KENYATTA UNIVERSITY
MUSIC INSTITUTE
DEPARTMENT OF MUSIC PERFORMANCE AND EDUCATION

INTEGRATION OF THE VISUALLY IMPAIRED: THE CASE OF VOICE TRAINING IN KENYATTA UNIVERSITY

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MUSIC

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DECLARATION

This research project is my original work and has not been presented for any degree in any University.

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DEDICATION

To my dear parents, Narkiso Okeyo and Mrs. Margaret Adoyo Okeyo.
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ABSTRACT

This study investigated the integration of the visually impaired students particularly those training in voice. The study sought to:

a) Identify the strategies employed by lecturers in voice training of the visually impaired.

b) Determine how the strategies differ from those employed with the sighted students.

c) Identify the activities visually impaired and students engage in to ensure the learning of a song.

d) Outline how the lecturers’ teaching strategies and students learning activities are integrated to ensure maximum benefit to the visually impaired students.

The study targeted the voice-training lecturers, visually impaired and sighted voice students. The simple random sampling was used in selecting those that participated in the study. A total of 11 lecturers and 39 students participated in the study.

Data was collected using three types of tools questionnaires, interview schedule and observation schedule. Interviews were recorded using a cassette tape recorder. Information from the interviews and the observation schedules were tabulated. The data analyzed using frequency tables and percentages. This revealed patterns, which described the level of integration of the visually impaired.
The major findings of the study revealed that lack of proper teaching and learning activities, and methods like listening to the recorded excerpts acted as an impediment to effective teaching of voice. Inadequate time and regular training also lead to the lagging behind of voice students particularly the visually impaired.

In light of these findings, recommendations for improvement and further course of action by appropriate authorities included:

a) More time should be allocated for lecturer-student contact.

b) Learning activities beyond lecture hour should be engaged in to enhance concept assimilation and skill development, for example, participation in group singing, choirs/ensembles and own practice with or without accompaniment.

c) Training of music lecturers to handle visually impaired students and also to update music skills.

d) Curriculum should be developed for voice as an instrument with graded teaching and learning material. Expansion of resources and provision of specialized material for the visually impaired students also to be included.
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DEFINITION OF TERMS

The following terms are defined as they are used in the context of the study:

**Visually impaired:** Refers to a learner who cannot make use of vision for the purpose of learning.

**Special education:** Refers to the education given to people who are considered unfit for regular school programmes due to either physical or mental impairment.

**Special schools:** Refers to schools where the impaired children are taught.

**Integration:** Refers to a program intended to keep learners with impairments within their community and allow them to attend classes with non-impaired counterparts. They spend some or all of their time in regular classrooms.

**Vocal performance:** Refers to any music for voice or voices, with or without instrumental accompaniment done through practice.

**Voice training:** A program of instruction aimed at enabling the individual to master and utilize the voice, especially for performance, e.g. in singing.
CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND TO THE STUDY

In any given community, there exist people with different abilities. The categories of people include those with physical and mental impairments. This necessitates modification of learning material, after referred to a special education.

Their existence is due to a variety of factors including physical and mental capacities. Within the field of education where young people are socialized into the economy of their society, these different categories of individuals demand different forms of attention if they are to benefit from the process of education, and also if the goals of education are to be realized.

In Kenya, before independence in December 1963, a handful of special schools and units existed to provide special education. Kenya's Ministry of Education (1976) states that churches, voluntary and charitable organizations pioneered the few special schools and programmes then in existence. The schools were initially church based vocational institutions. These churches worked sometimes in conjunction with and sometimes independent of the societies for each impaired category such as, Kenya Society for the Blind, Kenya Society for the Deaf Children and Association for the Disabled people of Kenya. Ndurumo (1993) says that the Ministry of education admitted in the mid 1970s that its participation in special education was very minimal.
These students were isolated from the normal students because of their special needs and also to ensure that they were not neglected or left behind in the acquisition of basic education. Reports prepared by the Kenya Special Education Council on exceptional children in 1974, indicate that majority of the students were capable of learning when given special attention and remedial classes. This gradually became an awakening of social conscience and the disabled were accorded more humane care.

In 1981, there was a call by different organizations to integrate exceptional children with normal children. In the same year the Kenya Education commission was formed to investigate among other things the care and rehabilitation of the Disabled. The commission noted the need for provision of training of children with mild impairments in regular schools providing special consideration to their needs. It also stressed that no impaired child that should be sent to a special school if he/she can satisfactorily be educated in a normal school Ndurumo (1993). It is because of this perceived importance of integration that the government of Kenya decided to integrate the exceptional children with the normal.

With the integration movement, the exceptional students are attended to in the same manner as normal students. This is evidenced at Kenyatta University where there is no separation of impaired students from the rest. The visually impaired learn alongside their physically impaired and normal counterparts. The main focus of this study was the Music Institute where both visually impaired and sighted students undergo tuition in all areas of music including vocal performance. At the school of music students undergo tuition in performance and theory of music. In performance, they all sing and/or play pieces
assigned to them by their instructors. There is also the dancing of indigenous music. The assigned pieces are given at the beginning of the semester and assessed at the end of the semester. The foregoing concern clearly highlights the necessity for a study to show the practicability of having normal and impaired students in such a situation given the understood advantages and handicaps.

1.1 STATEMENT OF THE PROBLEM

The visually impaired students in Kenyatta University's School of Music are subjected to the same performance lessons and examinations as their sighted counterparts. While the sighted students use both their audio and visual senses in assimilating concepts and developing skills in music, the visually impaired students rely purely on the sense of hearing.

A casual observation of the two groups of students seemed to indicate that the visually impaired students may take longer to learn a given piece of music than the sighted. This observation further seemed to suggest that the visually impaired students could have been may be placed at a disadvantage in learning which would result in process low performance in examination.

Despite such concerns no study had been conducted to establish how tuition in performance for both the visually impaired and sighted students should be conducted for maximum benefit to the students with the focus on vocal performance. The study hence intended to answer the following questions.

1. What strategies do lecturers employ in vocal training of the visually impaired?
2. How do these strategies differ from those employed with the sighted students?
3. What activities do the visually impaired and normal students engage in to ensure the learning of a song?

4. How can the lecturers' teaching strategies and students learning activities be integrated to ensure maximum benefit to the visually impaired voice students?

1.2 OBJECTIVES OF THE STUDY

Specifically the study sought to fulfill the following objectives:

1. To identify the strategies employed by lecturers in vocal training of the visually impaired.

2. To determine how the strategies differ from those employed with the sighted students.

3. To identify the activities the visually impaired and normal students engage in to ensure the learning of a song.

4. To outline how the lecturers' teaching strategies and students learning activities are integrated to ensure maximum benefit to the visually impaired students.

1.3 ASSUMPTIONS OF THE STUDY

a) A visually impaired student requires more time to master a piece of music than the sighted counterpart.

b) Sighted students have access to more learning experience in practical music than their visually impaired counterparts.

c) Exposure to varied learning experiences result in efficiency in knowledge acquisition and skill development.
1.4 RATIONALE AND SIGNIFICANCE OF THE STUDY

This study derived its rationale from the continued call by various organizations for public awareness of the learning needs of the visually and other impaired students. The visually impaired need Braille machines note taking as a learning activity. In Kenyatta University, the visually and physically impaired students are provided with the Braille machine and transport from one class to the other. The visually impaired in the Music Institute also require special attention like Braille music and specially trained lecturers in practical music to assist them achieve higher grades. Yet the Music Institute has no special education trained lecturers in practical music. This makes the learning hard to cope with especially when there is a complicated problem that needs a specialist.

The study hoped to provide useful information on the extent to which the needs of the visually impaired students at Kenyatta University are catered for in the music classroom. Such information may be useful to music lecturers, lecturers in other performance oriented subject areas, education planners and administrators as well as policy makers in their effort to ensure that visually impaired students benefit from education as much as their sighted counterparts.

The study also hoped to provide a number of recommendations on resources and instructional procedures that are suitable for the visually impaired students particularly in practical music lessons. Such suggestions may be useful in sensitizing the curriculum planners and implementers to pay attention to the needs of impaired students during the design and implementation of the school curriculum.
1.5 SCOPE AND LIMITATION

This study was conducted in Kenyatta University's School of Music. Kenyatta University was purposively selected among public universities that offer music because it has the oldest Department of Music. It admits a large number of students and over the years it has admitted the highest number of visually impaired students who are integrated with the sighted students.

The study covered the following respondents: the lecturers who teach voice in music, all the visually impaired music students in the School of Music and a sample of sighted music students from all the four year groups. All these categories were expected to provide a rich ground for conducting the research.

The following were the limitations of the study:

a) Scarcity of previous researches dealing with the teaching and learning of practical music particularly at the University level. This limited the scope of literature review. However related literature in other subjects was used as supplementary reference.

b) Limited time and budgetary constraints never allowed the inclusion of other relevant institution in the study. However this study hoped to stimulate other researches concerning integration of visually impaired and sighted students into the normal learning process.
1.6 THEORETICAL FRAMEWORK

This study was guided by the theory of sensory and cognitive association advanced by Woodworth (1969). The theory demonstrates factors that determine an individual's rate of learning and achievement.

The sensory and cognitive associated theory states that learning is a function of sensory interactions with the object of learning, thus coupled with the cognitive or intellectual interpretation, the sensory experience results into knowledge and skill acquisition.

According to the theory, the human senses of touch, smell, sight, hearing and taste are available and necessary for information reception and interpretation. The use of one or as many of the senses as possible in the learning process results in quick interpretation and enhances the retention of the learnt material. The sensory and cognitive interpretation of the object of learning will be slower or quicker, effective or ineffective depending on the level of difference and distribution of the learning and practice time.

The perceived level of difficulty, adequacy or inadequacy of time are however considered to be dependent upon the magnitude of sensory interaction with the learned material, that is, interpretation occurs more easily through the channels of more sensory systems.

The sensory and cognitive association theory is particularly applicable to practical lessons that appeal to the use of visual, auditory, and factory senses of the learner. The theory implies that a visually impaired learner being incapable of making use of all the above senses would be disadvantaged in the practical lessons as compared to their sighted counterpart. In other words, the rate of learning of the visually impaired students would
be jeopardized by their limited sensory interaction with the object of learning and consequently slow cognitive interpretation. Further indications of the theory is that more time would be required by the visually impaired to learn a given task in practical music due to the sensory limitation.

The sensory and cognitive association theory formed the basis for the study on the integration of the visually impaired students in voice training with regard to time allocation for learning and practice, methods of teaching and their effects on students' achievement in voice performance lessons.
2.0 INTRODUCTION

This section reviewed the literature related to the study. It provided vital information regarding what various educators have expressed concerning the importance of integration of visually impaired students with the sighted ones in general, and specifically in teaching and learning music.

The literature is divided into two sub-sections:

a) Review of literature focusing on special education in general, and visually impaired in particular.

b) Review of literature highlighting voice training.

2.1 Special Education

Special education is very important in that it is aimed at embracing children who were considered unfit for regular school programmes. Haring (1978:16), vividly describe the value of special education in the statement, "There is need to overcome the impaired through specialized education and social, cultural and vocational training so that the impaired child may take his place in society as a full and useful member able to become a self-sufficient individual contributing to the development of the nation." This makes the present century educationists consider special education as being among the major strategies for improving the learning outcomes of the exceptional children in general.

Ndurumo (1993), Anderson (1973) and Barraga (1976) maintain that special education facilitates the development of positive a self-image, self-expression, self-discipline, self-reliance and social standards and attitudes. It helps the child in the acquisition of literacy,
numeracy and manipulative skills. This leads to the development of ability for logical thought and critical judgment. Ndurumo (1993) says that through special education a child develops awareness and understanding of his environment, attitudes to his or her country, other countries and the international community.

Special education did away with the stigmatization that the impaired students faced when they were seen as incapable of engaging in gainful employment. This came about as a result of them being forced to sit idly on their family farms and watch helplessly as months and years passed by. Muchiri (1982) supports this by saying that the practice of viewing the impaired as incapable of gainful employment is embedded in the original Kiswahili term wasiojiweza used in Eastern Africa to refer to the disabled. The literal translation of the term means 'those incapable of performing'. Therefore the society saw them as good for nothing children.

Kalugula et al (1984:34), clearly outline the advantages of special education. According to them as educators:

1. Special education helps integrate whenever possible the impaired child into local schools.

2. It allows special children to perceive their world realistically and have a realistic outlook on life and their eventual participation after school years.

3. It assists regular schoolteachers in the integrated institution to refine their teaching strategies when teaching the non-impaired as they learn to utilize the finer and more structured instructional approaches used with the impaired.
A clear relationship is seen between special education and the integration of visually and sighted students. It is from the special education that a child is judged whether he or she needs to be integrated or not. This helps promote the integration movement. According to Kennedy (1990) of Kenya institute of education, integration allows special children to compare themselves with non-impaired children and make a realistic estimate of their relative standing academically, socially, linguistically, and intellectually. This is also the main advantage of integration.

Special education students need more attention than the normal students therefore supportive services should be provided. Ndurumo (1993) says that integration minus supportive services is considered to be education in the most restrictive environment for some of the impaired children. Therefore, they need to be supported in order to develop positive self-concepts and acceptable social behaviour.

As regards educational programming for the visually impaired, it is evident that visually impaired students experience problems in learning concepts, especially those related to objects that cannot be perceived through sense of touch. This is because vision plays an important role in environmental input. Visually impaired children perceive those items, which are accessible to them by the use of their remaining senses - by feeling, listening, tasting and smelling. Harley (1973) states that what children see they assimilate and integrate in the brain. Therefore limited sensory input due to environmental deprivation may cause visually impaired students to lag behind sighted students in cognitive development.
According to Harley (1973), the visually impaired are disadvantaged in learning concepts that sighted children learn readily and which they are able to relate to other concepts in their environment. This shows that an intact vision plays an important role in the development of reasoning abilities. Fraiberg (1968) supports Harley when he says that concept of objects begin to emerge between 3 and 5 years in visually impaired children while sighted children develop the concept of objects by 2 years. This shows that the visually impaired are late learners given such conditions.

Lowenfeld (1976) states that congenital and totally visually impaired children experience difficulty in learning speech by imitation. He notes that such children may learn better by hearing the sounds and by occasional touch. This proves that the development of speech in the visually impaired may be slower than that of sighted children because they acquire word concepts slowly since they lack the experience of associating words with what they see. Hill and Blasch (1980) further state that this occurs because the information is collected in fragments by using the remaining senses. This process is slow and generalization takes longer. Therefore, there is a possibility of the visually impaired music students not associating the correct sounds heard with those written as fast as the sighted students in a voice class. This is the reason why they need supportive services in almost all the learning activities.

Lowenfeld (1976), Abel, G. (1976) and Cutsforth (1966) say that the teacher in the regular school should provide tutorial and remedial assistance to the integrated child, for example taped lectures, Braille and other relevant teaching aids. Harley (1973) adds that Braille should be availed to the visually impaired to assist in writing and reading. This is
because Braille compels readers to read carefully and purposefully thereby enabling them to comprehend more information.

From the discussion, there is evidence that visually impaired students are slow in reading and writing even though they use Braille, which is also believed to be slower. This implies that the visually impaired students are generally disadvantaged in terms of concept and skill acquisition. It is hence desirable that supportive services be provided to ensure that all their needs in educational programmes are met.

2.2 Voice Training

Voice training involves the teaching of vocal music. Kamien (1992) says that vocal music is written for groups of solo voices and for solo voice with or without the accompaniment of one or more instruments. Rainbow (1978) stresses that vocal music involves mainly singing. Arnold (1983) adds that voice is a musical instrument capable of interpreting the vast range of vocal music from 1600 to the present day. He goes ahead to say that in singing we use wider ranges of pitch and volume than speaking, and we also hold vowel sounds longer. From these statements, vocal music is where everybody is expected to produce musical sounds using the voice. This may imply some degree of training for its realization.

Kamien (1992) says that the air from the lungs makes the vocal cords vibrate, and the singer's lungs, throat, mouth and nose come into play to produce the desired sound. This shows how singing demands a greater supply and control of breath. The pitch of the tone varies with the tension of the vocal cords, for example, the tighter they are, the higher the pitch. This is believed to help a person in acquiring his own individual vocal range.
About the voice ranges, Choksy (1986) says that the range of singer's voice depends both on the training and on physical makeup. Voice training is hence the means to developing the capacity and ability to effectively use the voice as a musical instrument.

According to Rainbow (1978:23), "before training the class a new song, the teacher should always go through it carefully noting the places where modifications in the accompaniment may be necessary to help the class while it is learning the song". This implies that the teacher should analyze songs used in teaching. The teachers' knowledge of the song facilitates its use for skill development. Songs are hence the tools used for voice training.

Arnold (1983) believes that the first thing in voice training is to encourage vocal production, whereby a singer hums gently on a convenient note. He adds that humming encourages good tone, and that all exercises need not be sung loudly. This also allows the opening up of the vocal cords. The exercises done for vocal production should involve the vocalizing of vowel sounds. But Kamien (1992) advises that it is unwise to use the same vowel sound for all vocal exercises. This is the basis for voice training followed by the real act, which is singing.

Miller (1986:206) says 'The task of the singing teacher is to listen carefully to the sounds the performer is making and to discover whether the singer's ear demands timbre that results from malfunction of some parts of the instrument. Hence a good technician in the field of vocal technique must have the ability to diagnose the causes of vocal problems and offer workable solutions to a clear fashion'. This can be detected well during the vocal exercises.
Swanson (1973) further says that by understanding the correct or most approved musculature involved in singing, one should engage in specific exercises to develop the desired coordination of muscles. Music educators such as Hyslop (1964), say that increasing vocal range via a set regime of exercises adds to the number of tones, both high and low. Konchar (1992) supports the idea of exercises by saying that singers should develop correct breathing techniques by use of drills or vocalizes. He also recommends that the enthusiastic teacher be anxious to secure some good vocal training himself or herself before he or she guides others. All these bring out clearly the importance of exercises in voice training and their place in the development of the voice as an instrument of music.

Rainbow (1978: 23) indicates that "in training of a young singer the emphasis should be on a light or lyric production. If the voice has the potential, it will develop more dramatic quality as it matures". This brings out an important aspect of voice training known as registers. Brocklehurst (1971) supports the idea of registers by saying that the development of the registers is the most important aspect of voice training as described in sources of the 18th and early 19th centuries. He adds that the traditional voice training is to do with singing on the breath or portamento style. Portamento here he says is not used in the narrow sense of slurring between two notes but its rather the idea of the voice being carried on the breath, so that every note melts smoothly into the next. This helps in the refinements of vocal production.

According to Miller (1986) a complete technique of singing must consider the regulation of breath management, the accomplishment of freedom at the vibratory source, the
intricate process of resonator coupling and the coordination of phonetic articulation in response to language and meaning. This shows that the total body should be involved in the singing process and that each bodily force depends upon the others in the complex act of supporting the Laryngeal sound. He adds that compensating techniques of singing includes a system of breath management that concentrates on the control of muscles that at best are auxiliary breathing muscles. This means that the singer must have trust in the ear of the teacher and in the school of technique being presented. Therefore, it is essential that the ear of both teacher and student be trained to desire freely produced sound, recognized when it is lacking and know how to produce it over and over again. This helps in the mastery of the songs. In short, good teaching of singing produces independent singers, capable of trusting their own ears and their own daily teachers, although they should never dispense with an occasional ear.

It is evident hence, that the voice trainer must be knowledgeable and perhaps himself or herself a trained musician, but definitely one with a good ear. The voice student must on his or hr part cooperate fully, putting in time for the various exercises to be mastered and used effectively if they are to benefit from voice tuition.

2.3 Summary

From the literature reviewed, it has been established that there are special needs to be taken into considerations especially when dealing with the special children particularly the visually impaired. It is also noted that the visually impaired are slow in learning because they learn in fragments but with supportive services they can do as well as their sighted counterparts.
Besides, the reviewed literature has brought to light the fact that in voice training singing and reading of musical notes is one of the most learning activities involved. Therefore the voice lecturers are required to give the visually impaired Braille music to help them in the singing and reading of the voice pieces for better achievement. This is the main reason for the provision of the supportive services Braille inclusive. Thus, the literature formed a basis for carrying out a survey on integration of the visually impaired in order to find out how the teaching and learning can best be done within the realms of voice tuition, a practical subject. is done for the integrated group.
CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter deals with the methods and the procedures that were followed in carrying out the study. The study employed the descriptive methods of research due to its suitability in investigating the current situation with regard to integration of the visually impaired students in voice training. This involved direct observation, interview and soliciting responses from the respondents by use of questionnaires. Library resources were also made use of in the study.

3.1 Population and Sampling

The target population was all students and academic staff at the Music Institute. This included Bachelor of Education (Music), Bachelor of Music, Master of Music, Certificate and Diploma students as well as full time and part time lecturers and performance instructors.

The visually impaired students and the voice lecturers were purposively sampled. 30% of the sighted students were selected using simple random sampling. In each year group all the sighted students were listed down and assigned a number form 0 up to 39. An arbitrary number was selected from the table of random numbers and the corresponding students were noted as part of the sample. The process was repeated until the required sample size was obtained. This procedure gave each individual in the population an equal chance of being selected.
3.2 Research Tools and Equipment

The following tools and equipment were employed to aid in the collection of relevant data from the study sample.

3.2.1 Questionnaires

Two categories of questionnaires with open-ended and close-ended items were developed for the study. Questionnaire I for the voice-training lecturers, comprised two sections. Section A mainly dealt with information concerning the teachers’ professional qualification and teaching experience. Section B solicited information on the time allocated to the visually impaired and sighted students, the actual contact time between the teacher/tutor, strategies employed and the teaching and learning activities.

Questionnaire II for the visually impaired and sighted voice students also had two sections. Section A dealt with information concerning the students’ background. Section B of the students’ questionnaire contained items, which mainly dealt with the learning activities and strategies they employed when learning a song.

3.2.2 Observation Schedule

The observation process was made use of in gathering information that could best be obtained through direct examination by the researcher.

Lecturers were observed during the voice lessons, in order to ascertain what methods they used to support the teaching and learning. Lecturers’ activities, resources available students’ activities and methodology used to voice training were noted.
3.2.3 Interview Schedule

Voice training lecturers and voice students from the sampled population were interviewed by means of an interview schedule.

The information gathered was compared with that of the questionnaires to establish the time allocated for both students, teaching strategies and learning activities employed by the lecturers and the learning activities engaged in by the students during the learning of a song.

3.2.4 Equipment

The researcher used a battery-operated cassette recorder in recording the proceedings during the interviews.

3.3 Data Collection Techniques

The following techniques were used in data collection:

3.3.1 Questionnaires

Fifty-two questionnaires were distributed to the voice lecturers and voice students both visually and sighted students. They were then collected after two days. All the questionnaires were completed and returned.

3.3.2. Observation

The researcher made a 30-minute observation of lecturers and students during a voice lesson. A total of six out of eleven selected teachers were observed.

3.3.3 Interviews

Interviews with the six lecturers, two visually impaired students and thirteen sighted students were conducted during the voice lessons. The interviews took place within the rooms and a battery-operated cassette recorder was used to record the proceedings.
3.4. Data Analysis Procedure

The collected data was analyzed as follows:

a) Voice training lecturers and students' questionnaires were analyzed using two methods: information obtained from the close-ended items was tabulated and the table indicated the percentage of lecturers and students who responded to each item. For the open-ended items, a sample of the questionnaires was taken and responses for lecturers and students were studied. Coding frames were then developed and used for all the questionnaires. Information obtained was then tabulated; indicating the percentage of lecturers and students which responded to each category of the coding frames.

b) Information from the interviews and the observation schedule was tabulated resulting into patterns, which described the integration of the visually impaired voice students.
CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

The following section deals with presentation and analysis of data gathered from voice training lecturers and voice students both the visually impaired and sighted.

4.1 Voice Training Lecturers as Respondents

Voice training lecturers play an important role in helping the students to develop their vocal range. They should be conversant with the voice teaching techniques, problems and the ways in which these problems can be solved.

Duration of service of the lecturers was considered an important background factor in this study because it was felt that the length of time taken in training voice would be a major contributing factor to the capability to deliberate on matters related to voice training. Therefore, the lecturers’ responses would be regarded as bearing more weight than those of the newly appointed lecturers.

The analyses of the responses are presented on the subsequent tables.
Question 1. What is your highest formal educational qualification?

Table 4.1.1: Shows analysis of voice training lecturers’ responses regarding the highest formal educational qualification.

<table>
<thead>
<tr>
<th>Response</th>
<th>No. of Lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelors</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>Masters</td>
<td>8</td>
<td>72.7</td>
</tr>
<tr>
<td>Doctorate</td>
<td>2</td>
<td>18.2</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>100</td>
</tr>
</tbody>
</table>

As can be observed from table 4.1.1, most of the lecturers have Master’s degree, 8(72.7%) indicated that they have Master’s degree, 1(9.1%) indicated a Bachelor’s degree while 2 (18.2%) indicated doctorate.

The implication here therefore is that majority of the voice training lecturers are highly qualified and therefore are in a good position to deliberate on voice training issues.

Question 2. What is your teaching experience?

Table 4.1.2: Years of Experience as a Lecturer.

<table>
<thead>
<tr>
<th>Duration of Teaching (Years)</th>
<th>No. of Lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 1 year</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>1-2</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>2-5 years</td>
<td>9</td>
<td>81.8</td>
</tr>
<tr>
<td>Above 5 years</td>
<td>2</td>
<td>18.2</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>100</td>
</tr>
</tbody>
</table>
On this question, most of the lecturers have taught for a considerable period of time, 9 (81.8%) indicated that they have taught for a period ranging between 2-5 years, 2 (18.2%) indicated over 5 years, and no lecturer had taught for less than two years.

**Question 3: Apart from voice, what other instruments do you teach?**

**Table 4.1.3 Additional Instruments Taught**

<table>
<thead>
<tr>
<th>Instruments</th>
<th>No. of Lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piano</td>
<td>9</td>
<td>81.8</td>
</tr>
<tr>
<td>Recorder</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Trumpet</td>
<td>2</td>
<td>18.2</td>
</tr>
<tr>
<td>Violin</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.1.3 indicates that 9 (81.8%) of the lecturers teach piano apart from voice, 2 (18.2%) teach trumpet while no lecturer taught recorder or violin. It therefore shows that a higher percentage of the lecturers teach voice and piano. This indicates that there is a relationship between voice and piano.

**Question 4: Do you teach both visually impaired and sighted students?**

**Table 4.1.4:** Shows the voice lecturers’ responses on whether they teach both visually impaired and sighted students.

<table>
<thead>
<tr>
<th>Responses</th>
<th>No of Lectures</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
<td>36.4</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>63.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
7 (63.6%) lecturers responded by indicating that they do not teach both students and only 4 (36.4%) responded that they have taught both students. The four lecturers have been teaching the visually impaired.

**Question 5:** How long on average do these students take to master a song?

a) visually impaired

b) sighted

**Table 4.1.5:** Shows Time Taken by the Visually Impaired

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 day</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>2 days</td>
<td>2</td>
<td>18.2</td>
</tr>
<tr>
<td>1 week</td>
<td>5</td>
<td>45.5</td>
</tr>
<tr>
<td>2 weeks</td>
<td>4</td>
<td>36.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

For this question, 2 (18.2%) of the lecturers indicated that some of the visually impaired students take 2 days, 5 (45.5%) of the lecturers indicated 7 days while only 4 (36.4%) indicated that visually impaired students take 14 days to master a song.
Table 4.1.6  Shows Time Taken by the Sighted Students

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 day</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>2 days</td>
<td>9</td>
<td>81.8</td>
</tr>
<tr>
<td>7 days</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>14 days</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>100</td>
</tr>
</tbody>
</table>

It is evident that majority of the sighted voice students take 2 days to master a song, 9 (81.8%), of the lecturers indicated 1 day while 1 (9.1%) indicated 14 days. This reveals that time taken for mastering a song by the sighted students is shorter compared to the time taken by the visually impaired.

Question 6: Do you give extra attention to the visually impaired?

Table 4.1.7:  Showing Analysis of the Lecturers’ Responses Regarding Extra Attention Given to the Visually Impaired Students

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
<td>36.4</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>63.6</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>100</td>
</tr>
</tbody>
</table>
From table 4.1.7, it is evident that 7 (63.6%) of the lecturers do not give extra attention to the visually impaired while only 4 (36.4%) give extra attention. This is because only four of them have taught the visually impaired students.

**Question 7: a) What strategies do you employ in vocal training?**

**Table 4.1.8: Strategies employed**

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sing the whole song and analyze it</td>
<td>8</td>
<td>72.7</td>
</tr>
<tr>
<td>Listening to a recorded excerpt</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Students sing by themselves</td>
<td>3</td>
<td>27.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

8 (72.7%) of the lecturers sing the whole song and then analyze the song pointing out any outstanding features while 3 (27.3%) leave the students to sing by themselves while none of the lecturers give a recorded excerpt.

**7 b) Do the above mentioned methods apply for the visually impaired?**

**Table 4.1.9: Methods apply for the visually impaired students**

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>4</td>
<td>36.4</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not applicable</td>
<td>7</td>
<td>63.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
From table 4.1.9 only 4 (36.4 %) lecturers responded adequately the rest gave an additional answer of not applicable. The researcher feels that this was done because they had never handled the visually impaired students.

**Question 8 a) What kind of learning and teaching activities do you engage in during the vocal training?**

**Table 4.1.10:** Shows General Learning and Teaching Activities Undertaken during the Vocal Training.

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sight singing</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>Technical exercises</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>Discussion of principles like Diction</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>Sing the song out together</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>Other activities</td>
<td>7</td>
<td>63.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the analysis of the responses, all the lecturers responded by indicating other activities above. This shows that voice-training lecturers engage in other activities apart from the ones listed.
8 b) Do you engage the visually impaired students and the sighted in similar activities.

Table 4.1.11: Shows whether both students are engaged in similar activities

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>6</td>
<td>54.5</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>45.5</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>100</td>
</tr>
</tbody>
</table>

As is evident in table 4.1.11, the majority of the lecturers, 6 (54.5 %) engage both students in similar activities while 5 (45.5%) indicated that they do not.

Question 9: What instructional materials do you use to support the teaching and learning of a song?

Table 4.1.12: Instructional materials use to support the teaching and learning of a song

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piano</td>
<td>8</td>
<td>72.7</td>
</tr>
<tr>
<td>Recorded Excerpts</td>
<td>2</td>
<td>18.2</td>
</tr>
<tr>
<td>Resource Books</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>100</td>
</tr>
</tbody>
</table>

8 (72.7%) of the lecturers use piano to support the teaching and learning of a song, 2 (18.2 %) indicated that they use recorded excerpts while 1 (9.1 %) indicated that they use resource books.
Chapter 4: Research Findings

4.2 Voice Students as Respondents

Voice students need to develop performance have voice training skills, as this is most essential for the students' musical and general expression of the meaning of music. Those who have not undergone a vocal training cannot progress beyond a certain standard as performers.

This section focuses on the analysis of the data provided by the students regarding the learning activities they engaged in and the learning strategies employed during the learning of a song.

The data collected from the voice students both visually impaired and sighted are presented in the tables that follow.

Question 3: Sighted or not sighted?

Table 4.2.1: Analysis of Students' Response regarding their Vision

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sighted</td>
<td>37</td>
<td>94.9</td>
</tr>
<tr>
<td>Not sighted</td>
<td>2</td>
<td>5.1</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100</td>
</tr>
</tbody>
</table>

On this question, 37 (94.9%) students indicated that they were sighted while only two were not sighted. This reveals that the number of visually impaired students who take voice is very few and therefore the reason needs to be established.
Question 4: What is your year of study?

Table 4.2.2: Shows all the year groups of all the sampled voice students.

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>2nd year</td>
<td>20</td>
<td>51.3</td>
</tr>
<tr>
<td>3rd year</td>
<td>10</td>
<td>25.6</td>
</tr>
<tr>
<td>4th year</td>
<td>9</td>
<td>23.1</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100</td>
</tr>
</tbody>
</table>

For this question the majority of the students 20 (51.3%) indicated that they are second years, 10 (25.6%) indicated third years, 9 (23.1%) indicated forth years while lastly no student indicated first year.

Question 5: Which degree course are you undertaking?

Table 4.2.3: Analysis of Students Responses to Regarding the Degree Course

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Diploma</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Bachelor of Music</td>
<td>15</td>
<td>38.5</td>
</tr>
<tr>
<td>Bachelor of Education (Music)</td>
<td>20</td>
<td>51.3</td>
</tr>
<tr>
<td>B.ED (special Education)</td>
<td>2</td>
<td>5.1</td>
</tr>
<tr>
<td>Master of Music</td>
<td>2</td>
<td>5.1</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 4.2.3 shows that majority of the students undertake Bachelor of Education (Music). 20 (51.3%) indicated Bachelor of Education (Music), 15 (38.5%) indicated Bachelor of Music, 2 (5.1%) indicated B.ED(Special Education) 2 (5.1%) indicated Master of Music and none of the students indicated Certificate or Diploma. The education students take music as a second subject.

**Question 6: When did you start receiving voice training?**

**Table 4.2.4: Showing when students started receiving voice training**

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form 1</td>
<td>19</td>
<td>48.7</td>
</tr>
<tr>
<td>Form 2</td>
<td>2</td>
<td>5.1</td>
</tr>
<tr>
<td>Form 3</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Form 4</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Primary School</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Other Responses</td>
<td>5</td>
<td>12.8</td>
</tr>
<tr>
<td>Non-Respondents</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

On this question, 19 (48.7) students answered that voice training was begun in Form 1, 2 (5.1) begun in Form 2, 1 (2.6) began in Form 3 and no student began in Form 4. 11 (28.2) replied that they began earlier in primary school, 2 (5.10) gave answers un-related to oral
training. It therefore shows that a higher percentage of students began voice training in Form 1.

**Questionnaire 7a) How often do you have tuition in your instrument?**

**Table 4.2.5:** Shows how often the students have tuition in the voice

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once a week</td>
<td>35</td>
<td>89.7</td>
</tr>
<tr>
<td>Once fortnight</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Any Other Specify</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Non-respondents</td>
<td>3</td>
<td>7.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

35 students (89.7%) had one lesson per week, 1 (2.6%) had a voice lesson once per fortnight while 3 (7.7%) of them failed to respond to the question. This reveals that most of the students' train once a week.
Question 8a: Are there any teaching resources that you use in your voice lessons?

Table 4.2.6: Shows the Analysis of the Study Books Used by Students.

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3</td>
<td>7.7</td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>92.3</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100</td>
</tr>
</tbody>
</table>

As is evident on table 4.2.7, only 3 (7.7) of students indicated that they made use of the study books. 36 (92.3) reported that they do not use.

Q 8b) If Yes, which ones

Table 4.2.7.

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Books</td>
<td>3</td>
<td>7.7</td>
</tr>
<tr>
<td>Non-respondents</td>
<td>36</td>
<td>92.3</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100</td>
</tr>
</tbody>
</table>

As indicated in table 4.2.8, 3 (7.7) students reported that they use resource books while 36 (92.3) did not respond at all. The response of students who indicated that they make use of study books in question 8a.
Q 8c) If no, how do you learn your songs?

Table 4.2.8. Time taken in learning the songs

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imitating the teacher</td>
<td>29</td>
<td>74.4</td>
</tr>
<tr>
<td>Imitating the record exerts</td>
<td>3</td>
<td>7.7</td>
</tr>
<tr>
<td>Reading Braille music</td>
<td>2</td>
<td>5.1</td>
</tr>
<tr>
<td>Myself</td>
<td>4</td>
<td>10.3</td>
</tr>
<tr>
<td>Other students</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table 4.2.9, 29 (74.4%) of the students indicated that they imitate the teacher during the learning of a song, 37 (7.7%) indicated that they learnt from the recorded excerpts, 2(5.1%) reported that they read Braille music, 4(10.3%) reported that they learn the songs by themselves while 1(2.6%) indicated that they the songs with the help of the other students.
Question 9: How long do you take to master the voice

Table 4.2.9:

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 days</td>
<td>3</td>
<td>7.7</td>
</tr>
<tr>
<td>1 week</td>
<td>34</td>
<td>87.2</td>
</tr>
<tr>
<td>2 weeks</td>
<td>2</td>
<td>5.1</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>100</td>
</tr>
</tbody>
</table>

3 (7.7%) reported that they take 2 days from the same time the new song is introduced to memorize the song, 34 (87.2) indicated that they take 1 week and they have memorized the song while only 2 (5.1%) indicated that they take two weeks to master a new song.

Question 10: What goes on during the voice lesson?

Table 4.2.10

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening to audio tapes and noting the music</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Sight singing and sight reading</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Interpreting the song</td>
<td>4</td>
<td>10.3</td>
</tr>
<tr>
<td>Technical exercise</td>
<td>3</td>
<td>7.7</td>
</tr>
<tr>
<td>Other answers</td>
<td>29</td>
<td>7.4</td>
</tr>
<tr>
<td>Touch singing and reading</td>
<td>2</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Table 4.2.11, shows that majority of the students responded by giving all the answers listed, 1 (2.6%) reported that they sight sing and also sight read, 2 (5.1%) responded by indicating that they sight sing and also sight read, 2(5.1%) responded by saying that they touch sing and also touch read the songs, 4 (10.3%) indicate that they interpreted the songs, 3 (7.7%) indicated that they do the technical exercise during the voice lessons while no student indicated that they listen to audio tapes and noting the music.

This reveals that during the voice lesson all the responses listed take place at once and that is why majority reported by indicating others and specifying that all the above.

4.3 Voice Training Lecturer’s Responses to Interview

Six lecturers were interviewed and the following were their responses to an interview conducted to establish methodologies and teaching and learning activities engaged in during voice training.

Coding frames were used and the percentages of teachers who responded to each item were noted. Below are some of the questions and the responses:
Question 1: How long have you taught.

Table 4.3.1: Teaching Experience

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 yr.</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>2-3 yr.</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>3-4 yr.</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>4-5 yr.</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Over 5 yr.</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

Half of the lecturers had taught for over 5 years and the rest had less than 5 years teaching experience.

The table shows that no lecturer had taught for less than 2 years. 1 (16.7%) has taught for between 3-4 years, 1 (16.7%) has taught for between 3-4 years, 1 (16.7%) has taught for between 4-5 years while 3 (50%) of the lectures have taught for over 5 years.
Question 2 Do you teach visually impaired and sighted students

Table 4.3.2

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>66.7%</td>
</tr>
<tr>
<td>Both</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

The table shows that 4(66.7%) of the lecturers have taught the sighted students alone while 2(33.3%) have taught both students. This reveals that few lecturers teach both sighted and visually impaired. The reason being lack of training on special education particularly the education of visually impaired.
Question 3a: What teaching resources are available for voice training?

Table 4.3.3

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piano</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>Recorded music</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Printed music</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

5(83%) lecturers reported that piano is available for teaching voice, 1(16.7%) of the lecturers indicated that printed music is available, while no lecturer indicated the availability of recorded music. This was in contrast with the records from the students' questionnaires, where 3(7.7%) indicated that they imitate recorded excerpts.
Question 3b: How effective are they?

Table 4.3.4.

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very effective</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Effective</td>
<td>3</td>
<td>50.0</td>
</tr>
<tr>
<td>Not effective</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

This question had the following responses, 2(33.3%) of the lecturers reported that the teaching resources they used were effective in voice training and they had no problems, 3(50%) responded that with the piano the students were able to identify easily the intervals and the different sounds.

However, 1(16.7%) was attributed to lack of effectiveness of the piano in the music room, which was not sound proof.
Question 4: How long do visually impaired students take to master a song?

Table 4.3.5: Duration taken by visually impaired

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 days</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>1 week</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>2 weeks</td>
<td>4</td>
<td>66.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table majority of the lecturers indicted that the visually impaired students take 2 weeks to memorize the song, 4 (66.7%) indicated 2 weeks, 2 (33.3%) reported that they take a week while no lecturers indicated 2 days. This reveals that the visually impaired students take longer to master a song.

Table 4.3.6: Duration taken by the sighted

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 days</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>1 week</td>
<td>4</td>
<td>66.7</td>
</tr>
<tr>
<td>2 weeks</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
For this question, 2(33.3%) of the lecturers responded that the sighted students take 2 days to master a song, 4 (66.7%) indicated that the students take one week while no lecturer indicated 2 weeks. This shows that the majority of the sighted students take a shorter time as opposed to the visually impaired.

**Question 5: What difficulties do you encounter in voice training in terms of**

a) *Teaching resources?*

**Table 4.3.7: Difficulties in voice training?**

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources adequate</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>More resources needed</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

All the six lecturers (100%) responded that more resources were needed for both students to ensure better learning.

**5b) Methodology? Table 4.3.8: Voice Training Methodology**

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>No difficulty</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Difficulty in approach</td>
<td>4</td>
<td>66.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Two lecturers (33.3%) did not have difficulties in training voice but 4 (66.7%) of them admitted to face some difficulties particularly when dealing with the visually handicapped students. Some lecturers went further to indicate that sometimes they are unsure of the methodology to used since their students had differences in musical ability.

5c) Time?

Table 4.3.9: Time for the training

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time is adequate</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Time is inadequate</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

All the six lecturers (100%) agreed that there was no adequate time for voice training.
Question 6: How do you train the following aspects of voice work?

a) Sight reading and touch reading

Table 4.3.10: Sight-reading and touch reading

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giving short melody service and students trying to sing without assigning a solfa notation</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>Use of piano to play the melodies</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>No much teaching takes place</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

Short pieces of melodies were used in sight-reading or touch reading by 5(83.3%) lecturers. 1(16.7%) lecturers use piano to play the melody then the students imitate by identifying the notes. No lecturer admitted the no much teaching takes place.
b) Interpretation

**Table 4.3.11**: Shows the analysis of the songs

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of piano to play the songs and identifying the difficult parts</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Listening to other performances from the same period</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Giving the general meaning of the song</td>
<td>3</td>
<td>50.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

For this question, 2(33.3%) lecturers responded that they use the piano to play the song then identifying difficult areas like the breath marks, language enunciation etc 1 (16.7%) lecturers indicated they were listening to the performances from the same period to help interpret the song while 3(50%) indicated that they give the general meaning of the song to help the students in the analysis of the song.
c) Musicality

Table 4.3.12

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of recorded music</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Students participate in singing</td>
<td>4</td>
<td>66.7</td>
</tr>
<tr>
<td>Use music with phrases to show the location of</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>e.g. cadence</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Students’ participation in singing while training musicality was reported by 4(66.7) lecturers, use of recorded music was reported by 1(16.7%) while another 1(16.7%) reported that the use of music with phrases was good enough in training musicality. Some of the lecturers went further to indicate that, musicality is singing musically and also it involves good phrasing.
d) Singing on pitch

Table 4.3.13

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rote learning</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Use of piano to play 2 notes and asking the students to identify the notes</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Use familiar songs to teach the difference in the various pitches</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Familiar songs were used in teaching Singing on pitch as indicated by 3(50.0%) lecturers, 2(33.3%) used piano while only 1(16.7%) of them used note learning to teach and train singing on pitch which involves matching the tones and singing them accurately.
e) Stage Presence

Table 4.3.14

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to audience</td>
<td>3</td>
<td>50.0</td>
</tr>
<tr>
<td>Encourage choral and solo</td>
<td>3</td>
<td>50.0</td>
</tr>
<tr>
<td>participation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

Three lecturers (50%) indicated that they expose the students to audience for example small audience such as the recital hour while the same number (50%) reported that they encourage choral and solo participation for both students visually impaired and sighted students.
Question 7: What other challenges do you face in voice training of the visually impaired students?

Table 4.3.15: Shows extra challenges

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of lecturers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of Braille music</td>
<td>3</td>
<td>50.0</td>
</tr>
<tr>
<td>More materials on touch singing</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Identify with the visually impaired</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The same number of lecturers 2(33.3%) indicated that they have inadequate Braille music materials, touch singing materials and also they have a problem with identifying the visually impaired. Some went further and indicated that they expect from them as much as the sighted but there is no adequate time.

4.4 Voice Student’s Responses to Interview

Fifteen students both visually impaired and sighted were interviewed and the following were the responses to an interview conducted to establish learning activities engaged in during voice training. Below are the questions and their responses:
Question 1a): When did you start learning voice?

Table 4.4.1: Shows when the students start learning

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form 1</td>
<td>9</td>
<td>60.0</td>
</tr>
<tr>
<td>Form 2</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Form 3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Form 4</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Primary school</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

9 students (60%) reported that they began voice training in form 1, 4 (26.7%) indicated primary school, 2 (13.3%) indicated that they began in form 2 while no student began voice training in form 3 or form 4. Some students further indicated that in form 1 they were very much influenced by the music teacher who exposed them to good singing.
1 b) How often do you study this instrument?

Table 4.4.2

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>After every 2 days</td>
<td>7</td>
<td>46.7</td>
</tr>
<tr>
<td>Every week</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>After every 2 weeks</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>

For this question, 7 (46.7%) of the students responded that they study their instrument after every 2 days, 5 (33.3%) reported that they study every week while only 3 (20.0%) indicated after two weeks. It was noted that majority of the students who studied their instruments after every 2 days were visually impaired students. This reveals that the visually impaired students need more time to study their instruments and master the songs in order to succeed.
Question 2: What difficulties do you encounter voice training in terms of

a) Methodology

Table 4.4.3: Shows the difficulties in voice training methodology

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>No difficulty</td>
<td>11</td>
<td>73.3</td>
</tr>
<tr>
<td>Difficulty in the approach</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Eleven students (73.3%) indicated that they did not have difficulties with the methodologies but 4 (26.7%) of them admitted to facing some difficulties and this arose from the fact that teachers were unable to express some concepts to the visually impaired students since they required a great deal of time in learning. One of the students specifically talked of use of abstract concepts during the learning process.

2 b) Time

Table 4.4.4: Difficulties in time allocated for training

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time is adequate</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Time is in adequate</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>

All the students agreed that there was no adequate time for voice training.
Question 3: What activities do you engage in during your learning process?

Table 4.4.5: Shows the learning activities

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice exercises</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Analyzing the song</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Imitating the lecturer</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Listening to the accompaniment</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Learning the actual song</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>All of the above</td>
<td>10</td>
<td>66.7</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above table majority of the students engage in all the listed activities during the learning process. 10(66.7%) indicated the listed activities while only 1(6.7%) student indicated that he or she engaged in each activity during the learning of the song.

This reveals that there are various learning activities done during the voice training. Some students indicated that the learning activities are undertaken in a given order so that they cannot learn the actual song before technical exercises and both cannot be done before the analysis of the song.
Question 4: What other instructional materials do you use to support the learning of a song?

Table 4.4.6: Instructional materials

<table>
<thead>
<tr>
<th>Responses</th>
<th>No. of students</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braille transcription</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Listening to excerpts</td>
<td>10</td>
<td>66.7</td>
</tr>
<tr>
<td>Other students assistance</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

For this question, 2 (13.3%) students indicated Braille transcription. This involves transcribing print music to Braille music. 10 (66.7%) reported that they listen to recorded excerpts in the music rooms and even sometimes in their residential rooms, 3 (20%) students indicated that they get assistance from other students which the researcher felt is related to the question because it is human resource.

4.5 Observation Schedule

6 lecturers were observed during the voice lesson in order to establish the teaching and learning activities engaged in by both the students and the lecturers to ensure maximum learning. At the time of the observation different lecturers used different methods in teaching different aspects.
The following is a record of what was observed by the researcher in terms of activities engaged in by the lecturers and students.

**Table 4.5.1:** Shows the analysis of the activities engaged in by the lecturers and students

<table>
<thead>
<tr>
<th>Activities</th>
<th>Teaching activities</th>
<th>Students activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocal exercise</td>
<td>Plays piano</td>
<td>Sing out the exercise</td>
</tr>
<tr>
<td>Sight reading and touch</td>
<td>Listens to the students</td>
<td>Reads and sings at sight</td>
</tr>
<tr>
<td>reading</td>
<td>sing</td>
<td></td>
</tr>
<tr>
<td>Diction</td>
<td>Sings text clearly</td>
<td>Imitate the teacher</td>
</tr>
<tr>
<td>Interpretation</td>
<td>Analyses the difficult parts</td>
<td>Identify the difficult sections</td>
</tr>
<tr>
<td>Musicality</td>
<td>Sings the text</td>
<td>Imitate the teacher</td>
</tr>
<tr>
<td>Singing on the pitch</td>
<td>Plays different notes, intervals on the piano</td>
<td>Sings back the notes</td>
</tr>
</tbody>
</table>
4.6 SUMMARY

This section dealt with the voice training lecturers and students responses. Voice training is demanding and it requires a lot of creativity and a careful interpretation of the songs on the part of the lecturers and students.

What comes out clearly is that voice training involves a lot of activities and methodology differed from the teacher to the teacher because of the difference in the musical ability of the students. Therefore teachers needed a clear guideline as far as the voice training approach is concerned.

Another fact is that the teachers and lecturers who teach music and specifically special students, have a difficult task in training their visually impaired students.
CHAPTER FIVE

DISCUSSION OF RESULTS

In this chapter, discussion is carried out on the findings that had been presented in chapter four of the study.

The observation and interviews conducted by the researcher yielded some important and accurate information that has been used in the discussion to corroborate and supplement the questionnaires’ responses. Note that tables presented in chapter 4 will be referred to in this discussion.

5.1 Discussion of the results of data provided by voice training lecturers.

The following is a discussion of data provided by the voice-training lecturers. The lecturers’ questionnaires will be discussed in connection with the various responses they gave. There will be cases whereby the questionnaires relate to items in the voice training lecturer’s interviews. This will be discussed together for the purpose of avoiding repetition.

5.1.1 Academic Qualification of the Lecturers

Here a number of lecturers had a master’s degree. 8 (72.7%) lecturers had Master’s degree, 2 (18.2 %) had a Doctorate and only 1 (9.1 %) had Bachelor’s. Further responses from the interviews made indicated that the voice-training lecturers have even registered for further studies. This shows that the lecturers have got a lot of knowledge concerning voice training. Therefore they have adequate voice teaching knowledge and skills to assist the students to achieve higher grades.
5.1.2 Teaching experience

Discussion of the teaching experience of the voice-training teachers was deemed necessary because they have direct influence upon the quality of education offered in schools. This could only be possible if a teacher has had a considerable length of time serving.

For this question, 9 (81.8%) lecturers had taught for a period ranging between 2-5 years, 2 (18.2 %) of them had taught for over 5 years. This shows that they have experience enough to tackle voice teaching issues. Therefore they should be able to give relevant information on voice training. Miller (1986:206) supports this by saying, “a good technician in the field of vocal technique must have the ability to diagnose the causes of vocal problems and offer workable solutions to clear fashion”. Ability is both a factor of training and hands on experience.

5.1.3 Other Instruments Taught

Responses to this question were intended to reveal the relationship between other instruments and voice. Voice training consists of a lot of activities in the body such as breath management, relaxing the throat and allowing the natural sound to be produced.

From the responses given, it was clear that most of the voice-training lecturers also taught piano. 9 (81.8 %) lecturers indicated piano, 2 (18.2%) indicated trumpet. Responses from the interview indicated same results of majority of lecturers teaching and training piano. In all the instructions they use piano.
5.1.4 Teaching both Visually Impaired and Sighted.

This question sought to ascertain whether the voice lecturers taught both visually impaired and sighted students. This was also to reveal whether they are treated equally or some are given extra attention.

From table 4.1.4, 4 (36.4%) lecturers indicated that they taught both students, 7(63.6%) reported that they do not teach both of them. Some lecturers went further to indicate that they would not really wish to teach the visually impaired because they need a lot of time in transcribing the print music to Braille music and more so very slow to assimilate the concepts being explained.

5.1.5 Time Taken by Visually Impaired to Master a Song.

Responses to this question showed that majority of the visually impaired students took 1 week to master a song.

From table 4.1.5, 5 (45.5 %) lecturers indicated that visually impaired students take one week, 4 (36.4 %) reported that they take 2 weeks, 2 (18.2%) lecturers reported that they take 2 days while no lecturer indicated 1 day.

5.1.6 Time Taken by Sighted Students

For this question, 9 (81.8 %) lecturers reported that majority of the students take 2 days to master a song. This is far much opposed to table 4.1.5 where only 2 (18.2%) of the lecturers indicated that the visually impaired students take 2 days.

This reveals that visually impaired students generally take a long time to master a piece of song. Some of the lecturers went further to indicated that the visually impaired students can even take as long as one month to fully master a piece of song but with assistance they are able they are able to take a shorter time. Time taken by both students are not results of experiments and are hence teachers’ approximation and evaluation.
5.1.7 Extra Attention to the Visually Impaired Students

Responses to this question were intended to reveal whether there are supportive services given to the visually impaired students.

In response to this question, 4 (36.4%) lecturers indicated that they give extra attention while 7 (63.6 %) indicated that they do not give. A survey of the voice training questionnaires showed that those who indicated that they do not give extra attention do all teach the visually impaired students. Therefore they are not aware whether they need attention or not and extra attention on what kind of aspects.

But for those who teach the visually impaired students, they asserted that there is need for extra attention.

5.1.8 General Strategies Employed to Vocal Training

From the Responses given in table 4.1.8, majority of the lecturers agreed that they sing the whole song and then analyze the song. The song is analyzed by the lecturer and allows the students to identify difficult sections. 8 (72.7 %) of the lecturers responded that they sing the whole song and analyze and 3 (27.3 %) of the lecturers allow the students to sing the song by themselves.

5.1.9 Do the Mentioned Methods Apply for the Visually Impaired Students.

From the Responses, 4 (36.4 %) lecturers indicated that the mentioned methods apply for the visually impaired students. Some of them indicated that there are also verbal conducting and tapping of the feet particularly for the visually impaired students.

This reveals that apart from the general strategies employed, the visually impaired students still need extra attention for example the verbal conducting and many others.
This shows that even though the visually impaired students are integrated they still cannot be treated equally as their sighted counterparts. Special consideration must be addressed to make them succeed in their academic work.

5.1.10 Teaching and Learning Activities

Here only one lecturer gave answers to each question, 1 (9.1%) indicated sight singing, 1 (9.1%) technical exercises, 1 (9.1%) indicated that there is discussion of principles while 8 (72.7%) indicated that they engage in all the listed activities. It was revealed that voice training involves different activities to ensure maximum participation of parties, the lecturers and the students.

Some lecturers further indicated that the activities must follow and order to ensure maximum learning. For example the students cannot sight sing a piece before warming up their voices so that vocal exercises come first and then sight reading and sight singing for the sighted students and touch reading for the visually impaired students.

5.1.11 The visually impaired students and the sighted engaging in similar activities.

This question sought to ascertain whether the visually impaired students and the sighted students engage in similar activities. The lecturers were supposed to respond either by ticking *Yes* or *No*.

From table 4.1.11, 6 (54.5 %) lecturers responded by indicating that they engage the students in similar activities while 5 (45.5 %) indicated that they use different activities. This therefore confirmed that the lecturers try their best to accommodate the visually impaired students into the normal education system. Allowing the students to engage in similar activities as their counterparts can only be achieved through engaging in similar
activities. This is the goal of integration. Kennedy (1990:70) supports this by saying “integration allows special children to compare themselves with non-impaired children and make a realistic estimate of their relative standing academically, socially, linguistically and intellectually.”

5.1.12 Extra Activities that the Visually Impaired Students engage in.

From the Responses, given in table 4.1.12, it was clear that touch singing is the extra activity. Some lecturers indicated further that the transcription of print music to Braille music in itself is an activity they engage to ensure maximum learning and more participation of the visually impaired students. This allows them to participate fully during a voice lesson.

10 (90.9%) lecturers indicated that they engage the visually impaired students in touch singing, while only 1 (9.1%) indicated that there is listening to recorded excerpts. Some of the lecturers also indicated that there is need for creativity in order to accommodate the visually impaired students and make them feel part of the class. Therefore apart from the class activities, teachers’ attitudes towards the visually impaired students should change to ensure maximum learning. The students should be motivated to learn.

5.1.13 Instructional Materials Used

Here the lecturers gave a variety of materials that were used for voice training. 8 (72.7%) of the lecturers responded that only piano is used. In support, all the students quoted the piano as the only instrument in use and also observation of the teaching revealed that all the lecturers used piano in voice training and majority also teach piano and voice.

2 (18.2%) of the lecturers responded that the recorded excerpts were also in use, while only 1 (9.1%) indicated the resource books. This reveals that piano is the most used and
available instrument used in teaching and training voice. It can play the melody, and accompany the songs hence it is multi-functional.

5.2 Discussion of the Results of Data provided by the Voice Students

Data collected from voice students and analyzed in the previous chapter is discussed below.

5.2.1 Discussion on Whether the Students are Sighted or not Sighted.

Here a number of students were sighted: 37 (94.7%) students were sighted while only 2 (5.1%) were not sighted. These Responses revealed that sighted students learn voice together with the visually impaired students meaning that they attend the same class of voice. The visually impaired students are very few and the reason given is that of the attitude they have towards themselves. They also believe that they are not able people therefore still not given equal chances as the rest.

5.2.2 The Year of Study

Responses to this question showed that majorities of the voice students were second years, 20 (51.3%) students were second years. 10 (25.6%) third years 9 (23.1 %) fourth years and no student in the first year. Among the students in the second year there was one visually impaired student and third year also one visually impaired student specifically taking voice.

The Responses to this question were intended to reveal how long the students have taken in voice training, which will also determine whether they have interest in the course.
5.2.3 Degree Course Undertaken by the students

Responses to this question were intended to reveal the degree course undertaken by each student. For this question 20 (51.3%) students answered that they take Bachelor of Education (Music). This shows that upcoming teachers are interested in voice training. 15 (38.5%) students Bachelor of Music, this will give them a chance to become good performing artists, 2 (5.1%) students for Bachelor of Special Education (Music) will be the role models to the rest who are interested in music and particularly voice training. 2, (5.1%) Master of Music students and lastly no certificate or diploma take voice training.

5.2.4 When Students Start Receiving Voice Training.

Here a number of students gave different answers: 19 (48.7%) students began voice in Form, 2 (5.1%) began in form 2 and 1 (2.6 %) began in form 3.

The observations made showed that the students who started voice training early enough had good performance. This was the case of both students' visually impaired and sighted students.

Voice training consists of very many aspects; voice teaching ideas and activities, which needs a lot of concentration and careful interpretation by students.

5.2.5 How Frequently Does the Student Have Tuition?

Here the students gave a variety of responses. 35 (89.7 %) students responded that they have their tuition once a week and only 1 (2.6%) had tuition once a fortnight. This question was to determine the frequency with which voice training was taught.

Responses from the interview indicated that 38% of the teachers train their students once a week. This coincided with the students' responses. The other reason is that their
lecturers attend to most students once a week as time tabled. This made it easy for the
lecturers to teach and train voice once a week without any inconsistency.
The observation made showed that the number of hours per session differed greatly
according to the degree course undertaken.

5.2.6 Teaching Resources Used by the Students in Their Voice Lessons
This question sought to ascertain whether voice training had reference books. The
students were supposed to list down the reference books.

From table 4.2.7, 3 (7.7 %) students responded that there are books used in voice training
while 36 (92.3 %) stated that there were other ways the students used to learn the songs
during the voice lessons. 29 (74.4 %) students reported that they imitate the teacher,
3 (7.7 %) indicated that they imitate the recorded excerpts, 2 (5.1 %) reading Braille
Music.

This therefore confirmed that voice training does not involve much of the reference
books. From the lecturers’ interviews, it was clear that the most used instructional
material was piano and students did imitate their teachers as they play the piano. This
reveals that voice students should give first priority ear training.

Leonard and House (1958: 37) note the importance of ear training when they state that “
Aural awareness is the key to all musical learning, and the music-learning situation
should be constantly focused on ear training.”

5.2.7 Time Taken to Master a Song.
Responses to this question were intended to reveal the time taken by the visually
impaired and sighted students to master a piece of song.
For this question, 34 (89.2%) students took 1 week, 3 (7.7%) took 2 days and only 2 (5.1%) took 2 days and only 2 (5.1%) took two weeks. A survey of the students’ questionnaires showed that those who responded that they take 2 weeks to master a song were the visually impaired students. Therefore generally they take long to master their songs. Harley (1973) supports this when he says that what children see they assimilate and integrate in the brain. Therefore, limited sensory input due to environmental deprivation may cause the children to lag behind in cognitive development. This means that the visually impaired students are disadvantaged in learning concepts that sighted students are able to relate to other concepts in their environment.

5.2.8 Activities Engaged in During Voice Lesson.

Here the students gave a variety of activities that they engage in during a voice lesson. 29 (74.4%) students added another choice that was other answers, which they specified as all of the above. All the activities listed like touch singing and reading, technical exercises, analysis of the song, sight singing and sight reading and listening to audiotapes and voting the music which no student responded to. This confirms the response given by the voice training lecturers of lack of recorded music. Instead they play the music on the piano as the students listen. This reveals that most of the listening was done when the lecturer played the song through.

The observation made showed that there was no audiotape for listening. Instead the teacher together with the student sight-read and sang the song once. Then the second time the teacher accompanied the students as they sing the song. This show that the activities engaged in during the voice lesson was meant for both the teacher and the student. All of them must engage in a given activity to ensure maximum learning.
CHAPTER SIX

6.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 SUMMARY.

This study focused on the integration of the visually impaired students of Kenyatta University's School of Music. Particular emphasis was put on the voice training because it involves the use of visual, auditory and factory senses of the learner.

The study sought to determine the following:

a) The strategies employed in voice training of the visually impaired.

b) How the strategies differ from those employed with the sighted students.

c) The activities the visually impaired students and sighted students engage in to ensure maximum learning of a song.

d) How lecturers' teaching strategies and students learning activities are integrated to ensure maximum benefit to the visually impaired students.

The study focused on the voice training lecturers, and the descriptive method of research was used. Data was collected from the selected sample using questionnaires, interviews and observation. Data was analyzed using frequency tables and percentages.

6.2 Conclusions

The following are the conclusions drawn from the study: the study revealed a number of factors affecting the integration of the visually impaired voice students at Kenyatta University’s School of Music. The factors are given below: -
1. Methods used in voice training are not sufficient to meet the needs of visually impaired students. Voice teaching and training entails concentration of one aspect at a time so that the student properly grasps it. Failure to do this leads to poor grasping of concepts on the students’ part and also lack of motivation leading to slow learning of the songs.

2. There is little cooperation between the lecturers and the visually impaired students. Most lecturers do not seem to realize that limited sensory input may cause visually impaired students to lag behind sighted students in cognitive development. Therefore there is need for special attention to assist the students in learning a song.

3. Learning activities in which the students engage in are inadequate to enhance or develop their skills, for instance, the visually impaired students are left to touch read their Braille music without a specialist to guide them in case of a vocal problem arise during the learning process.

4. Most voice training lecturers’ concentrate on the sighted students, for instance availing the print music immediately the lesson begins forgetting the transcribed music for the visually impaired students. Methods like listening to recorded excerpts, singing with or without an accompaniment are applied to both students without any support.

5. Voice training lecturers give some assistance students both visually and sighted in order to ensure maximum learning of the songs. Lack of support for the visually impaired students by the lecturers is considered a draw back to acquisition of voice teaching ideas.
6.3 Recommendations

From the findings of the study, the following recommendations are made:

1. More time should be allocated for lecturer-student contact.

2. Learning activities beyond lecture hour should be engaged in to enhance concept assimilation and skill development for example, participation in-group singing, and choir/ensembles ad own practice with or without accompaniment.

3. Curriculum should be developed for voice as an instrument with graded teaching and learning material. Expansion of resources and provision of specialized material for the visually impaired students to be planned.

4. Training of music lecturers to handle visually impaired students and to update the music skills.

5. Workshops for transcribing print music to Braille music should be considered and encourage, providing adequate instructional resources, which could be made available for the visually impaired students. This will help in developing well-equipped resources center for music in the institution.

The study was not exhaustive due to the fact that the academic field, especially in the area of Music Education, is vast and deep. In the course of the research, very many gaps emerged that needed to be filled. The following are such areas that need further research:

1. There is need to conduct an in-depth research dealing solely with the integration.

2. An investigation into the effectiveness of teachers teaching and learning activities, and methods employed in enhancing students voice skills and aural acuity.

3. The effect of regular and consistent voice training of the visually impaired students on performance of voice.
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APPENDICES

APPENDIX A: QUESTIONNAIRE I: VOICE TRAINING LECTURERS' QUESTIONNAIRE

Please answer the following questions to the best of your knowledge. Tick ( ) appropriate answer or fill in your opinion where applicable.

SECTION A. Background information

What is your highest formal Education qualification?

Bachelor's ( )

Master's ( )

Doctorate ( )

What is your teaching experience?

a) Between 1-2 years ( )

b) Between 2-3 years ( )

c) Between 3-4 years ( )

d) Between 4-5 years ( )

Apart from voice, what other instruments do you; (a) Teach? (b) Play

SECTION B: Time Allocation, Teaching and Learning Activities and strategies Employed.

4a. Do you teach both the Visually impaired and Sighted students?

Yes ( )

No ( )

(b) If yes, how long have you taught? ---------------------------
How long on average do these students take to master a song

A visually impaired

Sighted (indicate number of hours)...

Do you give extra attention to the visually impaired?

Yes ( )

No ( )

(a) What strategies do you employ in vocal training?

.................................................................

.................................................................

Do the above mentioned methods apply for the visually impaired?

Yes ( )

No ( )

If not what additional strategies do you employ for voice training of the visually impaired.

.................................................................

.................................................................

(a) What kind of learning and teaching activities do you engage in during the vocal training

.................................................................

.................................................................

Do you engage the visually impaired students and the sighted in similar activities during the learning of a song?

Yes ( )

No ( )
What extra activities do the visually impaired students engage in?

10. What learning activities do you expect a student to do at the end of the lesson?

11. What instructional materials do you use to support the teaching and learning?
APPENDIX B: QUESTIONNAIRE II: VOICE STUDENTS QUESTIONNAIRE

Tick or fill in where appropriate.

SECTION A: Background information.

1. Name: (optional)

2. Institution: .................................................................

3. Sighted ( ) Not sighted ( )

4. Which year do you belong?
   a) First year ( )
   b) Second year ( )
   c) Third year ( )
   d) Forth year ( )

5. Which Degree course are you undertaking?
   a) Certificate ( )
   b) Diploma ( )
   c) Bachelor of Music ( )
   d) Bachelor of Education (Music) ( )
   e) Bachelor of Special Education (Music) ( )
   f) Master of Music ( )

6. When did you start receiving voice training? .................................................
   a) Form I ( )
   b) Form II ( )
   c) Form II ( )
d) Form IV (  )
e) None of the above (specify)

7(a) How often do you have tuition in your instrument?

Once a week (  )

Once a fort night (  )

Any other specify .................................................................

(b) How long does the tuition session last? ..............................

SECTION B: Learning Activities and Strategies Employed.

8(a) Are there any study books that you use in your voice lessons?

Yes (  )

No (  )

(b) If yes, which ones?
.....................................................................................................
.....................................................................................................
.....................................................................................................

(c) If NO, how do you learn your songs? By

Imitating the teacher (  )

Imitating the recorded excerpts (  )

Reading Braille music (  )

An other specify .................................................................

9. How long do you take to master voice piece? ..........................

10. What goes on during your voice lessons?
.....................................................................................................
.....................................................................................................
.....................................................................................................
APPENDIX C: INTERVIEW SCHEDULE

Respondent’s No. .................................................................

Date of interview .................................................................

Instructions:
The interviewer will carefully read each question to the respondents then record the proceedings. Probing will be done by the interviewer to ensure that all questions are answered carefully and as truthfully as possible.

Interview Schedule 1: For Voice Training Lecturer.

1. How long have you taught?

2. Do you teach visually impaired and sighted students?

3. Which instruments do you teach them?
   b) How frequently?

4) (a) What teaching resources are available for voice training?
   b) Which ones among them do you use?
   c) How effective do you think they are to your students particularly the visually impaired?

5) How long do you train your students per session?

6) How long do visually impaired and sighted students take to master a song?

7. What difficulties do you face in voice training in terms of:
   a) Teaching resources
   b) Methodology
   c) Time
8. How do you train the following aspects of voice work?

a) Sight reading
b) Interpretation
c) Musicality
d) Touch reading
e) Singing on pitch
f) Stage presence

9. What other challenges do you face in voice training of the visually impaired students?
APPENDIX D: INTERVIEW SCHEDULE TWO: FOR VOICE STUDENTS

1. When did you start learning voice?
   Why?
   How often do you study this instrument?

2. What difficulties do you face in voice training in terms of;
   Methodology
   Time

3. What activities do you engage in during your learning process?

4. What other instructional materials do you use to support the learning of a song?

5(a) In your own opinion, would you say that there are some factors that affect the tuition of voice training?

(b) Which ones are they?
APPENDIX E: OBSERVATION SCHEDULE

DATE: 

TOPIC: 

<table>
<thead>
<tr>
<th>Activities e.g. sight reading, diction, musicality</th>
<th>Teachers activities and methodology</th>
<th>Students responses and activities</th>
<th>Available resources</th>
</tr>
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