

Chapter 1

Introduction and overview of the study

1.1 Introduction

In this chapter, the author aims to provide the reader with a broad overview of the study. He explains why he regards this research project as extremely important and what the general level of music literacy in South African choirs is. After stating the research problems, he explains the research procedures as well as terminology that are used in the thesis. Problems that were encountered during the study are discussed and the author explains how they were solved.

The ability to sing music from sight is probably one of the most important skills for choristers as well as solo singers. This skill can help singers and choristers to learn music quickly and effectively, to follow a music score and to understand music better. Sight-singing develops the ability to anticipate melody and rhythm without actually hearing the music.

Singing from sight involves a combination of skills that the singer has to perform simultaneously. The singer should be able to recognise the symbols representing different music concepts while looking at the music. At the same time, he has to interpret each symbol and anticipate the pitch, duration, tone quality, syllable and diction of the sound. Only then can he sing the note and compare the actual sound to the one he anticipated. If the actual sound does not match the anticipated one, he should realise that something is wrong, determine the mistake without stopping, and ensure that he does not repeat the mistake in the following notes. While he is sight-singing a note, the singer has to consider the following couple of notes and anticipate what the phrase will sound like. Although it may seem totally impossible to perform all of this at the same time, the human brain is more than capable of executing all of these actions at once.

The very important musical skill of singing from sight is often sadly neglected in South African schools, with the result that many singers and choristers are not able to read music. While South Africa's educational system is currently being redesigned, this can be an

opportunity to ensure that sight-singing tuition at school level receives the attention it deserves.

Learning to sing from sight is a process that can be compared to learning how to read language. In this study, the author discusses the various concepts that learners should master to sing from sight. These concepts are formalised in South African unit standards for sight-singing. To enable learners to achieve the unit standards, the author provides learners with a sight-singing training programme, using multiple media.

1.2 Motivation for this study

The author has conducted several choirs of different age groups. He found that only a small percentage of these choristers were able to sing music accurately from sight. A lot of time had to be spent on learning different voice parts by rote during rehearsals. If each chorister could sight-sing the music, much more rehearsal time could be spent on choral singing and on vocal technique.

Since 2000, the author has been teaching sight-singing at the Drakensberg Boys' Choir School where sight-singing is regarded as an extremely important part of each chorister's training. The Drakensberg Boys Choir is one of South Africa's best-known choirs and is rated as one of the best boys' choirs in the world (Duvenage 2003).

Some information about the Drakensberg Boys' Choir school should help readers understand why sight-singing is such an important skill for these choristers. This is the only choir school in South Africa. The school is situated in the mountains of the Kwa-Zulu Natal province, South Africa. The nearest town, Winterton, is 30 km from the school. Boys between the age of nine and fifteen representing all parts of South Africa sing in this choir. All the boys are boarding at the school and they have two choir rehearsals, of an hour each, every day from Monday to Friday. There are three choirs at the school, namely two concert choirs and a choir for the new boys. The concert choirs perform in public, while the new boys' choir is a training choir for each year's new choristers. Every Wednesday afternoon the boys give a concert in the auditorium of the school, and they regularly tour to perform in different parts of South

Africa. Annually an international choir is chosen from the two concert choirs to undertake an international concert tour.

Boys enter the school after passing a music audition and an academic test. Most of these boys are not able to read music when they enter the school. Only the boys who received private music lessons are able to sight-sing simple music. This observation coincides with the research findings of Henry and Demorest (1994: 4-8) in the USA, that private piano study was the only background factor that made a significant difference in the individual sight-singing ability of high school choristers.

Each new chorister of the Drakensberg Boys' Choir has to complete a course in sight-singing before he is allowed to sing and perform as part of one of the two concert choirs. This is a great motivation for the boys to learn sight-singing. Because new choristers enter the school at different ages (from 9 to 13 years old) and with varying musical abilities and training, the group is not homogeneous. To enable the learners to progress according to their age and abilities, each boy is allowed to learn at his own pace. This same principle is advocated in the outcomes-based educational system, which has been adopted in South Africa since 1997.

In the past, the boys used the *Training status programme* by Oosthuyzen (1994) that consists of a printed handbook with some explanations and graded exercises. The boys were expected to learn the exercises one at a time and then sing it to the teacher to evaluate their "sight-singing". By learning each exercise before being evaluated, the boys never really sang from sight. The outcome of this method was that many boys were not able to sight-sing very accurately. A more detailed discussion of this method is presented in Chapter 5.3.4.

To teach a group of learners to sing from sight accurately, using the *Training status programme*, was a time-consuming process. Most of the teacher's time during sight-singing lessons was spent explaining new concepts to individual pupils. The present author felt that there should be a more effective way to deal with sight-singing training than the one described above. When the teacher has to explain every concept to each individual pupil and evaluate each pupil's efforts, a lot of time is being wasted. If an alternative way can be found to introduce new material or to evaluate each pupil's efforts, the whole group's progress can be much faster.

In the 21st century, a great variety of educational media are available that can be used to introduce different music concepts. These media include computers, music instruments, printed matter, as well as human media, namely the learner, fellow choristers and the teacher. If the available media can be optimally utilised, choristers should be able to learn sight-singing effectively and quickly without wasting any time waiting for assistance from another person, or by learning a music concept incorrectly.

The author realised that choristers' lack of sight-singing skills is probably one of the main problems of many South African choirs. He also concluded that the sight-singing tuition that learners receive in South African schools does not equip them to sing even simple music from sight.

The National Department of Education has requested interest groups and individuals to make themselves available to write national unit standards for every subject (learning area) that is formally taught at South Africa's educational institutions. In response to this request, Proff. Caroline van Niekerk and Heinrich van der Mescht from the University of Pretoria initiated the MEUSSA group to write national unit standards for music education. MEUSSA is an acronym for Music Education Unit Standards for Southern Africa. The author realised that he can contribute to improve South Africans' musical literacy by joining this group and by writing suitable unit standards for sight-singing tuition in South Africa.

The study package and method described in this thesis is used to teach sight-singing to the talented choristers of the Drakensberg Boys' Choir, but the author is convinced that it should be equally effective to train other choristers and singers. The author therefore regards this project of great importance and believes that it can contribute to a better musically educated society and a higher standard of choral singing in South Africa.

1.3 The importance of sight-singing

The ability to record music by means of writing is an invention that revolutionised music making. Notation made it possible to preserve music and to spread music throughout the world. Notation also enabled composers to compose lengthy and complex pieces of music.

To benefit from music notation, it is necessary that the musician should possess the knowledge and skills to read and perform the notated music.

The *Oxford Paperback Dictionary* defines notation as “a system of signs or symbols representing numbers, quantities, musical notes, etc.” (Pollard 1994: 550). It is important to note that music notation represents music sounds and that it is not music itself.

Visual symbols are used to represent the musical concepts of pitch, duration and metre in Western music. This enables people to re-create the music that was written down, thus preserving the music and spreading it over the world. Various people experimented with different systems of music notation, using a variety of symbols to represent musical sound. The notation system that is most commonly used worldwide is “staff notation” in which music is written on staves with five lines each.

The ability to read a music score or to sing from sight has many great advantages for the individual singers as well as for choirs. Some of these advantages are:

- Singers or choirs can learn music faster.
- Singers (choristers) can learn their parts on their own, without learning it by rote.
- New music can be sung immediately, giving singers (choristers) an idea of what the whole piece sounds like.
- Each chorister can follow the score and start singing at the correct moment.
- Singers (choristers) can look ahead on the score and anticipate the next note(s) that they should sing. This should help to improve intonation.
- Singers (choristers) can see where their individual parts fit into the whole of the musical piece.

The ability to sing from sight also has several advantages for instrumentalists. Sight-singing helps instrumentalists to:

- anticipate music before playing it,
- improve their intonation, and
- follow a score easily, entering at the correct moments.

1.4 Sight-singing tuition in the South African context

The most appropriate time and place to learn to read music is undoubtedly at school level. Up to 1997, sight-singing was regarded as part of the subject Class Music in South African schools. According to the findings of a team of researchers in 1993, Class Music was not taught effectively in the majority of South African schools (van der Walt, Roets & Hauptfleisch 1993: 82). The researchers identified various reasons for this unsatisfactory situation, namely: insufficient time allocated to this subject, inadequate training of Class Music teachers and a lack of resources for teaching Class Music.

In the new South African education system, music education is a subdivision of the learning area *Culture and Arts*. This implies that music education, and therefore sight-singing, will most likely receive even less time on the timetables of schools.

From own experience, the author has seen that the majority of young singers joining the Drakensberg Boys' Choir are not able to sing from sight. It seems that the only boys who can read music are those who have received private music tuition. The music director of this choir, Christian Ashley-Botha, confirmed that the percentage of new boys entering the choir that can sing from sight did not change noticeably during his 21 years at this school (Ashley-Botha 2002).

Mr. Ockert Botha has been the chairman of the Interprovincial Council for Choral Art (Previously the Transvaal Council for Choral Art) since its establishment in 1966. He founded the national SASOL choral competition and can be regarded as one of South Africa's greatest authorities on choral singing. He stated that the sight-reading ability of adult choristers in the choirs represented by this Council is not of a good standard. According to Mr. Botha, most of these adult choristers learn their parts by rote and use the music notation only as a reminder of the music. These choristers solely rely on the choirmaster and the accompanist to teach them the music by rote. Although they cannot really read music, the choristers enjoy their choral art and play an important role in the musical life of their respective communities. Learning music by rote unfortunately uses a lot of rehearsal time and can be frustrating for all the participants. For many choirs it is difficult to reach a high standard of choral singing, because a considerable percentage of the time that they have for rehearsals has to be spent on learning repertoire.

In various interviews, the author discussed the sight-singing standard of South African choristers with some South African authorities on choral singing, such as Ashley-Botha (Drakensberg Boys' Choir), van Wyk (Potchefstroom University Choir), van der Sandt (University of Pretoria Concert Choir and Camerata) and Verster (Bloemfontein Children's Choir). These choirmasters agreed with Botha's statement that most South African choristers are not able to sing from sight.

This sad state of affairs may be changed when unit standards for sight-singing form an integral part of the outcomes that learners should achieve at school. Including sight-singing in the new curriculum can make it compulsory for all learners (with normal mental and physical abilities) in South African schools to learn this skill.

In South Africa with its great variety of cultures, music is an artform that can help people to understand each other better and that can unite participants. Botha (2002) stressed the importance of choral singing as a musical activity to bind people from different communities together. By singing together and by listening to a performance of music from different cultures, people can understand each other better. Such a better understanding between cultures can make a significant contribution towards peace in our country.

1.5 The research questions

The author realised that he is in a position to make a contribution towards better musical literacy for South African choristers by suggesting national unit standards for sight-singing and by offering a multiple-media study package to realise the unit standards. Although these unit standards can help to ensure better music education, it is extremely important that learners as well as teachers (and choirmasters) should have access to learning material on this subject. The learning material should be written in such a way that learners who do not have any musical knowledge could use it, even without the help of a music expert.

The author formulated the main research question of this study in an effort to improve the standard of sight-singing of South African choirs and the musical literacy of South Africans.

1.5.1 The main research question

How should a multiple-media study package be designed to realise South African unit standards for sight-singing?

In an attempt to provide an answer to the main research question, several sub-questions arose. The author believes that finding answers to the sub-questions would lead to an answer to the main research question.

1.5.2 Sub-questions

- Which processes are involved in sight-singing? (Chapter 2)
- Which music concepts should be mastered to sight-sing well? (Chapter 2)
- How can sight-singing skills be graded into national standards? (Chapter 3)
- Which communication processes are involved in sight-singing? (Chapter 4)
- Which media attributes are essential in a multiple-media study package for sight-singing? (Chapter 4)
- What are the advantages and disadvantages of some existing sight-singing methods? (Chapter 5)
- How can a multimedia study package for sight-singing be designed? (Chapter 6)

1.6 Research methods

To find answers to the various research questions, the researcher had to use different research methods. These methods were a study of relevant literature, interviews with authorities in relevant fields, designing a study package for sight-singing, producing the study package, and action research on a small scale. Each of these research methods is described in the following paragraphs.

1.6.1 Study of literature

Relevant literature was consulted to find information about sight-singing, utilising educational media, writing unit standards, and instructional design. The literature that was used included books, articles and web pages on the following topics:

1.6.1.1 Sight-reading

Literature on instrumental sight-reading explained the process of reading music notation and interpreting these symbols on a music instrument. Many of the principles that apply for instrumental sight-reading are equally relevant for sight-singing. Books on piano, flute and recorder tuition were consulted. These books underline the importance of sight-reading for musicians and of practising this skill regularly. The doctoral thesis of Fourie (1990) provided very valuable information about the mental processes involved in sight-reading on the piano. Books such as those by Galway (1982) and Wollitz (1982) provided advice regarding sight-reading on the flute and the recorder respectively.

1.6.1.2 Sight-singing

Several sight-singing methods were studied to learn how other authors approached this subject. The author will evaluate several of these methods in Chapter 5 according to the criteria explained in Chapters 2 and 3. The sight-singing methods that are considered vary from very simple and user-friendly (e.g. Bauguess 1995) to very advanced and theoretical (e.g. Arnold 1999). Books and articles on this topic were also studied to find information on the process of sight-singing and to see which methods these authors suggested to help their readers master sight-singing. In the books that were consulted, explanations of music concepts and graded exercises for sight-singing are given. Articles on sight-singing describe various sight-singing experiments. Unfortunately, the majority of books on sight-singing focus on sight-singing exercises and examples and do not describe the phenomenon, sight-singing. The works consulted do not describe the mental processes involved in sight-singing or a theoretical model for this skill.

1.6.1.3 Choral singing

Books on choral singing such as *Choral insights* by Whitlock and Anderson (1990) and *Koorsang en koorleiding* by the great South African music educator Phillip McLachlan (1983a) underlined the importance of sight-singing for choristers and choirmasters. In this literature, the author found many suggestions of how sight-singing can be taught during the

choir rehearsal. However, the majority of these books do not emphasise sight-singing. The book by Steven Demorest (2001), *Building choral excellence*, focuses on teaching sight-singing in the choral rehearsal. Valuable information about sight-singing in the choral context could be found in this book.

1.6.1.4 Class Music tuition

The author consulted a number of works on Class Music tuition. In these works, various methods of teaching sight-singing are suggested. Sight-singing is generally expected as an essential part of Class Music tuition. Several books on Class Music tuition for young children deal with sight-singing in great detail. These books include *Musical growth in the elementary school* by Bergethon, Boardman and Montgomery (1986) and *Klasonderrig in musiek* by McLachlan (1982). Books on Class Music tuition for secondary school pupils, such as *Teaching music in today's secondary schools* by Bessom, Tatarunis and Forcucci (1980), mention sight-singing, but focus mainly on teaching strategies and classroom management.

1.6.1.5 Research on Class Music tuition in South Africa

A number of researchers assessed the effectiveness of Class Music tuition in South Africa over the past four decades. Their research revealed very clearly that Class Music tuition, and, more particularly, sight-singing tuition is often neglected in a great percentage of South African schools. The majority of this research was done before South Africa's educational system started to change in 1997. These researchers focused mainly on the education in White schools and did not consider all South African learners. The research project "Effective music education in South Africa" for which Hauptfleisch (1993) wrote the main report, did consider the broad South African population. In the report, Hauptfleisch indicated that the level of Class Music tuition in the majority of South African schools was unacceptably low. Although the research was done a decade ago, these findings are still relevant because no major steps were taken in this time to improve the situation.

1.6.1.6 Songbooks and scores of vocal music

The author found suitable examples in songbooks and scores of vocal music to use as sight-singing exercises as part of the suggested study package. This vocal music include:

- books with traditional folk songs, e.g. *Ons Volkspele erfenis* by van Heerden (ed.) (1989) and *Sing together* by Appelby and Fowler (1967),
- hand-written manuscripts of African music,
- hymn books, e.g. *Worship in song* (1972),

- operas, e.g. *The Magic Flute* by Mozart,
- oratoria, e.g. *Messiah* by Handel, and
- chorales, such as those from the Riemenscheider chorales by Bach.

Songs in different languages were selected to provide the student with examples that he probably would not know. The author chose these examples to encourage the learner to read the notation, rather than rely on his memory. A number of African songs are included in the study package. Not many songbooks with collections of African songs are published and the author had to use some hand-written manuscripts of traditional African songs.

1.6.1.7 Educational media

Works on educational media explained the characteristics of different media. Books written in the 1970s and 1980s, such as *Fundamentals of teaching with audiovisual technology* by Erickson and Curl (1972) and *Instructional technology* by Knirk and Gustafson (1986), describe the use of printed media and audio recordings in detail. Books written since 1990, such as *Materials production in open and distance learning*, edited by Lockwood (1994), focus mainly on the use of computers in education. The author considered different media and chose the most appropriate ones to use in the proposed sight-singing training programme. Some information on educational media was gathered from the Internet.

1.6.1.8 The South African National Standards for education

Publications by the South African Qualifications Authority (SAQA) and other documents on unit standards were consulted. These works explain the prerequisites for national unit standards as well as the process of recognising and implementing them. The functioning of the different bodies involved in the writing and recognising of National Unit Standards is described in *The National Qualifications Framework: An Overview* (SAQA 2000a). Advice on how to write unit standards is given in *The National Qualifications Framework and Standards Setting* (SAQA 2000b), while assessment of education is explained in *The National Qualifications Framework and Quality Assurance* (SAQA 2000d). The webpage of SAQA was another valuable source of information on the writing of South African unit standards. All of these sources by SAQA describe the official viewpoint of the current ministry of education and it does not give a scientifically researched motivation for changing to Outcomes-Based Education (OBE).

1.6.1.9 Outcomes-Based Education

The author consulted different works on Outcomes-Based Education (OBE). The book by Olivier (1998), titled *How to educate and train Outcomes-based*, summarises Outcomes-Based Education in South Africa. This book provides a brief overview of the legislative process that led to the implementation of OBE in South Africa. It summarises the Outcomes-based learning process and explains the teacher's and the learner's roles. Not all sources on OBE are so optimistic about this system. Olsen (1997) questions the merit of this educational system from a Christian perspective in the book *Outcomes-Based Education: an Experiment in Social Engineering?* A great number of web pages on this subject are available on the Internet, of which most express their concerns about the system. The author learnt from these works how OBE functions and how effective it is or was in other countries, such as the United States of America and Australia. It seems that OBE was not a success in these countries and that there is considerable opposition against this type of education in these countries. The opposition comes from Christian groups, parent organisations, academics and various individuals.

1.6.1.10 Education

Works on education and, especially, didactics provided guidelines for designing a training programme in sight-singing. *Didaktiek: Teorie en praktyk* by Duminy and Söhnge (1981) was a useful source on traditional education, while works such as *A guide to student-centred learning* by Brandes and Ginnis (1986) and *The modern practice of adult education* by Knowles (1980) provided a background on student-centred and individualised learning. The book *Multicultural education* by Le Roux (1997) contains information on the unique cultural diversity in South African schools. The author gathered suggestions on the tuition of sight-singing and the inclusion thereof in the general music class and in the choir from works on music education. Some very valuable webpages on reading instruction were consulted. In these pages, various reading models are described which provided prototypes for a theoretical model for sight-singing.

1.6.1.11 Human communication

Works on human communication such as *Human Communication* by Burgoon, Hunsaker and Dawson (1994), and *Kommunikasie 2000* by Huebsch (1990) helped the author to describe the different processes that are involved in reading music and reproducing it by singing. Salomon (1981) describes the use of symbol systems in communication. His explanation of

communication as utilising symbols and symbol systems enabled the author of this thesis to understand music and sight-singing as forms of communication. This process is described in Chapter 4. The information also enabled the author to design a study package that can communicate the relevant concepts by using educational media.

1.6.1.12 Computer programs

The author examined the possibility of using computer programs as an aid to teach and to learn sight-singing. Programs dealing with sight-singing, ear training and music theory were examined. Demonstration versions of many of these programs are available on the Internet and the researcher used these to evaluate the possibility to use these programs for teaching sight-singing (Chapter 5). These computer programs do not seem to be the best media to use in a sight-singing training programme. Some of the programs, such as *Sight-singing trainer* (Baciu 1998), create random melodies, which the learner should sight-sing into a microphone. The computer then evaluates the accuracy of the singing.

Unfortunately, these programs are too sensitive to give a realistic evaluation of students' sight-singing. The sight-singing programs do not accept all voice types and dynamics and cannot evaluate pitch and rhythm at the same time. The sight-singing programs are also not able to evaluate musical aspects such as phrasing and accents. Programs that focus on music theory, such as *A musical tutorial* (Swerdfeger 2001) or *Music Ace* (May & Rockenbach 1994), can be a valuable aid for learning certain concepts of music such as note names and key signatures.

1.6.2 Interviews with authorities in relevant fields

The author interviewed several authorities in the field of choral music and music education in South Africa to get an indication of South African choristers' sight-singing abilities. These persons' advice regarding the proposed sight-singing programme was most helpful and was incorporated in the sight-singing study package. The author interviewed the following persons:

- Mr. Christian Ashley-Botha, music director of the Drakensberg Boys' Choir School,
- Mr. Ockert Botha, chairman of the Interprovincial Council for Choral Art,

- Prof. Ella Fourie, piano lecturer at the University of Pretoria, who did a doctoral study on piano sight-reading,
- Dr. Paul Loeb van Zuilenburg, retired Senior Lecturer in aural training at the University of Stellenbosch,
- Mr. Zabalaza Mthembu, Deputy Culture Organiser of the Empangeni region, Kwa-Zulu Natal,
- Prof. Johan Potgieter, Music examiner for the University of South Africa,
- Mr. John Roos, Music examiner for the University of South Africa,
- Dr. Johann van der Sandt, lecturer in Choral Conducting at the University of Pretoria and the official choral conductor of the University
- Prof. Attie van der Walt, retired lecturer in Class Music at the Potchefstroom University for Christian Higher Education,
- Dr. Suzette Schulz, lecturer in Music Education at the University of Pretoria,
- Mr. Vaughn van Zyl, culture co-ordinator at the Rand Afrikaans University in Johannesburg,
- Mrs. Huibri Verster, conductor of the Bloemfontein Childrens' Choir, and
- Mrs. Cecelia Yutar, established music teacher and music examiner for the University of South Africa for more than thirty years.

The author received valuable information from these authorities regarding the realities of sight-singing in South Africa. Comments on the experimental sight-singing method enabled the author to improve it. All of these musicians agreed that this study could be a valuable contribution towards a more musically literate society in South Africa.

1.6.3 Compiling a multimedia study package for sight-singing

The author compiled a study package for sight-singing consisting of a workbook with a CD (Compact Disk) recording and a testbook. The workbook for sight-singing was compiled according to the criteria outlined in Chapter 2 (Sight-singing) and Chapter 4 (Educational media) of this thesis. This workbook consists of a graded series of examples with explanations and exercises. The author provided interval and rhythm exercises as well as melodic exercises. The workbook is accompanied by a testbook with similar exercises as the workbook.

An experimental CD recording was added to the workbook to provide examples of music concepts that were introduced. The study package was used to teach sight-singing to the new choristers at the Drakensberg Boys' Choir School from 2001 to 2003. Finding several shortcomings and room for improvement, the author amended the study package a number of times. Because boys were used as role models and not professional singers, not all of the examples are perfect. It is the author's opinion that the boys provide a realistic role model for novice sight-singers, challenging the listener to echo their singing.

In Chapter 6.3 the author provides a detailed description of the process of designing and producing the study package for sight-singing.

1.6.4 Action research on a small scale

The rationale behind the action research was to develop, through trial and error, the multiple-media study package, which is the main focus of the study. This was done in order to test and improve the initial study package.

The workbook described in Chapter 1.6.3 was implemented to teach sight-singing to the new choristers at the Drakensberg Boys' Choir in 2001. Thirty boys aged from 9 to 14 years participated in this research project. The outcome of the experimental programme was very positive, with the boys having a good understanding of music and music notation, as well as competent sight-singing skills. Each learner was able to progress at his own pace, each new concept was mastered before the next one was introduced and the learner's sight-singing skills were evaluated by using a separate testbook. The problems that arose while using the workbook were solved and the programme was amended accordingly. Examples of problems were that some exercises were too difficult for the learners and more exercises were needed to practise certain concepts.

In 2002 and 2003 the amended version of the workbook, with the concept CD recording, was employed to teach sight-singing to the new intake of choristers. A group of 35 boys used the new version of the programme in 2002 and 22 boys in 2003. Both the workbook and the CD recording proved to be very effective. Every year all choristers of the Drakensberg Boys' Choir are tested on their singing and sight-singing abilities in an internal audition. The boys who used the experimental sight-singing programme did considerably better in sight-singing

than the boys who used the previous sight-singing programme. The author also found that using a CD to provide music examples saved much time. The CD enables each learner to listen to examples repeatedly, giving the teacher time to evaluate and correct learners' efforts at sight-singing.

1.7 Outline of the thesis

This thesis consists of seven chapters and four appendixes. In Chapters 1, 2 and 4, background information is provided. This information is then utilised in Chapters 3, 5 and 6, to write National Unit Standards for sight-singing, evaluate a number of sight-singing programmes and compile a multiple-media study package for sight-singing. The last chapter contains conclusions and recommendations regarding the study.

In **Chapter 1**, a background to the study is given to explain the importance of this project. The research questions are stated and the research procedure is explained. The author also describes problems that he encountered during the study and how he overcame them.

Chapter 2 explains the importance of sight-singing for every singer or chorister. The essential contents of a sight-singing programme are discussed briefly and criteria for a sight-singing study package are described.

National Standards for sight-singing are suggested in **Chapter 3**. The system of the South African Qualifications framework is discussed and the importance of National Standards for sight-singing is motivated. These Standards are realised in the suggested study package that results from the study.

The possibilities of utilising different educational media to help choristers to master sight-singing are discussed in **Chapter 4**. The practical implications of using the different media in different situations are considered and conclusions are drawn about the most suitable media to use for this specific programme.

Some recent sight-singing methods are evaluated and discussed in **Chapter 5**, to determine their strong and weak points. This evaluation is done according to the criteria that are specified in Chapters 2 and 3.

In **Chapter 6**, a multiple-media study package for sight-singing is compiled according to the criteria that are described in Chapters 2 and 3. The aim of the study package is to achieve the unit standards described in Chapter 4. A well-proven model for instructional design, namely *Dick & Carey's systematic design model*, is used to design the study package for sight-singing.

Chapter 7 consists of conclusions drawn from this study and recommendations for further studies. The author provides answers to the research questions in this chapter.

The workbook as well as the testbook of the multiple-media study package for sight-singing are presented in **Appendix A** and **B**. Two audio CDs that accompany the workbook form part of the study package and they are included at the back of the thesis as **Appendix D**. In **Appendix C**, a list of choristers who sang on the CD recording and choristers who participated in the action research is provided.

1.8 Difficulties encountered during the course of this study

The researcher encountered several problems during the course of the study. These problems provided research challenges, giving the author an opportunity to contribute towards the improvement of the standard of music education in South Africa. The problems that were encountered and the solutions that the researcher found are the following:

1.8.1 Previous research

Research before 1994 regarding Class Music tuition in South Africa was mainly done in White schools and the author did not find any statistics regarding sight-singing tuition in Black schools. The research on Class Music tuition indicated strongly that this subject was not taught effectively. The researcher could not find any research specifically about the use of sight-singing and the teaching and learning thereof in South African choirs. The author

wanted to determine whether sight-singing is being taught at all in South African schools, and whether the tuition is effective. The author also wanted to determine whether South African choirs rely on choristers' sight-singing abilities and to which extent sight-singing is being taught to choristers. To find answers to these questions, the author interviewed a number of persons who are authorities on choral singing and music education.

1.8.2 Outcomes-Based Education

The author regards the new South African *Curriculum 2005* and the principle of Outcomes-Based Education as problems that he encountered (see Chapter 3.2). In the new curriculum Music along with the other arts, shares the learning area *Culture and Arts*. Having to share the available time limits the possibilities to teach sight-singing in schools. Nevertheless, the author regards it as of great importance to contribute towards this new curriculum by suggesting National Standards for sight-singing.

1.8.3 Heterogeneous group of learners

The new boys entering the Drakensberg Boys' Choir School have different ages and musical abilities. It is therefore necessary to enable each learner to work at his own pace. The number of boys learning sight-singing makes it difficult for the teacher to explain new concepts to each boy individually, and to sing intervals and rhythm patterns repeatedly. The author used a CD recording to illustrate new concepts, giving learners the opportunity to echo the examples. This method proved to be very effective with the experimental groups.

1.8.4 Designing a multiple media study package for sight-singing

The situation at the Drakensberg Boys' Choir School is unique in South Africa, in the sense that probably few other schools can spend the same amount of time to teach and practice sight-singing. Designing a study package for sight-singing that should be equally effective in all different learning situations is difficult. The author designed the sight-singing training course mainly for use with devoted learners, such as those at the Drakensberg Boys' Choir

School. The study package, consisting of a handbook and a CD recording, should be equally effective to help any interested person to learn how to sing music from sight.

1.8.5 Producing the sight-singing workbook

Some practical problems were encountered while writing the workbook. The author wrote the first ten pages of the initial workbook, using the computer program *Mozart version 5* (Webber 1994). With *Mozart 5*, it is very difficult to write short exercises in such a way that each exercise ends at the margin of the page. When an exercise ends in the middle of the line, the next exercise would also have to start in the middle of the same line. The alternative is to write only one exercise per page and print each exercise separately, adjusting the music's position on the page for every exercise. By printing one exercise at a time and returning the page to the printer for the next exercise, a page of exercises can be produced. Adding lyrics to the music using this program is difficult, with lyrics not automatically aligned with the notes.

The author then used a more advanced notation program namely *Sibelius* (Copperwhite, Finn, Hassen, Pollet, Simons, Westlake & Whiteside, 2000). This program has many more possibilities than *Mozart*. With the possibility to format music as it suits the author and to add text and lyrics where they are needed, this program made it possible to write the workbook in its current format.

While using the workbook to teach sight-singing to the new choristers of 2001 at the Drakensberg Boys' Choir School, the author realised the importance of providing a sufficient number of exercises for learners to sight-sing. Several exercises were added to the workbook, in particular to elaborate on the first three pitches that are introduced (*so*, *mi* and *do*).

Initially the first three pitches to be introduced in the study package were *so*, *mi* and *la*. The author found that starting with *so* and *mi* was effective, but that *la* as the third pitch obscured the boys' sense of tonality. The workbook was amended so that *do* was the third pitch and *la*, the fourth. This change in the order of introducing different pitches improved the boys' sense of tonality and helped them to sight-sing more accurately.

While using the study package during 2002, the author realised that there was no section on dotted quavers. An explanation and a number of exercises were added to the study package to help learners with the concept of dotted quavers.

Producing workbooks that are strong enough to be used by boys was another difficulty. After experimenting with stapled books of A4 and A5 format, the author found A4 books that are ring-bound with a plastic cover to be the most durable.

1.8.6 Compiling the instructional CDs

An experimental CD (*version 1*) with echo exercises was made by the end of 2001, to determine whether this type of exercise would make a positive contribution in the experimental sight-singing programme. The best sight-singers from 2001's group of new choristers were asked to record the exercises. Mr. Clive Staegemann, the sound engineer of the Drakensberg Boys' Choir, helped the author to produce the CDs. A metronome in the recording studio provided a steady beat for the singer. To ensure that the singer sings the correct pitch, the author played each exercise on a keyboard in the singer's earphones just before he sang it. At the beginning of each track, that track's number is mentioned.

Version 2 of the instructional CD was made at the beginning of 2002. This CD was approached slightly differently. The author prepared for the recording by playing the music that is to be recorded into the computer, with a computer-generated metronome. The boys who sang the examples for the recording listened to the pre-recorded music and the metronome on their earphones. No narration was included on *CD version 2*. Several of the learners who used this CD noted that it would be helpful if the number of each track is mentioned on the recording.

Finding a time and a place to make recordings at a music school that does not have a specific soundproof recording studio was a major problem. The boys' singing was recorded in the sound engineer's office, the author's teaching studio and at night in the school's auditorium to eliminate unwanted noises on the recordings. Several of the tracks had to be re-recorded because of outside noises.

Choristers of the Drakensberg Boys' Choir were used as role models on the recordings. The boys found it difficult to sing accurately with headphones on because they could not hear themselves. A solution was to let them sing with only one headphone on. In this way, they could hear the pre-recorded music and their own voices. Despite these measures, many phrases and exercises were recorded several times before they were acceptable.

Although *CD version 2* provided music examples for the notation in the workbook, the author decided to make the CD user-friendlier by adding explanatory narrations to several of the tracks. The narrations, as well as a number of music examples, were recorded at the University of Pretoria's sound studios. Their equipment was not functioning as it should and there was a slight buzzing sound on the recording. The narrations were combined with music from the previous versions of the CD as well as some newly recorded examples. Mr. Staegemann, at the Drakensberg Boys' Choir school, helped the author to combine the different recordings, which was a time-consuming process. Different audio filters were used to minimise the buzzing sound on the recording.

Editing the boys' singing involved putting together the good parts of the recording and eliminating the phrases that were not acceptable. Keeping a steady metronome beat in each exercise meant that the recordings had to be executed and joined very accurately. All the recordings and the editing were done digitally, using a computer. Adding explanatory narrations and music examples to the CD greatly increased its length and a second CD became necessary to record all the tracks. Therefore, *version 3* of the instructional CD consisted of two CDs.

Using *CD version 3* in 2003, and discussing it with other music educators, the author noticed a number of inaccuracies in the music examples and some places where the explanations could be more effective. This time the author used a professional sound studio, "Street Sounds Studios", with the help of the sound engineer Kevin Pienaar. He made some new recordings and edited them with some tracks from the previous versions of the CD. These CDs (*version 4*) are presented as part of the thesis. Making recordings and editing them in a well-equipped studio was much easier than the previous efforts. The author can recommend the use of such a studio very strongly to all future researchers.

The author used fifteen choristers to sing the examples on the CD recordings. Although the different voices provide variation on the recording, it would have been much easier to use only one singer from each voice group.

1.9 Explanation of terminology

It is necessary to explain certain words and concepts to clarify their exact meaning in the text. This should help to avoid any misunderstandings between the author and the reader.

1.9.1 Sight-reading

This is the “ability to read and perform music at first sight, i.e., without preparatory study of the piece” (Apel 1983: 775). This term includes reading music and performing that music on any music instrument, including the human voice. A more detailed description of *sight-reading* is provided in Chapter 2.2.3

1.9.2 Sight-singing

According to the *South African Music Dictionary* (Ottermann & Smit 2000: 220), sight-singing is the vocal form of sight-reading. Sight-singing can be defined as the ability to read music notation, anticipate the music and sing it without having heard it before. A more detailed description and definition of sight-singing can be found in Chapter 2.2.4.

1.9.3 Study package

The word “study” means acquiring knowledge (Pollard 1994: 797) and the word “package” means a set of items or proposals that are considered as a whole (Pollard 1994: 576). Combining these two meanings should define *study package*.

A study package can therefore be defined as a combination of relevant materials to study a particular subject. The reason to use a study package rather than only a handbook, is to enable

learners to study the subject without the help of a teacher. Such a package can provide the learner with sufficient information and exercises to master the subject to the required standard. In this thesis such a study package is compiled for teaching and learning sight-singing.

1.9.4 Multiple media

The term “multiple media” refers to a combination of educational media, e.g. a workbook and a CD. It is important not to confuse “multiple media” with “multimedia”. Multimedia refers to a computer with a CD-ROM, and soundcard (Lock 1995: 290).

1.9.5 Music notation

According to Daum (1994: 1), music notation is basically a “system of information storage”. He (ibid) explains that notation is “a very elaborate set of instructions for reconstructing a set of organized sounds.” Music notation can be described as the written symbols which are used to represent music. Different symbol systems can be used to notate music, e.g. staff notation, graphic notation and tonic sol-fa notation. In this thesis, the word “notation” refers to the written symbols representing music.

1.9.6 Staff notation

This term refers to the system where music is represented by notes on staves with five lines each. The author explains this system of music notation in the suggested sight-singing training programme.

1.9.7 Solmization

Solmization is the use of syllables in associated with pitches as a mnemonic device to indicate intervals, according to Hughes (2000). This is a learning aid to help with pitch and can help to make the abstract concept of different intervals more concrete.

1.9.8 Tonic sol-fa

Apel (1983: 857) describes “tonic sol-fa” as “an English method of solmization designed primarily to facilitate sight-singing”. A specific syllable is associated with each degree of the scale. This is a valuable aid to help learners sight-sing accurately. The tonic sol-fa system uses a movable *do*. The syllables are used “in reference to the key of a piece or any section thereof.” In major keys *do* is the tonic and in minor scales *la* is the tonic.

1.9.9 Symbol

A symbol is “a mark or sign with a special meaning” (Pollard 1994: 813). There is often no logical correlation between the symbol and its meaning, for example, between a red traffic light and the action to stop. Meaning is based on mutual agreement or convention. Music notation consists of different symbols, representing different elements, such as pitch and duration.

1.9.10 Symbol scheme

When symbols are arranged by specific rules or conventions, it is called a “symbol scheme”. Salomon (1981: 31) explains that music notation can be seen as a symbol scheme. In music notation, the symbols representing pitch and rhythm are combined by specific rules.

1.9.11 Symbol system

When a symbol scheme correlates with a field of reference, it becomes a “symbol system”. The field of reference for music notation is the performance of the music (Salomon 1981: 32). In this text, the author will refer to music notation as a symbol scheme, representing the sound of the music.

1.9.12 Reference to gender

Since the research in this study was done at a boys' choir, male pronouns are used in the text of this thesis. This does not imply that the research is only applicable to male singers and musicians. The male pronouns are purely used to simplify the text and to make it as comprehensible as possible for the reader.

1.9.13 Pre-scientific observations

The author refers to his own observations made while teaching or while working with choirs. Although these observations are not statistically tested or proven, the author regards his personal experience as important and he therefore mentions these pre-scientific observations in the thesis.

1.10 Delimitation of the study

The study only refers to music with traditional Western intonation. In South Africa, people from different cultures use slightly different intonations. The author focuses on Western intonation because Western music has a profound influence on various other musical styles in South Africa.

When learners are mentioned, the author refers to learners with normal mental and physical abilities.

1.11 The value of this study

- The value of this study is that the author writes National Unit Standards for sight-singing and compiles a study package to realise the unit standards. If all South African scholars reach these standards, our society should soon change to a musically literate one.
- In Chapter 2, the author proposes a theoretical model for sight-singing. This model can help teachers to understand the complex process of sight-singing better. It can also help other authors to write effective sight-singing methods.

- The way the author selected media for this study package can be an example for teachers of how to select the most efficient media for a specific lesson.
- The evaluation of a number of sight-singing methods in Chapter 5, according to selected criteria, can enable teachers and learners to make an informed choice regarding the sight-singing method(s) they want to use.
- The proposed study package for sight-singing can help learners to master sight-singing through self-paced learning. Because explanations and musical examples are provided on CD, the learners do not have to ask a teacher to explain every concept.
- This study package can be equally valuable as a source of graded sight-singing material to use in the classroom or for the choir.
- Utilising multiple media, the sight-singing study package can guide learners to master sight-singing even without the help of a teacher. This can be particularly useful for teachers or conductors who need to improve their own sight-singing skills.

1.12 Summary

Chapter 1 provides an overview of the study. The author explained that he needed a more effective way to teach a heterogeneous group of boys to sing from sight at the Drakensberg Boys' Choir School, South Africa. Being confronted with a unique educational challenge, the author decided to do this specific study.

The reality regarding musical literacy in South Africa was considered and it is clear that this important aspect of education has largely been neglected.

The research problems were stated. The main research problem is: *How should a multiple-media study package be designed to realise South African unit standards for sight-singing?* This research question led to a number of sub-questions.

The research methods were explained. This research consists of

- a study of relevant literature (books, articles and Web pages),
- interviews with authorities on sight-singing, choral work and music education,
- compiling a study package for sight-singing, and
- action research on a small scale at the Drakensberg Boys' Choir School.

A brief outline of the thesis was given, followed by a description of problems that the author encountered during the course of this study. After explaining the research procedure, a number of terms used in this study were defined. The author justified the relevance of the study and outlined the research procedure.

In Chapter 2, the author will now focus on sight-singing. This important skill is explained and criteria for a study package on sight-singing are provided.