

Chapter 2

A theoretical model for sight-singing

2.1 Introduction

In this chapter, the process of sight-singing is explained and the value of sight-singing to singers, choristers and other music lovers is emphasised. The learning contents relevant to sight-singing are described in order to incorporate it in a training programme. The author then sketches the current practice of sight-singing in South Africa. To do this, he refers to previous research, interviews with a number of music educationalists and choir masters, and his own experience teaching and working with choirs. Keeping the essence of sight-singing as well as the South African reality in mind, the author suggests criteria for a South African sight-singing programme. The learning contents for sight-singing as well as the criteria for a sight-singing training programme, described in this chapter, are background information to formulate national unit standards and to compile a multiple-media sight-singing programme.

2.2 Defining sight-singing

In a work on sight-singing, it is important that this term should be defined. Sight-singing is related to singing, reading and sight-reading. By defining each of these terms, the exact meaning of the term “sight-singing” should be clear.

2.2.1 Singing as a form of art

Singing is probably the oldest form of art known to humans, and it still plays an important role in our lives, whether it is to sing or to listen to other peoples’ singing. Janeder and Harris (2001) describe singing as follows:

Singing is a fundamental mode of musical expression. It is especially suited to the expression of specific ideas, since it is usually linked to a text; even without words, the voice is capable of personal and identifiable utterances. It is arguably the most subtle and flexible of musical instruments, and therein lies much of the fascination of the art of singing.

This definition underlines the fact that singing is also a mode of human communication. Through singing, we can express feelings and create a particular atmosphere that words alone cannot express. In this chapter, the author explains the process whereby music notation is brought to life by reading and re-creating it through singing.

The *Oxford Paperback Dictionary* (Pollard 1994: 40) describes art as: “the production of something beautiful; skill or ability in such work.” For a singer two elements of this definition are of particular importance. These elements are the creation of something beautiful and the skills needed for this creation. Either a musician can create something new, or re-create music that someone else has created.

Performing a piece of music on stage is definitely not the only art in music. Singing from sight can also be a way to experience music as a form of art. It is important that sight-singing should never become a mechanical exercise to struggle through notes and text. The singer should rather aim to perform the music in an artistic way, creating something beautiful. When sight-singing a piece of music, the singer can discover what a composer wrote. Sight-singing is a musical activity that requires the sight-singer to master a combination of knowledge and skills. To determine exactly which knowledge and skills are relevant for sight-singers, it is necessary to define the terms “reading,” “sight-reading” and “sight-singing” clearly.

2.2.2 Reading

Reading is generally regarded as one of the most important skills that children learn in school. It is difficult to imagine modern society without reading. Pollard (1994: 664) gives several descriptions of reading that are relevant to sight-singing. Reading is namely the ability to:

- be able to understand the meaning of (written or printed words or symbols),
- speak (written words etc.) out loud and
- interpret mentally, find implications.

These aspects of reading highlight the fact that reading depends on the understanding of the text. This is equally important for reading music. The reader needs to understand the content of what he is reading, before he can communicate it to the listener. To understand what he is reading, the singer needs certain knowledge about the language he is reading and of the content. Communicating the content in the code of sound (language or music) can be another element of reading. A person can read without making a sound, and still understand the

content of what he is reading. The mental interpretation of the message is important, because this is how the reader associates the content with the meaning. If he communicates this message to a listener, he conveys his interpretation of the message.

We can distinguish between prepared and unprepared reading. During unprepared reading the reader is not familiar with the printed text. He interprets the text as he observes it and communicates this interpretation verbally to the listeners. This can be compared to *sight-reading* in music.

During prepared reading, the reader is familiar with the printed/written text and he communicates a previously planned interpretation of that text. This can be compared to *playing/singing from notation*.

2.2.3 Sight-reading

The *Harvard Dictionary of Music* (Apel 1983: 775) describes sight-reading as “the ability to read and perform music at first sight, i.e., without preparatory study of the piece.” This definition makes it clear that sight-reading is to reproduce music *while reading it*, without hearing or learning it beforehand. This broad term indicates that the performer can reproduce the music on any music instrument or the voice.

It is important to note that *sight-reading* only refers to the first time that a person reads and performs the specific piece of music. When a reader does not perform the music, it is referred to as *following a score* (listening to the music while reading) or *silent reading* (forming a mental image of the music without real sound) which can be compared to silent reading of a word text.

2.2.4 Sight-singing

Sight-singing is a narrower term than *sight-reading*, implying that the performer uses his voice to reproduce the music. Rubinn (2001: 4) defines sight-singing as “The ability to sing, without study, a piece of music that one has never seen before.” The term sight-singing

indicates two separate processes, namely to see and to sing. Combining the two terms implies that the two actions should happen simultaneously. Telfer (1992b: 6) adds to this definition by writing that the sight-singer should be able to sing lyrics with the music, the first time it is sung. This definition of sight-singing suggests that the sight-singer is able to

- recognise the symbols of music notation and lyrics,
- interpret these symbols, and
- reproduce the music by singing it.

As a summary of the previous paragraphs, sight-singing can be defined as the ability to read music notation and to perform the music and the lyrics vocally, without having studied it before the time. This definition suggests that sight-singing can be regarded as the musical version of reading. In the author's opinion, similar mental processes are involved in reading (language) and sight-singing.

2.3 The relevance of sight-singing

Is sight-singing an essential skill for all South African scholars? It is important to answer this question before attempting to write national unit standards that can make sight-singing compulsory for all South African scholars working towards NQF level 1. It is equally important when compiling a sight-singing method for a specialised school such as the Drakensberg Boys' Choir School. Only after considering the value of sight-singing, can it be appropriate to teach it to scholars or choristers. Two main groups of people are concerned with learning sight-singing, namely musicians (e.g. choristers, singers and instrumentalists) and non-musicians (listeners). The relevance of sight-singing for these two groups will be discussed in the following paragraphs.

2.3.1 The relevance of sight-singing for choristers

Brinson (1996: 31) explains that sight-singing skills are just as important for choristers as rehearsing the pieces they want to perform in a concert. With this statement she emphasises that sight-singing is undoubtedly a very important skill for choristers. Brinson suggests that "a choir must be given opportunities on a regular basis and in a systematic fashion to gain

knowledge and skills in this area.” The author of this thesis supports this view of Brinson and will justify the importance of sight-singing for choristers further in the following paragraphs. Both the individual chorister and the choir as a whole can benefit from their ability to sing from sight. Some of these advantages are:

- Choristers (the whole choir) can learn music faster.
- Choristers can learn their parts on their own, without learning it by rote.
- A choir can sing new music immediately, giving choristers an overview of the music.
- Each chorister can follow the score and start singing at the correct moment.
- Choristers can look ahead on the score and anticipate the next note(s) that they should sing. This should help to improve intonation.
- Choristers can see how their individual parts fit into the whole of the musical piece.

In an attempt to provide an answer to the question why sight-singing should be taught, Demorest (2001: 3) asks a counter-question: “If I am not teaching my students to read music, what am I teaching them?” This is indeed a question that every choral conductor and music teacher should ask himself. The ability to read can give the reader access to a great quantity of music that is notated. A choral conductor or a music teacher that teaches sight-singing can make a significant contribution to improve learners’ quality of life by enabling them to participate in various musical activities.

Brinson (1996: 31) states: “To teach a choir to sight-sing is definitely the longer, slower route to take, but that will provide singers with a degree of independence and skill.” The author of this thesis is convinced that the ability to sing from sight and the insights a learner gets into music as a form of art makes it absolutely worth the while. Not only is the result, namely the ability to sight-sing music, worth the effort, but also the learning process. Taking the “longer and slower route” to master sight-singing will probably not provide an instant solution for a choir or a singer’s problems. On the long run it will, without any doubt, be of great value.

2.3.2 The relevance of sight-singing for instrumentalists

Instrumentalists can also benefit from the ability to sing from sight. Sight-singing should help to develop their inner hearing, sense of pitch, and their ability to anticipate notes and phrases. If the instrumentalist can “hear” the music with his inner ear before playing it, he should be able to create art instead of just playing the notes mechanically. The importance of sight-singing for instrumentalists is stressed by the fact that the major music examining bodies, namely the University of South Africa, the Associated Board of the Royal Schools of Music and Trinity College, include sight-singing in the aural part of practical instrumental examinations.

2.3.3 The relevance of sight-singing for music enthusiasts

With the term “music enthusiasts”, the author refers to people who love music as an artform, but who cannot play a music instrument or do not sing well. Although a great percentage of South Africans may never sing in a choir or learn to play a music instrument, they can also benefit from learning to read music and to sing what they are reading. Understanding music should enable them to appreciate and enjoy various styles of music. Listeners can enrich their listening experience by following the score of the music. Dickreiter (2000: 7) explains how the ability to read music can benefit the listener:

- The listener gains insight in the structure of the work.
- The listener can evaluate the accuracy of a performance.
- The listener can identify specific places in the score. These can be interesting moments in the music, or parts that the listener wants to hear again.
- The sound engineer can anticipate changes in dynamics before it occurs.

This list of benefits makes it clear that the ability to read music is not only of use to musicians, but also for listeners. When the reader can use his voice to re-create the music that he is reading, this music comes alive and has a specific meaning to the singer as well as to the listeners. The voice is the instrument that every human has, and by using it, the singer can take part in active music making.

The ability to sing from sight can enable every person to sing, even when he does not know the song. This can improve every congregation's singing in church and the public's singing at social gatherings. It can motivate enthusiasts to become involved in music making.

While musical literacy, and sight-singing in particular, has so many advantages for the individual, the choir and the community; it is necessary to consider ways to teach this skill in the best possible way. To do so, it is important to understand the processes involved in sight-singing. A theoretical model of these processes can help to clarify them and to suggest ways to master sight-singing. There are several models for reading, and by finding similarities between reading text and singing from sight, the author devised a model for sight-singing (see Chapter 2.7).

2.4 Sight-singing in the new curriculum for South African schools

If sight-singing is to be taught effectively in all South African schools it implies that all teachers that are teaching music should be able to read and sight-sing music themselves. It is very important to realise that the logical starting point to promote musical literacy in South Africa would be to teach unskilled music teachers how to sing from sight. According to van der Walt et al (1993: 103-104), policy makers, superintendents and principals, as well teachers and pupils, do not rate the status of Class Music tuition at schools as very high. As a result of this attitude towards music education, Class Music is not being taught effectively in the majority of South African schools. This negative position of Class Music tuition at school suggests to the author that an alternative starting point for sight-reading skills must be found.

In the new curriculum for South Africa, the ability to sing music from sight can possibly be awarded with credits in the national qualifications framework. Unfortunately, music is only a sub-field of the field *Culture and Arts* in the new curriculum. Being a sub-field in an integrated learning system can imply that music education (and therefore, learning sight-singing) will be integrated with other fields. Consequently, it is very unlikely that teachers will be able to devote more time to music education than in the traditional educational system.

Choirs can be an alternative starting point to improve South Africans' music literacy. Van Wyk (1998: 23) describes choral singing as "the most popular and populous musical

endeavour in South Africa at the present time, and most especially amongst the Black communities.” Every choir can benefit greatly if its members are able to read music and sing it from sight. The advantages of sight-singing (see Chapter 2.3) make the effort to learn sight-singing worth the while for choristers as well as for choirmasters. If choirs can be a place for sight-singing training it should make a significant difference in choristers’ musical literacy, and the choir’s musical performance should improve greatly.

A singer needs a considerable body of knowledge and several skills to read music and reproduce it vocally. Taking note of exactly what this knowledge and skills are can be a guideline for developing a sight-singing study package.

2.5 Essential knowledge and skills for sight-singing

In this section, the author aims to isolate the different concepts and skills that are essential for sight-singing. Although this information is most likely not new to the reader, the summary of knowledge is very important for compiling a study package on sight-singing. This summary serves as a reference for planning the suggested sight-singing programme, which is explained in Chapter 6. It is important to distinguish between knowledge and skills, because different learning processes are involved to master knowledge and to master skills.

Knowledge can be described as an original body of information (Pollard 1994: 444). This information can be conveyed through a written text. Learners should understand the information and be able to recall it when singing from sight.

Skills on the other hand are “the ability to do something well” (Pollard 1994: 752). Mastering the relevant skills for sight-singing indicates that the learner is able to apply this knowledge when singing from sight.

Vocal music consists of various concepts that can be separated, namely the text, pitch, rhythm, metre, dynamics and tempo. Each of these concepts can be symbolised in a written form and the reader should be able to interpret these symbols to re-create the music audibly by singing, or mentally through inner hearing, as he reads the written symbols. In staff notation, each of the above-mentioned concepts is symbolised in a different way and to sing

from sight the reader has to interpret and re-create all the relevant concepts simultaneously. The sight-singer should know these symbols well enough so that he can associate them immediately with the appropriate musical concept and perform it without hesitation. The relevant concepts involved in sight-singing are discussed briefly and the difficulties reading them are indicated.

2.5.1 Pitch

Pitch is symbolised by writing the notes at different levels on a five-line staff. The exact position of the note head symbolises the pitch of the note. A clef at the beginning of the staff indicates the register of the whole staff. Staff notation enables composers to notate the exact pitch where a tone should sound. It is easier for an instrumentalist to play a given note than for a singer to sing it: When a pianist presses the correct key, the desired pitch will sound, while a singer has to rely on his memory and the association with previous tones to sing a note on an acceptable pitch.

The relation between the pitch of the various tones in music is of the utmost importance for singers. This relationship is known as relative pitch. Relative pitch can be defined as “the ability to recognise or produce a tone by mentally establishing a relationship between its pitch and that of a recently heard tone” (Pickett 2000). For a singer, it is essential that the intervals between the tones in a piece of music should be accurate. As an example: the interval of a major third from middle C to E directly above it should stay a major third if both tones are sung an octave lower. Apel (1983: 723) states that the ability to recognise and reproduce relative pitch is a “fundamental requirement for a musician, much more important than absolute pitch”. This implies that another voice, such as a bass or an alto, can sing a soprano melody several tones lower than it is written and the melody will still be the same. The author of this thesis strongly agrees with this viewpoint and uses the principle of relative pitch throughout the suggested sight-singing method.

It is important that the sight-singer should not be dependent on a music instrument except to hear a specific pitch to start on. DeLane (1981: 4) urges sight-singers not to refer to the piano or another instrument for musical security. A music instrument can tempt singers to play the music, and imitate the sound that they hear, rather than to form a mental image of the music

before singing it. Singing from sight with the help of an instrument can give the singer a wrong impression of his sight-singing abilities.

If a learner wants to improve his sight-singing skills, he should aim to develop his inner ear to “hear” what he reads. Developing his inner ear should help him to anticipate intervals and phrases and to sing them correctly. The sight-singer should be able to form a mental image of the music without hearing it and without producing any sound.

2.5.2 Key

Key signatures at the beginning of a piece of music indicate the key of the music. It is important for musicians to know how to determine the key and how to find the tonic. There are different ways to guide learners to find the tonic:

- The learner can simply memorise the different key signatures and the keys they represent. Memorising the key signatures can be a frustrating assignment for learners, but knowing the key signatures off by heart is a fast way to recognise a specific key.
- Learners can determine the key from the last sharp or flat in the key signature. The last sharp is the leading note of the major scale and the last flat is the subdominant. The learner can also regard the second last flat as the tonic. Determining the key from the last sharp or flat eventually helps learners to memorise all the different key signatures.

When they have determined the major key, learners should decide if the piece is in a minor by observing whether there are accidentals that occur frequently. These accidentals may indicate the raised sixth and seventh degrees of a minor key. Learners should be able to determine the relative minor from the major key signatures. They should also be able to determine the relative major from the minor tonic.

2.5.3 Rhythm

Rhythm is an essential part of music, just as it is an essential part of human existence. The ability to read and perform music rhythms with precision helps choristers to begin and end

sounds at exactly the right moment, to sing accurately with the rest of the choir and to match the text with the music. This ability also helps the singer to follow a music score.

Rhythm can be described as the pattern that is produced by the emphasis and the duration of notes in music (Pollard 1994: 688). London (2001) explains that rhythm is concerned with describing and understanding notes' durations and durational patterns. From both these descriptions, it is clear that rhythm involves patterns formed by the duration of notes as well as the accents on certain notes.

The exact duration of a tone is from the onset of that tone to the beginning of the next one (London 2001). It is important that the sight-singer should observe the exact duration of every note, and sing it accurately. This can ensure that the music is sung rhythmically accurately.

As most choral music is based on a steady beat and clear rhythms, only the traditional use of rhythm is described in this section. In staff notation, rhythm is symbolised by using white or black note heads that can have note stems with or without flags attached to the note stems. The combination of note heads, stems and flags symbolises different note values. The sight-singer should be able to sing the durations with precision as he reads.

A good sense of rhythm can be described as awareness and maintaining of an even pulse. The musician should also be able to relate this even pulse to the different rhythmical groupings that are used in the music. Relating the pulse to other groupings implies that the singer has to remember the previous rhythms and groupings, to be able to compare them to the current pulse. The principle of relating one rhythm to others is significant in understanding the process of sight-singing. The sight-singer should develop rhythmical skills to maintain an even pulse and to relate one pulse to others. In section 2.6.3 of this chapter, this principle is applied in a theoretical model for sight-singing.

2.5.4 Metre

The relation between the note value and the beat is determined by the time signature. The time signature is written at the beginning of the music and consists of two numbers. The top number indicates the number of beats in a bar, whereas the bottom number indicates the note

value of the beat. Before singing a piece of music, the singer should take note of the time signature. This should help him to keep a steady beat and to sing in logical phrases.

It is important that the singer should understand the difference between simple and duple time. He should be able to demonstrate the difference between the two by comparing the different groupings.

2.5.5 Tempo

One or more words, usually written above the first bar of the music, indicate the approximate tempo at which the music should be performed. If the tempo changes in a music piece, the appropriate musical term is written above the bar where the change occurs. The words that indicate tempo are often in Italian, German or French, but sometimes English words are used. In some pieces of music, a metronome marking indicates the tempo.

Cecilia Yutar, an established music teacher and music examiner for the University of South Africa (Interview 1 August 2002), recommended that sight-singers should sing a bit slower and correctly, rather than fast and with more mistakes. Although the indicated tempo should be kept in mind when singing from sight, the author strongly agrees with Yutar, especially where less experienced sight-singers are concerned. The sight-singer should select a suitable tempo before he starts singing. The tempo should be in accordance with the tempo indications, but no faster than he can sing safely. To be able to select such a tempo, it is essential that he should know the meaning of the musical terms indicating tempo. It is worthwhile for the singer to memorise the musical terms that are relevant for vocal music.

2.5.6 Performance indications

Musical terms can describe several aspects of a piece's performance. These aspects include tempo, dynamics, increase/decrease in dynamics or tempo, general character, and which sections to repeat. To sight-sing a piece in a musically satisfying way, singers should take care to incorporate these performance indicators in their performance. It is unrealistic to expect sight-singing students to know all possible musical terms, but they should at least learn the most commonly used musical terms. Knowledge of these terms should enable them to

reproduce a considerable number of compositions in the way the composer intended it. The author strongly recommends that every serious musician should invest in a dictionary of musical terms to have a reference for the rare terms that may appear in a piece of music.

2.5.7 Text

To re-create any printed (written) text the person should be able to read words well. This is especially difficult when the reader is young and not able to read fluently. The text accompanying a piece of music can be in any language; therefore, it is important that the reader can read well, at least in his mother tongue. When the text is in a language that is not the singer's mother tongue, it is important that he should make sure of the correct pronunciation of the words as well as the desired phrasing and accents. The author is convinced that a singer can only communicate through music if he understands exactly what the text means. It is advisable to read the text before singing it. When the text is in a foreign language or uses unusual or fast moving words, the singer should study it more carefully before attempting to sing it.

In *Successful sight-singing 2*, Telfer (1992a: 6-7) states that sight-singers should be able to "sing a new piece of music accurately with the lyrics the first time through". This is probably the ideal to aim for, but not always realistic. Often singers are confronted with lyrics in foreign languages that are difficult to pronounce. The author has experienced that young learners have difficulty to read three different symbols systems at once, namely the pitch, rhythm and the words. He found it effective to allow young learners to chant the text on the rhythm and then sing the melody, using tonic sol-fa syllables. Only then, the young singer can combine the text and the melody accurately. However, it remains an excellent exercise, even for young singers, to try to sing the lyrics immediately.

2.5.8 Notation

Knowledge about the symbol system to notate music is of the greatest importance for every sight-singer. Staff notation consists of two symbol systems that are used to symbolise pitch and rhythm respectively. The encoding of music in the form of staff notation is discussed in more detail in Chapter 4.2.4.4.

Staff notation was an important factor in the development of Western music. Adlington (2001: 1) mentions some of the advantages of music notation:

- It opens a “world of new possibilities” for those who can read it.
- Notation makes it possible to notate long and complex musical compositions.
- Notation helps to spread music all over the world.

These advantages of music notation are of course only available to those who can read this notation. Many singers are often excluded from the advantages of using music notation, but this does not have to be the case.

2.5.9 Sight-singing aids

There are different systems available to help sight-singers to sing pitch and rhythm accurately. The systems that are most commonly used are the tonic sol-fa system for pitch and the Paris-Galin-Chev  system for rhythm. Only these two systems are discussed in this section, although there are various other systems that sight-singers can use. Tonic sol-fa is often used by South African choirs and conductors instead of staff notation. This system, however, is designed to complement staff notation, rather than to replace it. The Galin-Paris-Chev  system of rhythm names is recommended by McLachlan (1982: 74, 88, 89) for use in South Africa’s schools.

Not everybody is positive about the use of these systems. Telfer (1992: 7) states that “sol-fa syllables, time names or numbers are not necessary for a successful sight-singing program.” While it is not necessary, the researcher found it to be of great help. Using tonic sol-fa syllables and time names makes the music more concrete and gives sight-singers a sense of security. It is especially important for learners who learn the principles of music along with sight-singing.

2.5.9.1 Tonic sol-fa

Solmization associating pitch in a piece of music with particular sounds or syllables can be a valuable aid to teach and learn sight-singing. This type of aid is very old and was used by the ancient Greeks, Chinese and Indians (Apel 1983: 786).

In Western music, the tonic sol-fa system is often used as an aid for singers. Guido d'Arezzo (c990-1050) invented a system in which pitch is associated with syllables. He associated the first syllable of each line of the *Hymn to St. John* with a specific degree of the scale (Ulrich & Pisk 1963: 33). Glover used this system and Curwin refined it, resulting in the tonic sol-fa system, which Curwin published in 1842.

DeLane (1981: 2) suggests that learners and teachers should use the mode of vocalisation that they prefer as long as it provides a “natural, unforced way of intoning”. Tonic sol-fa can be a great help when singing tonal music which does not contain excessive modulations. The researcher fully agrees with DeLane's statement and strongly recommends the use of the tonic sol-fa. By using a movable *dō*, singers are constantly aware of each tone's relationship to the tonic and to the key of the music.

Curwin used the following spelling for the tonic sol-fa syllables: *doh, ray, me, fah, soh, lah* and *te*, and McLachlan (1981: 69) recommends that this spelling should be used in South African schools. Various sources, such as Collins (1993: 222-230) and Rubinn (1997: 14), use a simplified spelling for the tonic sol-fa syllables, namely *do, re, mi, fa, so, la* and *ti*. The author of the thesis prefers the simplified spelling to ensure that the system is as simple as possible for the sight-singing students. To avoid any misunderstandings, the author uses the vowel “ô” to indicate a flattened pitch, e.g. *mô* (pronounced “maw”) instead of Curwin's use of the vowel “a”, e.g. *ma* (pronounced “maw”). Similarly, the author writes sharpened pitches with an “i,” e.g. *fi* (pronounced “fee”), as opposed to Curwin's use of the s vowel “e” (pronounced “fee”).

2.5.9.2 French rhythm names

The Galin-Paris-Chevé system was developed by three people, namely Pierre Galin, Aimé Paris and Emile-Joseph Chevé during the 19th century. Forbis (1970: 167-168) explains that these gentlemen built on each other's work to create this system.

The author found that using the French rhythm names for specific note durations enabled sight-readers to sing rhythms very accurately. The French rhythm names are therefore used in the suggested sight-singing study package.

2.5.9.3 Conducting the metre

DeLane (1981: 9) suggests that the singer should conduct the metre while singing from sight to develop a “beat consciousness”. The music director of the Drakensberg Boys’ Choir, Christian Ashley-Botha, insists that all the boys conduct the metre while they learn new music. In the experience of the author of this thesis, learners quickly get used to conducting the metre while singing from sight.

There are several advantages for the learner as well as the teacher when each sight-singer conducts the metre while practising. These advantages are:

- The learner is constantly aware of which beat in the bar he is singing, or should be singing.
- The learner is particularly aware of the first beat of each bar, being a downward movement when conducting. This awareness can help him to accent the appropriate notes, resulting in a musically pleasing performance.
- The learner can realise when he is not singing in time when the downward movement does not correspond with the beginning of a bar.
- The teacher can see that the learner understands the time signature.
- The teacher can see which beat the learner is supposed to sing and can help him immediately if the learner makes a mistake.
- A physical hand movement helps the sight-singer to maintain a steady beat throughout the piece.

A metronome can help singers to practise the skill of maintaining an even pulse. The use of a metronome in a sight-singing programme is discussed in Chapter 4.6.4.4.

2.5.10 Practice

Sight-singing, like most other skills, only improves with practice according to Wollitz (1982: 68, 88). The same author emphasises that it is important that the sight-reader should practice this skill accurately. The learner can ensure that his singing is correct, by asking someone else to evaluate his efforts. He can also compare his efforts to a recording of the same music. In this way, the learner can become very critical of his own efforts, learning to sing correctly, the first time.

Referring to practising sight-reading at the piano, Joan Last (1954: 78) accentuates that “sight-reading requires PRACTICE, MORE PRACTICE, and STILL MORE PRACTICE.” Practising sight-singing is of the same importance for the vocalist as practising sight-reading for any instrumentalist. The difference is that vocalists do not have a man-made instrument to help them to produce the music.

2.6 Theoretical models for reading

Singing from sight can be compared to reading language. Johnson (1998: 37) explains five similarities between reading notes and words. The similarities are:

- In both systems the reader must associate a symbol with a sound and read from left to right.
- Both systems use symbols to encode thoughts and create ideas.
- Music and literature require the reader to master certain technical skills.
- The readers of both systems must master a number of rules. Readers learn these rules most effectively during actual reading or music making.
- In music and literature passion is involved “which can stir the soul and the mind.”

The most important difference is that sight-singing involves musical elements such as pitch, duration and dynamics along with the text. Seeing that there are so many similarities between reading music and reading words, reading theories should be helpful in understanding the process of sight-singing. The author will briefly discuss two different models, namely a *bottom-up* and a *top-down* model, describing the reading process. These models act as a basis to create a theoretical model for sight-singing. Such a model can be a useful aid in writing unit standards for sight-singing and in designing a training programme for this subject.

2.6.1 Bottom-up model for reading

The *bottom-up* model of the reading process describes reading as a serial process. According to this model, the reader combines letters into words and gives meaning to the words. Zakaluk (1996: 2, 3) explains that the reader observes the written letters and expresses them as sounds (Level I), combines these sound into words (Level II), and gives meaning to the words (Level III).

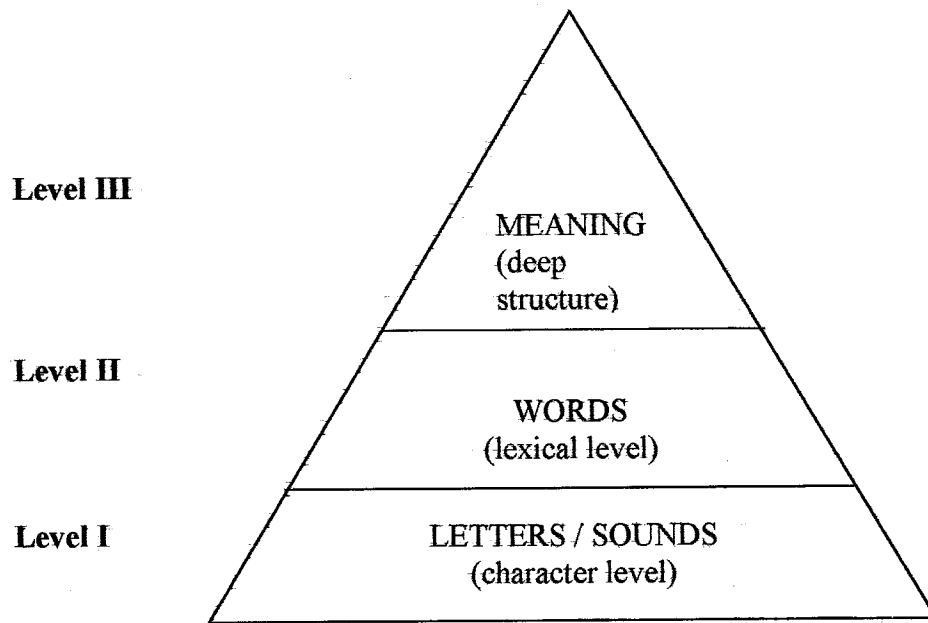


Figure 2.1: Bottom-up reading model (Zakaluk 1996: 4)

It is clear that the emphasis is on the letters and the sounds in the *bottom-up* reading model. From these, the reader forms words and after processing the letters and sounds, he gives meaning to the words. In this model, the meaning of the text and the reader's personal interpretation of what he reads are not regarded as very important.

Stringer (1999) defines a *bottom-up* reading model as one that

- emphasises the written text,
- says reading is driven by the process that results in meaning, and
- proceeds from part to whole.

Stringer explains that this model describes reading as a simple process where the reader only gets to the meaning of the words after processing all the letters of those words. Anticipation of the text, the context of the words and the background knowledge of the reader do not play a significant role according to this model. If the *bottom-up* model is applied to sight-singing, the singer would observe the symbols of the music notation, express them as sounds, combine these sound into patterns and phrases, and interpret the phrases as music. This is indeed what happens during the process of sight-singing, but it is not that simple. The singer does not necessarily observe every symbol of the notation and he does not sing or think one note at a time. That would result in very unmusical singing.

Although the *bottom-up* model can describe sight-singing as a linear activity, it does not give a complete description of the processes involved in sight-singing. It is therefore necessary to consider other possible models.

2.6.2 Top-down model for reading

The *top-down* reading model is an alternative for the *bottom-up* approach. In this model, the existing knowledge of the reader plays an important role. According to Zakaluk (2002: 4), the reader first observes the visual matter and forms a hypothesis on the words that will follow. He will then use the meaning of the words to confirm his hypothesis. If he was wrong, he observes the text again and forms a new hypothesis. To understand the *top-down* model for reading, it is necessary to define it. Waters (1999) defines a *top-down* reading model as a model that

- emphasises what the reader brings to the text
- says reading is driven by meaning, and
- proceeds from whole to part.

From this definition, it is clear that the background knowledge of the reader as well as the meaning of the text is of great importance in the reading process. In contrast to the *bottom-up* model, this model assumes that the reader anticipates some words before actually observing the letters of those words.

In Figure 2.2, the *top-down* model of reading is symbolised. The greatest emphasis in this model is on the meaning, while the letters and the sounds are both on the first level. The syntax (Level II) is placed between the letters (Level I) and the meaning (Level III), implying that this syntax should help or enable the reader to confirm the anticipated meaning.

According to the *top-down* model, sight-singing will include the following: the singer would observe the symbols and form a hypothesis about the pattern and the phrase(s) that may follow. He then compares his hypothesis to the actual notation. If it is not the same, he forms a new hypothesis. In some cases, like folk music, music is easily predictable and the process can coincide with this model. In other cases, as in contemporary art music, it is more difficult to form a hypothesis about the melodic or the rhythmic patterns. When this is the case, the process will be closer to what the *bottom-up* model describes. The emphasis on the reader's

existing knowledge and his background in the *top-down* model can symbolise how singers can read and think in phrases.

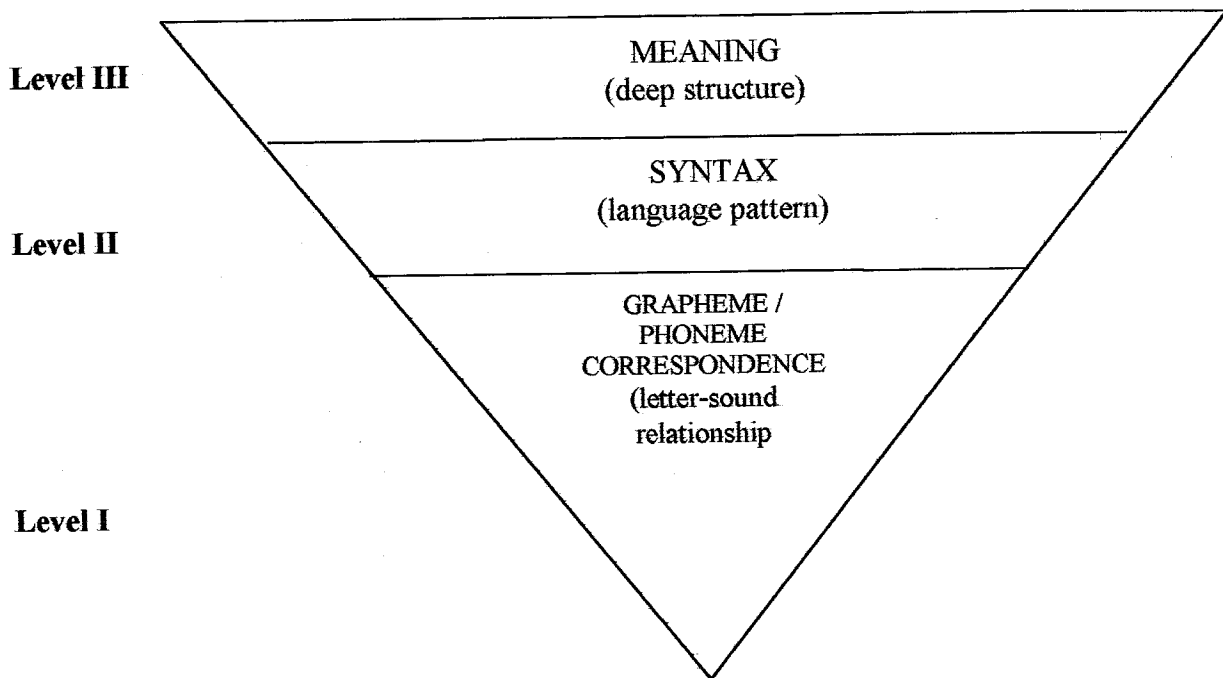


Figure 2.2: Top-down reading model (Zakaluk 1996: 5)

With more elements involved than only the text, it is likely that no single reading model for language would describe sight-singing accurately. The author therefore constructed a model describing the process of sight-singing.

2.7 A theoretical model for sight-singing

Singing from sight is a combination of different skills and mental processes. These skills and mental processes are represented in the theoretical model for sight-singing (Fig. 2.3). To sing from sight, the singer has to observe the written notation, process it mentally and express the music as sound, keeping in mind the meaning of the lyrics and the appropriate interpretation of the music. This can be described as phases of decoding, processing and re-coding.

The sight-singer has to observe the music notation of the work he wants to sing. A mental process then takes place during which the observed images are interpreted (decoded). After

interpreting the observed images, the singer expresses his interpretation of the visual symbols as vocal sound. In the final phase of the sight-singing process, the singer should evaluate each note and amend his singing if necessary. Each of the phases of sight-singing is described in the following paragraphs.

The arrows in the figure indicate that each phase of the sight-singing process leads to the next one. The broken lines connecting *Evaluating* to the other phases of the process indicate that the singer should evaluate every phase of the process if he realises that his singing does not correspond with the music he anticipated.

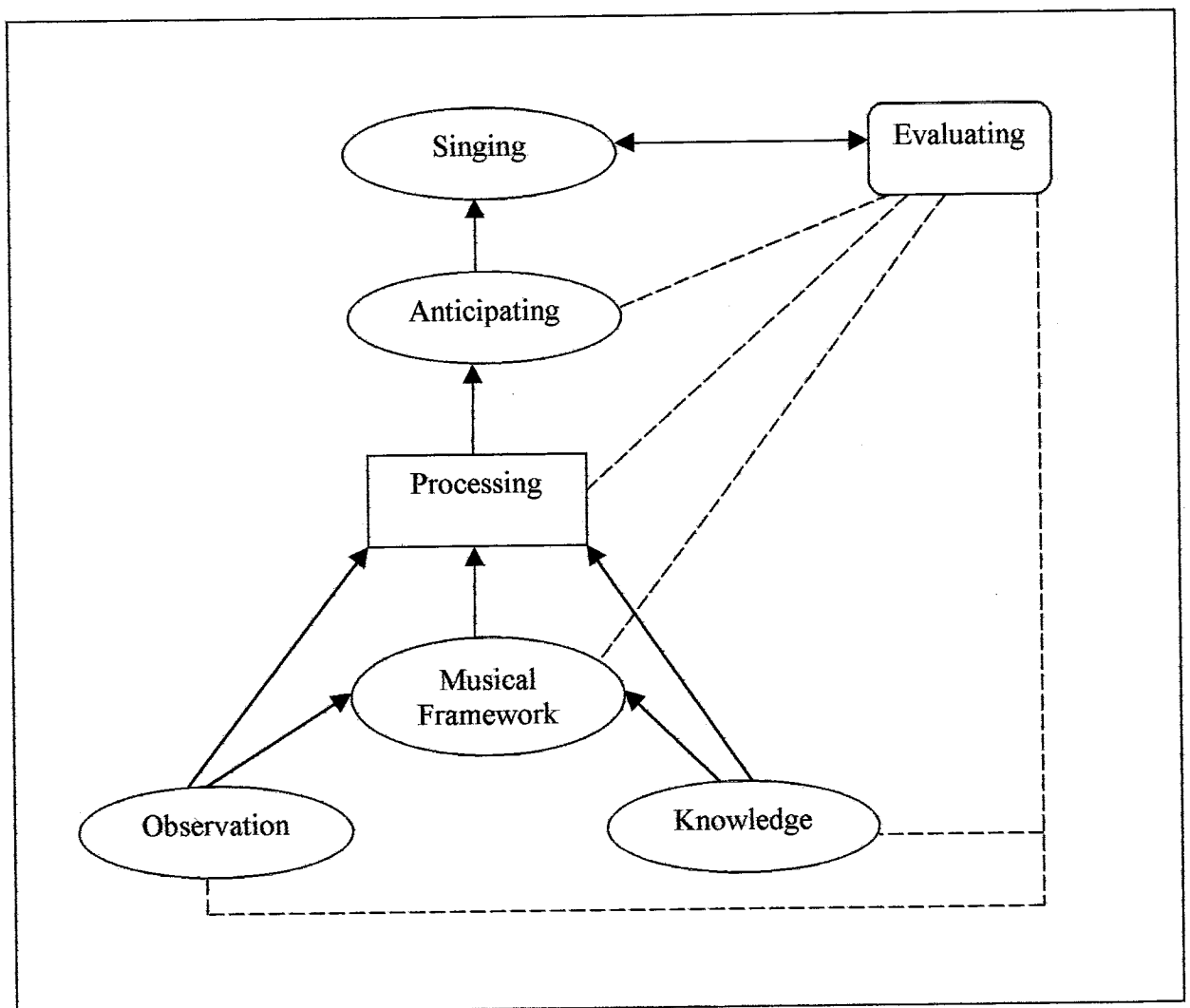


Figure 2.3: Theoretical model for sight-singing

2.7.1 Observation

In the first phase, the sight-reader observes the music notation. It is important that he should take note of all the relevant information before starting to sing and while he is singing.

Before starting to sing, the sight-singer should observe several elements of the music. These elements are the following ;

- *The title of the work.* This can give an indication of whether this piece is a part of a larger musical work and how it should be sung.
- *The composer.* Knowing who composed the work and when he lived, can suggest the style in which the work is to be interpreted.
- *The tempo indication.* Although this is only a guideline, the tempo indications can give the sight-singer guidance regarding the tempo and the character of the piece.
- *The clef.* The author has experienced that young sight-singers often do not observe the clef, and consequently try to sing in the wrong clef. Beginners will most likely only be confronted with the treble clef and, later, with the bass clef.
- *The time signature.* The singer should know whether the piece is in simple or compound time, how many beats to expect in each bar and what the duration of each beat is.
- *The key signature.* Without wasting any time, the singer should be able to recognise the major key as well as its relative minor.
- *The mode.* Glancing through the music, taking note of accidentals in the music as well as prominent notes, the singer should determine whether this piece is in the major or the minor mode. More advanced sight-singers may be confronted with other modes or atonal music.
- *The starting note.* The singer should take note of the specific pitch the piece starts on and relate this to the key of the piece.
- *Complicated rhythmic patterns.* Glancing through the work, the singer can quickly observe rhythmic patterns that may seem complicated. If there is time before starting, the singer should ensure that he is able to perform those rhythms accurately.

- *Difficult intervals.* While looking through the music the singer should make sure that he can sing all the intervals in the piece. He should take special care where accidentals are involved.
- *Changes of time, key or clef.* While looking through the music, the singer should take note of any changes of time, key or clef. He should decide what to do at those specific moments in the music.
- *Text.* The sight-singer should see how the text fits with the music. If the text is in a foreign language, the singer should decide whether he could sing the words or rather sing the melody on the tonic sol-fa syllables or on a neutral syllable.

Taking note of all of these elements before he starts should help the singer to sight-sing the music much more accurately than would be the case otherwise. It is of great importance that the sight-singer should keep these elements in mind while he is singing the music. The elements that he observed before starting to sing act as a point of reference for the whole performance of the work.

It is not only necessary for the sight-singer to observe musical elements before starting to sing, but it is equally important to observe a great number of musical elements while singing. Telfer (1992b: 8) mentions that singers who have trained their eyes to keep moving from left to right keeps the beat better and sing rhythms more correctly. Yutar (2002) agrees strongly with this statement, explaining that a sight-reader's eyes should always be a couple of notes ahead of the one that he is singing or playing. When the sight-singer observes the music ahead of what he is singing, he can anticipate the music that he is going to sing. This, in turn, enables him to compare his singing to the anticipated music, and to sing in musical phrases. The author has experienced that learners who do not look ahead are not able to keep a steady tempo.

While sight-singing a piece of music, the singer should constantly observe the following, while keeping in mind the elements that he observed before he started to sing:

- *Durations of the notes.* These durations are used in combinations to form different rhythmic patterns.
- *Pitch of the notes and intervals between notes.* The sight-singer should observe each note's pitch in relation to the preceding and following notes.

- *Accidentals.* The sight-singer should decide how the accidental will influence the pitch he is about to sing.
- *The text.* It is important that the text should fit in with the rhythmic patterns of the music. The singer should therefore constantly compare the text to the rhythm.
- *Indications of change in dynamics, tempo or character.* The musical terms written above or below the score, as well as symbols indicating these, should be carefully observed.
- *Own singing.* It is of the utmost importance that the singer should listen to himself while he is singing from sight.
- *Other singers.* It is of similar importance that the sight-singer should listen to other singers when he is part of a group. Listening to other singers performing the same part or other parts can enable a sight-singer to make sure that he is singing correctly. By following the notation of other parts, the singer can see when he should enter after a rest and how his part fits in with the whole of the piece.
- *Accompaniment.* The accompaniment often provides aural clues that can help the singers to keep within the context of a particular key.

While the sight-singer is observing all these different elements of the music, the visual and aural observations are interpreted according to the singer's relevant knowledge.

2.7.2 Relevant knowledge

A wide range of knowledge can be relevant when singing a piece of music from sight. Every singer has a unique body of knowledge, which he uses to interpret the observations he makes. Without the necessary knowledge, the singer will not be able to understand what he observes, and, consequently, will not be able to reproduce the music that is notated.

Gathering knowledge is a time-consuming process and there are many theories on how exactly learning takes place. For the purpose of this discussion, it is enough to take note that knowledge is an essential prerequisite for sight-singing.

In the book *Common sense in music teaching*, Lovelock (1965: 19) states three principles about learning that are of great significance to the sight-singing student:

1. All that we learn is ultimately based on memory.
2. All that we learn is cumulative.
3. All that we learn must be based on understanding.

Memory enables us to store information and recall it when the information is needed. The student should be aware of the fact that learning is a cumulative process. New knowledge can only be understood if it is integrated into the learner's existing knowledge. It is equally important to remember that knowledge is only useful if the learner understands it. In learning sight-singing, the student's knowledge should be sufficient to support his reading, interpretation and performance. The knowledge that is essential for sight-singing is described in section 2.5 of this chapter.

The singer uses this knowledge in combination with his observations regarding the music notation to form a musical framework as reference for his singing.

2.7.3 Musical framework

Using his knowledge to allocate specific meanings to the notational elements he observed, the singer creates a musical framework within which he can perform. This framework acts as a reference to relate each of the different musical elements to each other. Bennett (1984: 63) describes this musical framework as the singer's own "internal reference points".

Each note of music is related to the previous notes and those that follow. When one sings or hears music, you relate the note you are hearing to the previous ones. You also anticipate the notes that will follow. In a similar way each phrase, section or movement is related to the preceding and the following ones.

The musical framework consists of different elements, namely key, metre, tempo, style and character. Using the musical framework for the specific piece, a singer can process the observations that he made.

2.7.4 Processing the observations

Interpreting the written symbols of music notation requires the sight-singer to use his existing knowledge to give a particular meaning to the elements of music that he observed. To interpret each element, a mental connection is made between the visual or aural information and the relevant existing knowledge. The singer recalls the relevant knowledge from his memory and uses this knowledge to give a meaning to the symbol that he observed. When the visual symbol has a specific meaning for the singer, he can form a mental image of the music, anticipating the sound.

Ideally, the singer constantly compares the pitch and duration of the current tone with the previous ones in its relationship to the musical framework. At the same time, the singer should anticipate the next note or phrase to ensure that they will have the desired pitch and duration. While reading the music notation, a complex internal thinking process is taking place. The singer compares the visual image of the music notation to the acquired knowledge and associates the symbols with the anticipated pitch, duration and other musical aspects such as tone, intensity and articulation. This whole process takes place while he is sight-singing. For beginners the interpretation process takes some time, but with practice the process gets faster and happens without the singer being aware of it.

2.7.5 Anticipating the music

Resulting from his processing and interpreting of the notation, the singer can anticipate the music that he is about to sing. This anticipation implies that he should hear the music with his inner ear. Hearing the music without sound can be compared to reading text without pronouncing the words. The reader understands what he is reading and he has a good idea of what it should sound like, without actually making a sound.

Only when a sight-singer is able to anticipate the music that he is about to sing, can he sing accurately and in a musically acceptable manner. This ability to anticipate the music enables the singer to prepare his vocal and breathing mechanism to produce the desired sounds.

Anticipating the music before actually sounding a tone, is equally important for instrumentalists. Unlike singers, instrumentalists can play a note or a phrase without having an indication of what the music would sound like because the instrument produces the sound. Without forming a mental image of the music, and anticipating how it should sound, an instrumentalist can play music from sight. Prof. Ella Fourie, who researched piano sight-reading, explained that the result of this type of sight-reading will, most likely, not be musically satisfying. A traditional music instrument such as a piano or a melodica can help with pitch, but it cannot play rhythm on its own.

2.7.6 Singing the music

Singers reproduce music with their voices as musical instruments. Unlike an instrumentalist, a singer does not use a man-made aid to produce sound. This means that the singer should be able to control his voice in such a way that he can produce the sound that is needed. A good singing technique can ensure that the singer produces the desired tone and that he is able to reach the notes that the composer requires.

Bruce Schoonmaker (2002b: 1), lecturer in vocal technique at Furman University in Greenville, USA, explains that “the technique of singing deals with concepts of tone and beauty, musicality and meaning and expression and identification.” Due to the limited scope of this thesis, the author will accept that the reader already possesses the necessary vocal technique to produce the desired tone.

2.7.7 Evaluation

The sight-singer should listen carefully to his own singing as well as to other singers and the accompaniment. He should compare the pitch he is producing with the pitch that he anticipated. If the two are not the same, the singer should determine the mistake while continuing to sing. It may be that his anticipation was wrong. If this was not the case, he should confirm whether his interpretation, musical framework, knowledge and observations were correct. When he determines his mistakes, the sight-singer should concentrate to sing the following notes the way it should be sung, not repeating the same mistakes.

When sight-singing is described as such a complicated process, executed in a limited time, it may seem to be an impossible skill for anyone to master. Sight-singing is indeed a complex process, but the human brain is capable of mastering this process in such a way that it becomes an involuntary skill. With sufficient practice and systematic progress, the majority of learners should be able to read music notation and sing the music that they read.

2.8 Criteria for a sight-singing programme

After describing the mental processes involved in sight-singing, the author can suggest criteria for compiling sight-singing programmes. The importance of the suggested criteria as well as the criteria is stated in the following paragraphs.

2.8.1 The importance of criteria for sight-singing programmes

Specific criteria can be a guideline for the author to compile an effective sight-singing programme. It can also help teachers and learners to select appropriate materials for their specific needs. These criteria should include content, media use, grading of content, exercises, evaluation, feedback and record keeping.

The criteria are derived from literature on sight-singing, interviews with various experts, as well as from the author's own experience teaching sight-singing to choristers of different ages. These criteria can be used to evaluate existing sight-singing programmes, as in Chapter 5, or to design new ones for specific learners or circumstances, as in Chapter 6. After a discussion of each individual criterion, all the criteria are summarised in a table.

Demorest (2001: 28) conducted an informal survey via the World Wide Web, involving 178 choral directors throughout the USA and Canada. These directors were asked to grade a list of features of sight-singing materials and to name other features that they believe to be important. According to this survey, the most important features of sight-singing methods are:

- The material is graded for difficulty.
- The material includes minor melodies.
- The material features separate pitch and rhythm reading exercises.
- The material provides evaluation opportunities.

- The material includes music theory information.
- The material is sequential with lots of exercises at each level.
- The material includes the treble and the bass cleff.
- The pitch range of the exercises is limited.

Although this survey was done on another continent, the author believes that a similar survey in South Africa should provide similar results. This list of features can serve as a basis for criteria for sight-singing materials.

2.8.2 Criteria regarding the notation system

Apel (1983: 578) defines notation as “the method or methods used for writing down music.” Various systems of music notation are being used all over the world, each one with advantages and disadvantages. The different systems have evolved through several centuries. The notation system that is most commonly used to notate Western music is **staff notation**. The advantage of this system is that both pitch and rhythm can be notated very accurately. Text can also be written with the music. The disadvantage of staff notation is that only intervals consisting of tones and semitones can be notated. Non-western music such as Chinese and Indian music cannot be notated accurately with staff notation.

Bent, Hughes, Provine and Rastall (2001) explain that musical notation basically requires “an assemblage of signs and a convention as to how these signs relate to one another.” It is very important that a sight-singing programme should provide the learners with explanations of the signs that are used in the notation system, and how they are used. Learners should be guided to read the different elements of the notation system and have the opportunity to practise reading it.

The notation system used in a sight-singing programme should represent the bulk of music that the learners will most likely sing. The learners at the Drakensberg Boys’ Choir School and most other South African schools sing mostly Western and African music. Both these types of music can be notated reasonably accurately in **staff notation**.

Tonic sol-fa is a notation system in which every degree of the scale is associated with a specific syllable. This association can help sight-singers to anticipate the music before singing it. Using the tonic sol-fa helps learners to make the abstract concepts of music more concrete. Although many South African choristers rely only on the tonic sol-fa system (according to Botha 2002), the author suggest that tonic sol-fa should only be used as an aid, with staff notation as the main system of music notation.

The basic information that learners need to be able to read staff notation is the following:

- The staff consists of five lines and four spaces. To extend the staff, ledger lines can be used.
- A treble clef or a bass clef at the beginning of a line of music indicates the pitch of the notes G or F respectively.
- A time signature at the beginning of a piece of music, or a section, indicates the metre of the music. The top number indicates the number of beats, while the bottom number indicates the note value of each beat.

2.8.3 Criteria regarding learning

A sight-singing programme should include explanations of all the concepts that are encountered in the programme. These concepts should include:

- the notation system (staff notation or an alternative system)
- sight-singing aids (e.g. tonic sol-fa, Chev  system)
- pitch
- intervals
- beat, metre
- duration
- rhythmic patterns
- melody (combining pitch and rhythm)
- performance indicators (musical terms, tempo indications).

2.8.4 Criteria regarding practising

In order to improve sight-singing skills, it is most important that singers should practise these skills regularly. DeLane (1981: 3) gives valuable suggestions for practising sight-singing. Each of these suggestions is worth considering.

- “Like any musical skill, sight-singing demands continuing, rigorous practice.” Many skills such as singing, reading or walking require regular practice. Sight-singing as a skill is definitely no exception. The learner should have sufficient material to practice each concept that he has learned. Even a good sight-singer should practice this skill regularly.
- “When you read, be sure that the music is sufficiently aligned with eye level so that you do not have to bend or slouch to maintain eye contact with it.” When a singer holds the music in this position, he can produce a good tone by maintaining a straight posture. Choristers holding their music in this way can easily follow their conductor.
- “Try to keep your eye moving ahead of the notes being performed [...]. In other words, read ahead.” By doing this, the singer can anticipate the notes and phrases before singing them. This can help singers to sing accurately from sight and to keep a steady tempo.
- “Keep moving.” Sight-singers should aim not to stop or to start a piece over again. DeLane states that it is better to make some pitch and rhythm mistakes than to stop, or to start over.

These statements by DeLane underline the importance of practice in learning sight-singing. It is therefore essential that a sight-singing study package should contain enough exercises to enable learners to practice their sight-singing.

2.8.5 Criteria regarding teaching method

The way that sight-singing is taught can have a great influence on the learning outcomes. Various aids for teaching sight-singing were developed through the centuries. These sight-singing aids include the use of syllables (e.g. tonic sol-fa), numbers and graphic representations of pitch. The author is of the opinion that using one such a teaching aid for

pitch and one for rhythm can be a great help to the learners. Using more than one system for pitch and rhythm can be confusing (e.g. using numbers at first and then tonic sol-fa).

The possibility exists that when learners are confronted with different aiding systems, they will not be able to choose the most suitable one and consequently not use any of them. The most suitable systems to use in South Africa seem to the author to be the tonic sol-fa for pitch and the Chev  system for duration of notes.

2.9 Summary

Sight-singing is a complex process, which requires the singer to master specific knowledge and skills. The sight-singer needs knowledge regarding pitch, rhythm, key, metre, the notation system, the lyrics and the style of music. He also needs to acquire and practise the skills of observation, processing of information, anticipating the music, singing, and evaluating the singing. The author compared sight-singing to reading language by discussing two different theoretical models for reading in section 2.2.6. This discussion explained two contrasting views of the reading process. The models are used as examples for compiling a theoretical model for sight-singing.

A theoretical model for sight-singing was presented in section 2.7, symbolising the process of sight-singing. Each phase of the sight-singing process was described according to the theoretical model. The sight-singer observes the music notation and uses this observation with his knowledge to form a musical framework for the piece of music. The information is then processed within the specific framework, while referring to previously acquired knowledge. Processing the information enables the singer to anticipate the music he is about to sing. When he knows exactly what to sing, he sings the music and, at the same time, evaluates his singing according to all the previous steps in this process. If necessary, he changes his further singing to ensure that it will be correct.

In section 2.8, criteria for a sight-singing study package were suggested. These criteria can help instructional designers to design effective instruction for this skill. Since sight-singing is a very important skill, and as SAQA has invited stakeholders to propose unit standards for different aspects of education, unit standards for sight-singing are offered in the next chapter.