are given information commonly taught as music theory, for example time and key signatures and chord spellings.

The teaching strategies used are aimed at developing the ability to audiate rhythm and tonal content of music. This is because rhythm and tonal elements constitute a large portion of what music is. They are taught separately to enhance a learner's understanding of both concepts. Flash (1993) concurs that when music elements are presented in isolation the children become familiar with basic music skills and thinking which they can use in their vocal, instrumental, movement and listening work. Audiation is therefore developed by teaching pitch patterns in a context free of rhythm while rhythm patterns are clapped and chanted using appropriate rhythm-time names. As learners begin learning music, they are introduced to the concept of rhythm using preparatory exercises such as differentiating between slower and faster pulses, recognition of meter and control of accent. The teacher then combines a level of skill learning sequence with a level of rhythm content to deliver the content. Each level of rhythm content serves as a readiness for achieving the next higher level of rhythm content. A vocabulary of rhythm patterns is organized according to different meters (for example duple, triple and quadruple time). This enables the learners to identify the time signature of a melody that is played (at the inference level) and to write down the meter of a given melody.

In teaching pitch, the teacher combines a level of skill learning sequence with a level of pitch content. A vocabulary of pitch patterns is used where learners echo pitch patterns sung by the teacher. The pitch patterns used are organized according to tonality classification (for example major or minor). The pitch patterns introduced first should be based on major tonality because it is more familiar and more commonly used. Once specific pitch and rhythm patterns have been mastered, they can then be combined in the context of a song. The teacher selects music literature that is relevant to what he/she has taught.

As the learners progress from form one to four, more complex percepts of a concept should be introduced, for example the idea of syncopation, polymeters and changing meter, with appropriate music examples. The rate and level of conceptual presentation should be commensurate with students' ability and level of musical growth. Since music learning is cumulative, what is taught at the lower levels of learning, for example Form I and II should be incorporated at higher levels, for proper grounding of the concepts taught.

6.5 Materials and Resources

For this approach, the following resources are recommended following successful application in the experiment:

a) Songs (see appendix x)

Singing plays an important role in the lives of the people of Kenya and in many cultures around the world. Kofie (1994) lists three layers of musical practices currently in use: i) the traditional or indigenous music; ii) the urban popular dance music which is a meeting point of African and foreign traditions; and iii) western music. Music plays an important role in the life of the adolescents who tend to conform to particular types of music and their interaction with music helps in the construction of their identities (Taetle, 2002). Therefore indigenous music should be used to preserve long standing cultural heritage. The urban popular music which many young people ascribe to can also be used along with western music. The types of music embarked upon should be sufficiently close to the learners' musical experiences. These can be organized by teachers for the various levels. Teachers could make use of their own song material but also readily available materials in the learners' repertoire. Simple songs can be used and more complex songs introduced as the learners' music knowledge and skill increase as they progress from one level to the next.

b) Instruments:

Playing music instruments should form part of the activities in an aural musicianship class. Instrumental playing, especially for adolescents, can extend their scope in active participation in the classroom. Instrumental playing also provides an opportunity for learners to experiment with the instruments individually and can contribute to concept formation. The following instruments should be used:

- i. Pianos or keyboards for schools that do not have a piano. These will enable learners to generate different sounds within their own environment during their own time.
 - ii. Descant recorders which are fairly easy to learn in comparison with other instruments. These will also afford an opportunity for the learners to play in ensembles as disciplined musical activities. Recorders are relatively cheaper than other instruments and they open the way to increased musical opportunities provided by playing in consort. Furthermore they build on inner hearing, the foundation of aural skills.
 - iii. Drums which can be used by both teachers and learners in playing rhythms.
 - iv. Guitars could also be used if they are available. The guitar is an excellent instrument for music understanding and since it is most closely associated with the youth culture, it is readily accepted at all levels of the secondary school (Bessom, 1980). Teachers and learners could use them for accompanying songs and playing cadences.
 - v. Depending on their availability, other African music instruments for example the kayamba and jingles can be used to accompany songs to provide the students with a wholesome musical experience.
- c) Use of Tonic Sol-fa**

Sol-fa syllables have long been used in music education. Curwen (1870) incorporated features from Guido d'Arezzo's hexachordal system, Sarah Glover's modulator and movable do systems and the Paris-Galin-Cheve method to come up with a coherent, integrated system of his own (Brocklehurst, 1971). Sol-fa builds a comparative relationship between the tonic and the other degrees of the scale which assists in aural acuity in music. It is the best suited for developing audiation. Akuno (2005) states that it is a tool that is already widely used in Kenya, hence its inclusion in this approach.

The sol-fa syllables represent seven different pitches of the diatonic scale. They are written using the first letter of the syllable:

d = *doh* the keynote of the tonic

r = *ray* the supertonic which is a major second above the tonic









m = *me* the mediant, a major third above the tonic

f = *fah*, the subdominant, a perfect fourth above the tonic

l = *lah*, the submediant, a major sixth above the tonic

t = *te* the leading note, a major seventh above the tonic and

Sol-fa notation is also used where a punctuation mark which symbolizes the duration of the note, is added to the sol-fa syllable to indicate rhythm. Different note durations are symbolized by different punctuation marks:

Duration	Symbol	Example	
One beat	:	d:r:m	
Half a beat	.	s.f:m.r:d	
Quarter beat	,	d,m.s,d:	
Two beats	::	s:-:	
Three beats	::-	d::-:	
Four beats	:::-	m::-:-	
One and a half beats	:-.	m:-.r	
Three quarter beats	.-,	d.-,	

Extension of the beat is shown by adding a dash (-) sign for every additional beat:

The movable doh system, in which *doh* is the home tone in major modes and *lah* in minor modes is to be used, as opposed to the fixed doh system.







d) Hand signs

Hand signs were introduced by John Curwen in 1870 and they are useful for reinforcing intervallic feeling (Choksy, 1974). Each sign represents a particular sol-fa syllable. The signs are made in front of the body and the distance between the hand signs to some extent reflects the size of the interval to be sung. Octaves are shown by the same sign with the lower 'doh' sign occurring at the waist level and the higher one further above the eye level. The sign for the half steps '*te*' points up to '*doh*' while '*fah*' points down to '*me*', thus emphasizing the smallness of these half steps. The use of the hand signs is important because the visual imagery used aids in the development of auditory perception leading to concept formation.

e) **Rhythm-Time Names**

Rhythm-time names were introduced by Pierre Galin, Aime Paris and Emile Chev  and it came to be known as the Galin-Paris-Chev  method (The New Dictionary). It evolved out of the French system of teaching sight-singing. The method was planned as an approach to standard notation and not as an alternative notation. In this method note lengths are familiarised by means of a series of rhythmic note names which pattern the effect of the notes concerned.

The rhythm-time names have been used in this approach as they make it easier for students to understand the concept of time in music. Learners clap rhythmic patterns while saying the names representing individual beats in the pattern (Akuno, 2005). Consistent with the Kod ly approach, the rhythm is approached from the concept of one beat and later, notes of longer and shorter duration are incorporated:

Duration	Rhythm time name	Symbol
One beat	Ta	
Two half beats	Ta-te	
Four quarter beats	Ta-fa-te-fe	
A double beat	Ta-aa	
A triple beat	Ta-aa-aa	
A rest	sh	

6.6 **Procedures and Learning Experiences**

Musical learning should lead to learners' musical growth, demonstrated by their ability to react to musical stimuli. The procedures and learning experiences in this approach are based on Gordon's (1994) theory of music learning. The instructional process begins with what the learner knows or perceives and progresses on to unfamiliar material. The steps below show the approach to each element. The teacher should deliberately select the song material to be

used in class. The material should be familiar to the learners as well as contain specific elements the teacher intends to teach.

Rhythm

In teaching rhythm the patterns are extracted from a familiar song. These are practised in order to develop a rhythm vocabulary. The following steps are used in teaching:

- a) The teacher first establishes meter by clapping a simple rhythm (for example) from a familiar song for example 'Lidongolo Munyanza' (see appendix x) and learners listen and echo back. The teacher can vary the rhythmic patterns and learners echo what they hear.
- b) Teacher gives familiar syllables to the rhythms, for example:

<u>Duration</u>	<u>Familiar Name</u>
One beat	Ta
2 Half beats	Ta-te
4 Quarter beats	Ta-fa-te-fe

Learners are encouraged to think of other words that correspond to a quarter, half or one beat. They could be divided into groups of three or four to practise the rhythms. Consistent with Dalcroze rhythmic canons, the first learner claps a rhythm, based on what they have already learnt. This is imitated by the second one who claps the rhythm of the first learner before composing his/her own. The exercise continues and a musical vocabulary is built through repetition and rote learning. This exercise is also intended to sharpen their listening skills.

- a) The teacher provides the music symbols for the beats that have been learnt.
- b) The teacher guides learners in identifying and clapping rhythms which are displayed on flash cards.
- c) A new song with the same rhythmic motifs is introduced and learners identify and clap the rhythms given.
- d) Learners improvise and create their own rhythms based on the acquired knowledge and skills.

Other exercises could be given where two sets of rhythms are given and learners are asked to discriminate or identify the differences between two sets.

Pitch

Intervals

The introduction of intervals precedes melodic dictation. The following steps should be followed:

- i. The teacher first establishes tonality by singing the interval s-m-d since it has already been encountered before in the song previously used for example *'Lidongolo Munyanza.'*
- ii. The learners sing s-m-d by using the actual words of the song, *haiya haha* before humming the intervals several times. Previously encountered rhythms are used together with the intervals.
- iii. The teacher introduces the hand signs for the three syllables. The teacher then guides the learners in identifying and singing the intervals correctly. Learners sing the three syllables in varied melodic and rhythmic patterns (s-m-d; d-m-s; m-d-s, etc) with correct sol-fa syllables together with the hand signs;
- iv. The teacher confirms that learners have sung the right sol-fa syllables before introducing the correct rhythmic symbols. This leads to sol-fa notation (syllables and duration symbols). Other syllables and rhythmic patterns are used in exercises which are echoed by learners using hand signs. The learners divide into groups of two where one sings particular intervals while the other identifies and names the intervals sung.
- v. The teacher sings a phrase and learners write down the correct sol-fa and rhythm.
- vi. Learners sing the whole song once more and use the learned sol-fa to create their own music.

Thus two steps are followed: music is isolated for use in short exercises before it is used in compositional tasks with clear instructions. Once they have created their music, they can play familiar melodies on piano or any melody instrument like the recorder.

Playing familiar melodies and phrases by ear is a form of aural discovery that involves both tonal memory and inner hearing. It also demands intense concentration and affords a useful preparation for improvisatory work and is an enjoyable and stimulating form of aural training (Brocklehurst, 1971).

Melodic Dictation

In melodic dictation, the rhythms and intervals are combined and two approaches can be used:

Procedure one

The teacher begins by playing a short familiar melody. Learners are provided with the melody but with missing notes which they are required to fill after hearing the music. Examples are given below. The first example is used by the teacher and has all the notes while the second, presented in work sheets is given to the learners to replace the rests with appropriate pitches.

Example One: Aural Orientation of Pitches.



Example Two: Filling of Missing Pitches.



As learners progress more notes are omitted for them to fill up with correct pitches. Eventually the teacher plays a whole bar and students write down the notes played, using the procedures given below.

Procedure Two

- i. The learners sing a phrase from a known song. The phrases should be short for easier memorisation and to enable learners develop tonal and rhythm understanding;
- ii. After singing the phrase, humming and internalising it, learners use hand signs to denote the different pitches in the phrase. They then assign sol-fa syllables to the different pitches.
- iii. Learners write down the phrase and sing it in the context of the melody given.
- iv. With the tonal and rhythm vocabulary acquired, they are now able to create their own melodies and to play them on piano or other instruments.

Teachers should at this point assign music or songs that learners know for melodic dictation which should be done regularly out of class and in their free time. Crump (2008) indicated that daily music promotes greater musical security rather than facilitating access to more complex materials. Building this confidence will enable learners to freely interact with different kinds of songs, both familiar and unfamiliar. They will be able to discriminate both pitch and rhythm elements, thereby grasping the music encountered holistically.

Cadences

Cadence identification was one of the areas where pre-recorded music was heavily utilised. Bessom (1980:128) points out that:

In the study of cadences, the student will find it more meaningful to hear and analyze standard as well as pop literature to discover how, when, where and why cadences are used than to merely memorize the chord progressions that make up familiar cadences.

In this way the student gains further understanding and can analyze the cadences in the music he/she performs or music that he/she hears. Two approaches could be used:

- a) A simple and familiar melody based on chords I and V is selected and the students sing it together. They then divide into two groups; one sings the melody while the other hums or sings chords in appropriate places to create harmony. The teacher then guides the learners in identifying the cadences which they have already sung, that is the perfect and imperfect cadences. Similarly, other melodies with various chord progressions that spell out the plagal and interrupted cadences are used. In this way the learners sing and hear the cadences before gaining theoretical knowledge which serves to define and support what the ear has already perceived.

In the second approach;

- a) The teacher plays various chord progressions while learners listen, trying to concentrate on the bass part. Learners sing this part repeatedly to be familiar with the intervals and chord progressions. As the teacher plays the chords, learners try to improvise a melody above the respective chords. This is likely to use the pitches of the chords in the progression.
- b) This procedure is repeated several times using different keys. The teacher then plays the chord progressions that spell out different cadences and guides the learners in

identifying and naming the chords and cadences that have been played. In this way the students are able to experience harmonic progression from the inside and can identify cadences that they hear.

6.6 Assessment Procedures

The assessment and evaluation of learners' success in accomplishing the objectives of the music curriculum are pre-requisites for any effective music program. Assessment is carried out to determine what students have learnt. This enables teachers to improve their own teaching (Abeles et al, 1995). Educationally, the most important reason for assessing is to inform the teaching and learning process. There is need to know about each pupil's ability in order to plan for future learning activities appropriately (Adams et al, 1995). The question of what is to be assessed and the criteria for assessing achievement therefore comes into play.

In the theory of learning by Gordon (1994), there are eight levels of skill in two categories: Discrimination learning and Inference learning. Discrimination learning involves; (a) aural/oral and involves activities such as singing and clapping; (b) Verbal association where words and rhythm syllables are associated with sound; (c) Partial synthesis where learners recognize a series of patterns that are heard; (d) Symbolic association where the sounds are associated with music notation and (e) Composite synthesis where a series of patterns are recognized in notation and translated into sound. In inference learning there are three levels: (a) Generalisation where learners identify unfamiliar material on the basis of what is familiar to them; (b) Creativity/improvisation where skills learned at lower levels are used to improvise and create music and (c) Theoretical understanding where learners learn the definition of terms and the mechanics of music notation.

In the learning process, aural, visual and kinesthetic activities are incorporated. According to Abeles et al (1995), assessment strategies are intertwined with approaches to instruction; how something is taught and how it is assessed are closely related. The areas of assessment are:

- i.) Aural recognition of rhythms, intervals, melodies and cadences. The ability to recognize what is heard and to translate it to symbols;
- ii.) Visual recognition of the same elements, the ability to decode what is seen and translate the same into sound;

- iii.) Discrimination where students differentiate between two sets of rhythm, melodies etc in terms of pitch, note values and meter;
- iv.) Theory of music: knowledge of simple, duple and quadruple meters in simple and compound time; description of different intervals and cadences.

Table 6.5 gives assessment guidelines, how each concept is to be assessed.

Table 6.5: Assessment Guidelines

Element	Aural recognition	Translational skills and discrimination	Music Literacy
Intervals	Identifying different intervals played on keyboard	Singing and playing intervals above or below a given pitch, on keyboard or a melody instrument	Notating intervals that have been played; singing intervals from notation.
Melody	Listening to two short melodies and identifying the difference between them in terms of pitch	Ability to play short melodies on piano and recorder	Singing a melody played and notating correctly; ability to sight-sing a given melody.
Rhythm	Listening to two short rhythms which are almost similar and identifying the difference in terms of rhythm	Listening to a rhythm and clapping it or playing it on a drum.	Notating a rhythm that has been played.
Cadences	Identifying different cadences played on piano, keyboard or from familiar music.	Ability to play different chord progressions that form various cadences, singing cadences in groups and improvising melodies above the cadences.	Ability to identify from score, different cadences in different keys.

Teachers should make assessment an integral part of classroom activity and lesson planning. These guidelines should be flexible with suggestions coming from the learning activities, appropriate for each level of learning as per the curriculum models (Tables 6.1–6.4).

CHAPTER SEVEN

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This chapter presents a summary of conclusions made from the findings of the study and recommendations made with suggestions for further research. The aim of this study was to develop strategies for teaching aural musicianship in Kenyan secondary schools. The study was motivated by reports from the Kenya National Examinations Council (KNEC, 2000) which indicated that students taking music at KCSE performed poorly in aural musicianship. Musicianship through aurals grounding is an important aspect of Music Education because the ability to discriminate aurally between sounds is the basic foundation in music which leads to aesthetic growth and aesthetic sensitivity, which is one of the main purposes of Music Education. The strategies developed for the study were based on a theoretical framework anchored on two theories: the music learning theory by Gordon (1994) and the theory of learning modalities by Barbe and Swassing (1979).

The main objectives of the study were to:

- i.) Identify and assess the instructional strategies used in teaching aural musicianship.
- ii.) Assess music students' attitudes towards aural training.
- iii.) Identify and assess learning activities that students engage in to enhance development of aural skills.
- iv.) Identify and develop instructional strategies that could enhance the development of aural skills.

Data was collected using two modes, that is ; (a) questionnaires and an interview schedule for the teachers and (b) questionnaires, attitude statements and pre and post-tests for the students. The questionnaires were coded and analyzed using Statistical Package for Social Sciences. Students' opinionnaires were measured based on responses from the likert scale while the experiment was administered based on the null hypothesis statistical technique (NHST). The pre and post-test results were analysed using the *t* test for independent means.

7.2 Novelties of the Study

Some of the curious observations made during the study are discussed in this section. In some respect, some of the possible solutions and instructional aids were present in the classes where the teachers taught, and yet they (teachers) were either unaware of the possibilities or unwilling to appropriately utilize resources available in their classes. The following were some of the observations made during the study.

- a) Despite the fact that most teachers who took part in the study had the necessary academic qualifications, this was not reflected in the way they carried out aural training. A teacher's qualification should form a basis for activating his or her own musicianship;
- b) Aural training forms the bedrock of musicianship. Some teachers viewed aural training negatively yet it is an important component of music education;
- c) Computers were available in some schools but these were not utilised in the teaching of aural musicianship;
- d) There were simple and available resources in some schools but these were under-utilised during aural training. For example some schools had melody instruments in the school like the recorder but these were hardly used during aural training.

7.3 Conclusions

After administering the experiment and analysing responses from the teachers' and students' questionnaires and attitude statements, the following conclusions were made:

First, various instructional resources and strategies were used in teaching aural musicianship: The main book resources used in teaching aural musicianship were two text books; (a) the music text books from KIE and (b) a series of books entitled 'Foundation Music' published by the Jomo Kenyatta Foundation. Other text books were the *Basic Music Knowledge* by Annie Warburton (1967) and *Graded Aural Tests* (Annie Warburton, 1971); Instrumental resources frequently used were; (a) piano/keyboard for playing melodies and intervals, (b) drums for playing rhythms and c) technical supports like cassette players for playing pre-recorded melodies, intervals, cadences and modulations. The schools that took part in the research had music rooms with relevant music materials where music lessons were conducted. However, findings by Katuli et al (2003) revealed that most schools do not have

specific rooms set aside for the teaching of music and the teachers had to use other alternative venues like dining halls, normal classrooms or even in the open space.

Second, the main instructional strategies used were: pre-recorded music where students listened to and notated what they heard; teachers playing melodies, intervals, cadences and modulations on an instrument while students notated the music; teaching music theories for example the duration of a crotchet or minim before the students were introduced to the sound.

Third, students engaged in various learning activities for the development of the inner ear: rhythm was internalised by clapping various rhythms dictated by their teachers before notating them; they were involved in sight reading and sight singing and a few teachers used hand signs to enable students sing the correct sol-fa syllable by interpreting corresponding hand signs; for identification of cadences teachers played chords and students were asked to identify different chord progressions that spelt out the cadences.

Fourth and finally, aural skills can be developed consistently through improvisation, performing by ear (through listening and without printed music) and from memory as this leads to a highly developed aural acuity. Playing instruments during and after class together with listening experiences that are provided on a daily basis is important as frequent renewal of impressions is vital to the grasping of music concepts. Sight singing and reading, enhanced by the use of hand signs enables learners to associate the appropriate signs with the correct sol-fa syllables. As learners engage in sight singing, their ability in this area improves and they are able to audiate, that is, to imagine the sounds of the music represented aurally or on score.

7.4 Recommendations

While the recommendations made were specific to the current study, proposed instructional strategies and their implications go beyond the study and can be generalized to overall approaches in teaching aural musicianship. The following recommendations were made based on the findings of this study:

7.4.1 Recommendations to Teachers

1. Teachers should view music as an integrated curriculum so that the areas of music theory, history, performance and composition are viewed as a single subject rather

than as individual and independent areas within the music program. Consequently, aural musicianship courses should be designed to synthesize musical knowledge acquired in other areas of the curriculum for example. African Music, Music theory and Music Performance. This will help in the teaching of aural musicianship by ensuring that aural concepts are incorporated in all areas within the music program. Since Kenya is a multi-ethnic country, music programmes should be tailored to the needs of particular learners where the underlying aural concepts are the same but materials, activities and instructional techniques are different. Additionally, teachers should be thoroughly equipped with African music repertoire to enable them use these resources in teaching.

2. Teaching methods should be informed by current research on aural training and in this regard, music teachers need to make use of available teaching resources and to adopt practical and creative approaches to their aural musicianship teaching. Aural musicianship training should begin right from form one through to form four.
3. Since aural musicianship is an important component in music education, learning experiences should be opened up and more responsibility given to learners by providing opportunities for them to engage in music outside the classroom due to the limited class time that is allocated for music
4. Learning modules should be introduced to teachers so that they can be continually updated and guided through the necessary steps in teaching the various music concepts.
5. There are advances in educational technology involving E-learning and teachers would benefit from new information being developed.

7.4.2 Recommendations to Teacher Trainers

1. Teacher trainers in the TTCs and universities should equip music teachers with aural musicianship skills to enable them impart the same to students. In-service courses should be organised for teachers to enable them revitalize their skill.
2. Teacher trainers should form research teams together with music teachers to generate material for teaching aural musicianship.

7.4.3 Recommendations to the Ministry of Education

1. The Ministry of Education should provide learning resources and materials equally to all schools offering music as a subject.
3. The Kenya Institute of Education needs to review the aural musicianship curriculum to present aural tasks in a manner that enables teachers to sequence music instruction in the classroom. In the same vein assessment by the Kenya National Examination Council should not be based on pre-recorded music only; students should be assessed on their ability to sing intervals, melodies and clapping rhythm patterns.

7.5 Suggestions for Further Research

1. A number of issues have emerged from the findings of this study which would be a good basis for other studies. The following are suggestions for further studies on the Kenyan music education scene:
2. More research should be done with the aim of developing music material based on indigenous music for aural training;
3. A study should be carried out in Kenya to find out different student learning styles to enable teachers generate material to cater for individual needs.
4. Further research on the use of computer technology in teaching aural skills at the secondary school level should be carried out to explore this rich resource which is otherwise untapped.

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APPENDICES

Appendix I: Questionnaire for Teachers

The following is a questionnaire designed to find out how aural training is carried out in secondary schools in Kenya. Please tick against the appropriate choice or fill in the spaces appropriately.

1) Briefly describe what you understand by the term 'aural training'

2) Rate your views regarding aural training as necessary for music students using the scale below:

- a) Very important []
- b) Important []
- c) Unsure []
- d) Not very important []
- e) Not at all []

3) Give reasons for your answer to question 2 above.

4) When do you first introduce aural training to your students?

- a) Form I []
- b) Form II []
- c) Form III []
- d) Form IV []
- e) None of the above []

5) Briefly describe the teaching resources that you use in aural training and how you use them.

6) Please rate the frequency of aural training that you give to your students by ticking in the appropriate box in the table provided.

Class	Once a week	Once a fortnight	Once a month	Once a term	No training at all	Any other
Form I						
Form II						
Form III						
Form IV						

7) The following are aspects of aural training. Please tick the ones that you train students in during your music lesson.

- a) Identification of Intervals []
- b) Notation of Melodies: []
- c) Rhythmic dictation: []
- d) Cadence identification []
- e) Identification of modulation: []

8) Describe the steps that you follow (from the first to the last) in teaching the following aspects of aural work.

- a) Identification of Intervals.

- b) Notation of Melodies

c) Rhythmic Dictation

d) Cadence Identification

e) Identification of Modulation

9) How frequently do you incorporate sight singing/reading in aural training?

- a) Very often []
- b) Often []
- c) Unsure []
- d) Very rarely []
- e) Not at all []

10) What is your highest academic qualification?

- a) Diploma []
- b) Bachelors Degree (B.ED, B.A, tick appropriately)
[]
- c) Masters degree (for example.. M.ed M.A, M.Mus, tick appropriately)
[]

11) What other professional qualifications do you have?

- a) Music Theory Grade _____
- b) Instrument _____ Grade (for example.. one, two, etc)

12)) Name the institution/s attended for music training and years of study (for example..
Kenyatta University, Maseno, Kagumo College,
etc) _____

13) Indicate what **other** qualifications you have attained after completion of college. (This **excludes** the degree or diploma you obtained on completion of college)

a) Music Theory Grade _____

b) Instrument _____ Grade _____

14) For the following question put a tick () against the instruments that you currently play.

a) Voice _____

b) Wind. _____

c) Keyboard. _____

d) Chordophone. _____

e) Percussion. _____

f) Brass. _____

School: _____

How would you classify the type of school that you teach in?

- a) Girls' boarding school
- b) Boys' boarding school
- c) Mixed boarding school
- d) Mixed day school
- e) Girls' day school
- f) Boys' day school

Province: _____

Sex: Male _____ Female _____

Age: _____

Music Teaching Experience: _____ Years

Appendix II: Interview Schedule for Teachers

1. How long have you taught music ?
2. Please state your academic and professional qualifications with regard to music.
3. In your own words, what do you consider aural training or aural musicianship to be?
4. What do you think are the possible advantages and disadvantages of aural training to students?
5. What teaching resources do you use for aural training? Please list them
6. (a)When do you introduce your students to aurals?
b) State the reasons for your answer above.
7. How frequently do you give aural training in a week for each class?
8. Describe the methods you use in training the following aspects of aural work:
 - a) Identification of intervals _____
 - b) Notation of melodies: _____
 - c) Rhythmic dictation: _____
 - d) Cadence identification _____
 - e) Identification of modulation: _____

9. For each of the above aspects, describe the resources that you use

10. What difficulties do you face in training the various aspects of aural work?

11. What other challenges do you face?

Appendix III: Questionnaire for Students

This questionnaire contains two sections; in section one, please give the correct answer by ticking only ONE of the choices. In section two, please circle or tick the choice after each statement that indicates your opinion.

School: _____

Province: _____

Sex: _____

Age: _____

- 1). When did you receive your first lessons in aurals?
 - a) Form I
 - b) Form II
 - c) Form III
 - d) Form IV
 - e) None of the above

- 2) Please rate the frequency of aural training that you have received while going to school.
 - a) Once a week
 - b) Once a fortnight
 - c) Once a month
 - d) Once a term
 - e) No training at all
 - f) Any other

- 3) The following are aspects of aural training. Please tick the ones that you have received training in.
 - a) Identification of Intervals
 - b) Notation of Melodies:
 - c) Rhythmic dictation:
 - d) Cadence identification
 - e) Identification of modulation:

- 4) Briefly describe the methods used by your teacher in teaching the following aspects of aural work

- a) Identification of Intervals []
- b) Notation of Melodies: []
- c) Rhythmic dictation: []
- d) Cadence identification []
- e) Identification of modulation []

5) Please tick any one, two or all of the following to indicate some of the activities that are carried out during the aurals lesson.

- a) Singing back melodies after the teacher (repeating what the teacher has just sung) before writing them.
- b) Hand signs demonstrated by the teacher to indicate various intervals, which are then identified by the students.
- c) Different chords played by the teacher and identified by the students.
- d) Clapping rhythms before writing them down.

6) Fill in the table below by describing the methods and teaching resources (for example. piano, recorder, drums, etc) used in teaching aurals.

Aural training	Teaching Method	Teaching Resources
Melodic dictation		
Rhythmic dictation		
Interval Identification		
Cadence identification		
Metre recognition		

Appendix IV: Attitude Scale for Students

Instructions: Please circle or tick the choice after each statement that indicates your opinion.

The letters represent the following:

- SA - Strongly Agree
 A - Agree
 U - Undecided
 D - Disagree
 SD - Strongly Disagree

1. The learning of Music as a subject would be more exciting without aurals.

1. (SA) []
 2. (A) []
 3. (U) []
 4. (D) []
 5. (SD) []

2. I wish the aurals lesson would be conducted in a way that would be easy for me to understand.

1. (SA) []
 2. (A) []
 3. (U) []
 4. (D) []
 5. (SD) []

3. Aurals are an important part of the music lesson because they enable the music student to become a better musician.

1. (SA) []
 2. (A) []
 3. (U) []
 4. (D) []
 5. (SD) []

4. I often find it difficult to recognize the intervals played by my teacher during the aurals lesson.

1. (SA) []
 2. (A) []
 3. (U) []
 4. (D) []
 5. (SD) []
5. I am able to identify the cadences played by my teacher.
1. (SA) []
 2. (A) []
 3. (U) []
 4. (D) []
 5. (SD) []
6. Writing down melodies that have been dictated by the teacher is usually a difficult exercise.
1. (SA) []
 2. (A) []
 3. (U) []
 4. (D) []
 5. (SD) []
7. Rhythmic dictation is not difficult for me because I am able to identify the notes played or clapped by my teacher.
1. (SA) []
 2. (A) []
 3. (U) []
 4. (D) []
 5. (SD) []
8. The aural lesson is very exciting and I usually look forward to the class.
1. (SA) []
 2. (A) []
 3. (U) []

4. (D) []
5. (SD) []
9. I am content with how aurals are taught and wish that more time could be allocated for aurals.
1. (SA) []
2. (A) []
3. (U) []
4. (D) []
5. (SD) []

Appendix V: Observation Schedule (Sample)

PROVINCE: NYANZA

SCHOOL: X SECONDARY SCHOOL

CLASS: FORM II

DATE: 17TH JANUARY 2007

Concept /Element	Teachers' Activity/Methodology	Learners Activities/responses	Teaching Resources used
Melody	Playing a melody on the piano	Listening and notating the melody	Piano/Keyboard
Intervals	Playing two intervals (harmonically)	Listening and singing the intervals before notating them.	Piano and recorder
Rhythms	Teaching the various notes by starting with the theory	Clapping rhythms and identifying particular rhythmic motifs	Drums
Cadences	Playing pre-recorded music with pauses at the cadences	Listening and singing the music and identifying the cadences	Pre-recorded music, piano
Modulation	Playing music which modulates to a different key	Listening and identifying the new key	Pre-recorded music and keyboard/piano.

Appendix VI: Questionnaire (two) for Teachers

The following is a questionnaire designed to find out the methods you use in teaching aural. There are three sections; Rhythm, Pitch and Melody. Please tick against the appropriate choice.

Please tick the option(s) that best describe the methods you use in teaching the following aspects of aural work.

1) Rhythm:

- a) Starting with the music theory where students learn about the various notes (for example crotchet, minim, etc) before learning the duration of those notes (by clapping the rhythms)
- b) Using a familiar song where students listen and imitate patterns of sound before learning the note names and values.
- c) Playing or clapping rhythms repeatedly as students identify the various notes.
- d) Clapping the rhythms as students listen, imitate and notate the rhythms.

2) Pitch (intervals)

- a) Singing or playing the intervals repeatedly until the students master the proper sound.
- b) Playing the intervals from a recording while the students try to identify what has been played.
- c) Using a familiar song, the students try to identify particular intervals using sol-fa syllables.
- d) Students use a familiar song to identify the intervals through singing as well as using hand signs.

3) Melody;

- a) Giving the tonic sol-fa and playing a melody several times while students try to figure out the various pitches in relation to the tonic key.
- b) Playing or singing a familiar song, students listen and sing it out before notating the music.
- c) Playing or singing a familiar song while students use hand signs to show the various pitches and clap the rhythm before notating the song.

d) Playing recorded music as students try to find out the various pitches before notating the melody.

4) Describe the steps that you follow (progressively) in teaching the following aspects of aural work.

i) Identification of Intervals.

ii) Notation of Melodies

iii) Rhythmic Dictation

iv) Cadence Identification

v) Identification of Modulation

School: _____

Type of School;

- g) Girls' boarding school
- h) Boys' boarding school
- i) Mixed boarding school
- j) Mixed day school
- k) Girls' day school
- l) Boys' day school

Province: _____

Sex: Male _____ Female _____

Age: _____

Music Teaching Experience: _____ Years

Appendix VII: Aural Musicianship Teaching Method for Secondary Schools (Form II)

The following are sample lessons for Form Two students based on the model of music knowing. The lessons are part of a proposed teaching method for aural musicianship for Kenya secondary schools. The teacher should provide guidance in carrying out the musical activities.

Rhythm: Step One

Focus: Rhythm

Objectives: Students should be able to:

1. Listen and imitate small patterns of sound.
2. Identify rhythm patterns using familiar syllables.
3. Aurally recognise rhythm patterns played by the teacher.

Sequence:

1. Teacher claps small patterns of sound while students imitate immediately, as though answering to the given rhythm. Examples of rhythms are given:
2. Notes are given 'verbal associations' for easy memorization. Familiar names are used (for example.. taa and ta-te to denote a crotchet and a quaver respectively)
3. Teacher claps various rhythms (already learnt) while students recognise them aurally, by stating the familiar syllables assigned to the notes.

Step Two:

Focus: Note names for

Objectives: Students should be able to:

Clap various rhythms written by the teacher (either on flash cards or on chalkboard).

Sequence:

1. Teacher writes down the symbols for the notes already learnt.
2. Students recognise and clap the rhythms by using familiar syllables.

3. Teacher gives various rhythm patterns already learnt and students clap them. Some examples are given: (These can be used in different combinations)

Step Three:

Focus: Rhythmic dictation and notation.

Objectives: Students should be able to:

1. Clap the rhythm patterns of a piece of music provided.
2. Notate rhythm patterns played by the teacher.
3. Use the learned patterns to create new patterns of their own.

Sequence:

1. Teacher gives a piece of music with familiar rhythm patterns and students clap the rhythm.
2. Teacher claps a rhythm; students listen, imitate then notate the rhythm.
3. Students use the familiar patterns to create their own patterns.

Pitch: Step One

Focus: Intervals, d-r (Major 2nd)

Objectives: Students should be able to:

1. Sing the pitch pattern to 'lah' sound as directed by the teacher.
2. Identify the interval using the sol-fa syllables.

Sequence:

1. Teacher sings the two different pitches to 'lah' and students imitate.
2. Pitches are assigned sol-fa syllables and students sing them using solfas.

Step Two:

Focus: Introduction of written symbols

Objectives: Students should be able to:

Sing the two syllables using sol-fa and hand signs

Sequence:

1. Teacher writes down the two solfas representing the two sounds with a demonstration of the hand signs.

2. Students sing the two notes using sol-fa as they show hand signs representing the notes.
3. Teacher gives various exercises and students sing the notes while showing the hand signs.

Step Three:

Focus: Melodic dictation and notation

Objectives: Students should be able to:

Notate what is played by the teacher using solfas.

Sequence:

1. Teacher plays a couple of notes (a maximum of two bars)
2. Students listen and sing what they have heard, accompanied with hand signs before notating the music.

Combination of pitch and rhythm: Step One:

Focus: Rhythm and Pitch (d-r)

Objectives: Students should be able to:

1. Sing and chant pitch and rhythm patterns previously learnt, and in the context of a known song.
2. Aurally recognize and Identify pitch and rhythm patterns as they are played by the teacher.

Sequence:

1. Teacher hums a known song while students listen and sing in imitation
2. Students clap the rhythm of the known song and write the rhythm down

Step Two:

Focus: Rhythm and Pitch

Objectives: Students should be able to:

Sing the known song using the correct hand signs.

Sequence:

1. Students sing the two pitches in rhythm while showing the hand signs.
2. Students write down the pitches in sol-fa.

Step Three:

Focus: Melody writing

Objective: Students should be able to notate the given melody on the staff.

Sequence:

1. Students having identified the pitches and the rhythm, assign pitches to the rhythms thus writing down the whole melody.
2. Students use the pitches and rhythms learnt to create their own melodies.

Cadence Identification**Objective:**

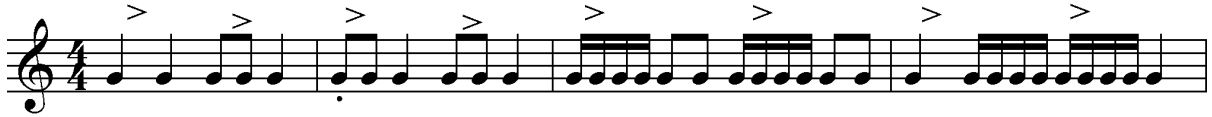
Students should be able to identify the various cadences which are played to them.

Sequence:

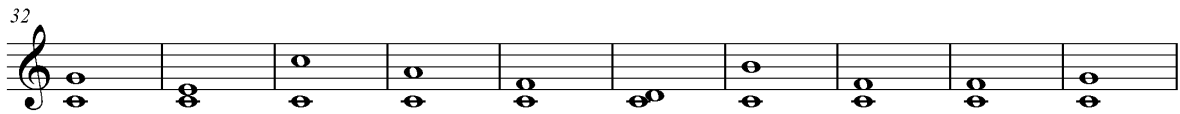
- e) The teacher teaches the students the various chords needed to form a cadence (for example.. chord one to five, four to one, five to one) using a simple key and the students are divided into groups where one of them plays the chords while the others try and improvise a melody above the respective chords.
- f) This procedure is repeated several times using different keys. The resulting effect is that students are able to experience harmonic progression from the inside and can identify cadences played to them.

Appendix VIII: Pre-Test /Post-Test for Aural Musicianship: Form II (Teacher's Copy)

1. The teacher will play the following rhythms twice. The time signature will be given by the teacher and students will insert the bar lines. (Rhythms are on monotone)



- 2 Each of the following intervals will be played twice. Write out the key signature (using the staff) and the two notes (use semibreves) to indicate the interval: (The two notes are played melodically)



- 1) Following are two melodies; each will be played four times: - once through, first half, second half then one final play through. (Teacher should give the clef, time and key signature.

a)



b)

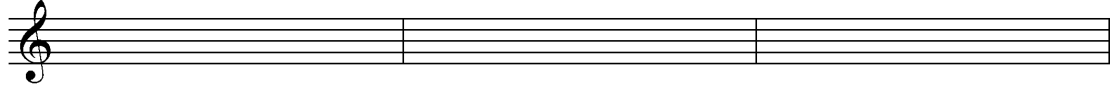


- a. Each of the following four cadences will be played twice. Identify them and write them down. The tonic chord will be given followed by the cadence.

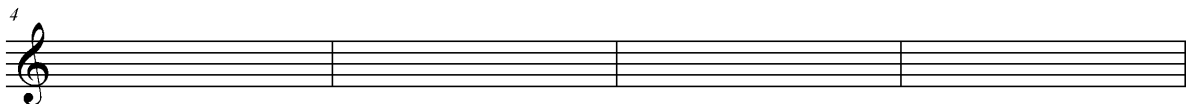
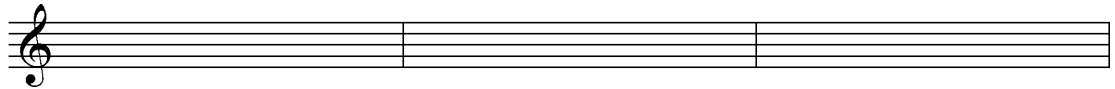
- 1) Perfect Cadence
- 2) Plagal Cadence
- 3) Imperfect Cadence
- 4) Interrupted Cadence

Appendix IX: Pre-Test/Post-Test Answer Sheet (Form II)

1. Monotone Rhythms: Write rhythm and insert bar lines



2. Intervals: using the staff. Insert the correct key signature and the interval played.



g) Melody writing: write out the clef, key and time signature as dictated by the teacher



h) Identify and write down the following cadences as played by the teacher.

Appendix X: Sample Songs Used for Classroom Teaching.

Title: Lidongolo Munyanza (Luhya folk melody)



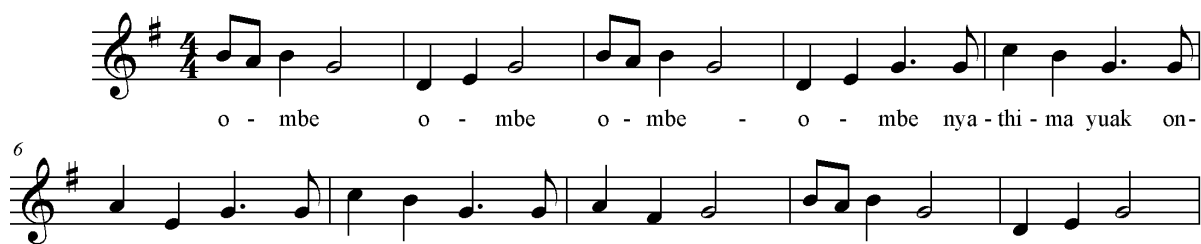
Li - do-ngo-lo-mu-nya-nza ha-i-ya ha-ha ha-ha ha ha ha-i-ya ha-ha

Title: Mama Mbe Nzimindi (Luhya folk melody)



ma - ma mbe nz-mi-ndi zi khu-mi - nza nzie - nzie nzie nzie khu-mi - nza

Title: Ombe Nyathima Yuak (Luo lullaby)



o - mbe o - mbe o - mbe - o - mbe nya - thi - ma yuak on-
 6
 diek cha - me nya - thi - ma yuak on - diek cha - me o - mbe o - mbe

Appendix XI: Music Teachers' Characteristics

No	Age (years)	Sex	Qualification		Instrument played
			Academic	Professional	
1	N/A	Male	B.ED	Piano Grade 1	Piano
2	N/A	Male	B.ED	N/A	Recorder
3	31	Male	Diploma	N/A	Voice
4	51	Male	N/A	N/A	Voice
5	50	Male	Masters.	N/A	Voice
6	48	Male	Diploma	N/A	Recorder
7	30	Male	Diploma	N/A	Recorder
8	35	Male	B.ED	Piano Grade 2	Piano
9	32	Male	B.ED	N/A	Voice
10	30	Male	B.ED	Piano Grade 5	Piano
11	30	Male	B.ED	Guitar Grade 1	Guitar
12	28	Female	B.ED	Piano Grade 2	Piano
13	N/A	Female	B.ED	N/A	Voice
14	47	Female	Diploma	N/A	Voice
15	N/A	Female	B.ED	N/A	Guitar
16	32	Female	Diploma	N/A	Recorder

Appendix XII: The Kenya Certificate of Secondary School Music Syllabus (Copied from the KIE Syllabus)

GENERAL OBJECTIVES

By the end of the course, the learner should be able to:

- 1) Read and write music
- 2) Use musical instruments, costumes and decorations
- 3) Express own ideas, emotions and experiences through composing music and dance
- 4) Appreciate and contribute to development of different types of music.
- 5) Acquire a sense of co-operation by participating in musical activities.
- 6) Promote and enhance national unity by identifying through exploration, appreciation and performance of indigenous music from all parts of Kenya.
- 7) Contribute to the world of music through study and participate in the country's music and that of other nations.
- 8) Use acquired music skills for his/her well being and of others in society.
- 9) Use music to acquire better mental and physical health.
- 10) Compose music to educate society on issues affecting them.
- 11) Perform and enjoy song, dance and instrumental music.
- 12) Develop/improve own creative skills/talent through the composition of music and dance.

FORM ONE

Specific Objectives

By the end of the sub topic, the learner should be able to:

- a) Write primary triads of major scales in root position
- b) Describe primary triads of major keys
- c) Group notes appropriately according to the beat.

Content

Rhythmic Dictation

Rhythms on monotone

- Time signatures-2 (simple duple)

- 3 (simple triple)
- 4
- 4 (simple quadruple)
- 4
- 6 (compound duple)
- 8

- Grouping of notes



Melody

Specific Objectives

By the end of the topic, the learner should be able to write melodies of up to four bars having intervals with leaps of a third.

Content

Melodies using the note values

Time signatures in simple time $\frac{2}{4}$ $\frac{3}{4}$ $\frac{4}{4}$ and compound time $\frac{6}{8}$

Quaver	
Crotchet	
Dotted crotchet	
Minim	
Dotted minim	
Semi Breve	

Ear Training

Intervals

Specific Objectives

Rhythmic Dictation

- Simple time $\begin{matrix} 3 & 2 & 3 & 4 \\ 8 & 4 & 4 & 4 \end{matrix}$
- Compound time $\begin{matrix} 6 & 9 & 12 \\ 8 & 8 & 8 \end{matrix}$

Melody

Specific Objectives

By the end of the sub topic, the learner should be able to:

- Write eight-bar melodies in major and minor keys in simple time
- Write eight-bar melodies in major and minor keys in compound time

Harmonic Intervals

By the end of the sub topic, the learner should be able to describe all major, minor and perfect intervals in a major scale.

Content

- Major 2nd
- Minor 2nd
- Major 3rd
- Minor 3rd
- Perfect 4th
- Perfect 5th
- Major 6th
- Minor 6th
- Major 7th
- Minor 7th
- Perfect Octave

Harmony

By the end of the sub topic, the learner should be able to:

- Write and name cadences
- Write and name chords

Content

- Perfect cadence
- Plagal cadence
- Imperfect cadence
- Interrupted cadence
- Chords I, II, IV, V and VI

FORM FOUR

By the end of the sub topic, the learner should be able to:

- a) Write rhythms on monotone
- b) Clap and tap rhythms
- c) Group notes
- d) Write correct time signatures from the given rhythms
- e) Write anacrusic rhythms
- f) Write syncopated rhythms
- g) Write rhythms of given melodies
- h) Write rhythms to given lyrics
- i) Write eight-bar melodies in minor keys in simple time
- j) Write eight-bar melodies in major keys in compound time
- k) Describe all harmonic intervals of a major scale
- l) Name chords
- m) Name cadences in a harmonic passage

Content**Rhythmic Dictation****Melody**

- Eight-bar melodies in major and minor keys in simple and compound time

Harmonic Intervals

- All major, minor and perfect intervals of a major scale

Cadences

- Chords I,II,IV,V and VI
- Perfect, plagal. Imperfect and interrupted cadences.