A Critical Study of Voice Teaching Method, with Specific Reference to Solo Singing, Choral Singing and Vocal Health for the Teenage Singer

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Submitted in fulfillment of the requirements for the degree of Magister Musicae in the Faculty of Arts at the Nelson Mandela Metropolitan University

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In accordance with Rule G4.6.3, I hereby declare that the above-mentioned dissertation is my own work and that it has not previously been submitted for assessment to another University or for another qualification.

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ACKNOWLEDGEMENTS

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DECLARATION OF ETHICS

I hereby declare that this research was conducted with due cognizance of the ethical considerations involved. To this end:

- Research subjects were informed of the aims and the objectives of this study
- Research subjects participated in this research on a voluntary basis
- Research subjects gave the researcher permission to use their responses in the writing of her dissertation.

**Signature:**

**Name:** MADELIE CHARLOTTE OLIVIER

**Date:** January 2012

**Place:** Port Elizabeth
ABSTRACT

This dissertation presents a critical study of voice teaching method as this pertains to the high school learner studying voice within the South African educational environment, with learning outcomes determined for subject music within the GET (General Education and Training) and FET (Further Education and Training) bands of the Department of Basic Education at each school grade level, as well as by external examining bodies such as Unisa (University of South Africa), Trinity Guildhall and ABRSM (Amalgamated Board of the Royal Schools of Music). Emphasis is placed on the methodological principles applicable in the case of the Western classical music solo vocal repertoire, but reference is also made to the applicability of this method in other vocal genres and, in particular, in the case of choral music participation. Special attention is given to the subject of the vocal health of the developing teenage voice, which includes an overview of vocal disorders and suggestions for rehabilitation and remedial programmes where necessary.

Triangulation of research results is achieved in this study through inclusion of:

- A thorough survey of selected pertinent bibliographic sources
- Description of and engagement with the researcher’s own numerous phenomenological encounters in this field
- Interviews conducted in Port Elizabeth with Jill Nock, voice teacher, on the subject of voice teaching method, and with John Black, Ear, Nose and Throat Specialist, on the subject of vocal health.

The researcher concludes that there is a need for continued education and training of music educators in the South African high school environment, many of whom are not trained voice specialists, in order to cater for the growing number of high school music learners who choose to specialise in voice. Although educator networking can go a long way towards creating an informal support system to address this need, it is ultimately the responsibility of the Department of Basic Education to address this in a formal and all-encompassing fashion.
KEYWORDS

- Teenage/Adolescent singer
- Voice teaching method
- Voice educator
- Vocal health
- Solo singing
- Choral singing
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CHAPTER 1

INTRODUCTION TO THIS STUDY

1. **Aim and scope of this study**

The main aim of this dissertation is to present a critical study of a body of knowledge relevant to the teaching of voice, particularly as this pertains to methodological approaches appropriate for the high school learner (grades 8 – 12), taking into account the vocal health of developing teenage singers and the relationship between their involvement as solo singers and choral singers respectively.

Babbie & Mouton (2001: 79-81) explain that three of the most common and useful purposes of social research are exploration, description and explanation. By **exploring** a topic an overview is presented to convey a basic familiarity with the topic; **descriptions** refer to the way in which the researcher communicates scientific observation, with scientific descriptions being typically more accurate and precise than casual ones; and **explanations** indicate causality between variables or events. A given study may have more than one of these purposes. In this dissertation the focus is primarily on exploration and description, but explanation also features in the various phenomenological encounters discussed, namely, encounters with voice learners and fellow educators in my capacity as voice educator, encounters with educators in my capacity as learner and student of voice, and encounters with choral singing in my capacity both as chorister and as high school choir director.

While this chapter forms the introduction to the study, chapter 2 provides a general overview of literature on voice teaching methods. Chapters 3 and 4 focus on methodological principles and practices that pertain specifically to the high school learner (South African school grades 8 – 12) studying Western classical singing. Chapters 3 and 4 draw from the literature study, but are further informed by the various phenomenological encounters described above. Chapter 5 is a continuation of chapter 4, focusing on the
identification and correction of vocal faults. The method put forward on these grounds in chapters 3, 4 and 5 is by no means definitive, but represent principles and approaches that I have found to work for me as educator within the current South African school situation and education system and also as private voice teacher.

The next three chapters serve to provide a context against which the proposed methodological principles should be understood. Chapter 6 comprises an explanation of basic physiological facts relevant to the voice and phonation. From this follows research into the vocal health of developing singers in chapter 7, with specific reference to learners doing voice as subject. This includes an overview of vocal disorders that may affect such learners, with possible rehabilitation and remedial programmes (under medical supervision, where necessary). This overview draws from existing literature in the field and from an interview conducted with Dr. John Black, a Port Elizabeth-based Ear, Nose and Throat specialist, in addition to which it encompasses my phenomenological encounters – my own remembered experiences – as teenage singer/learner doing voice as subject.

The relationship between solo singing, choral singing and stage performance will be considered in chapter 8, with reference to technique, adaptation and vocal health. Again this will be done by way of both an overview of current literature and a critical engagement with my own phenomenological encounters in the field, in this case:

- As chorister and soloist of several choirs, including the Framesby High School Choir, the Eastern Cape Children’s Choir and the Nelson Mandela Metropolitan University (NMMU) Choir
- And also as conductor of the Harvest Christian School Choir.

Chapter 9 forms the conclusion of the dissertation.

2. Context

Although popular and scholarly sources on voice teaching are fairly commonly available, some of them leave much to be desired regarding teaching actual technique, whereas others focus more on class music, singing popular music
or on the adult voice. It is very rare to find any literature that focuses exclusively on the needs of the adolescent voice, one that presents a method that is both technically sound, as well as simple enough for any music or voice educator to follow, and one that is relevant within the South African school situation and syllabus guidelines. Local (South African) sources on vocal health are also not readily available, especially with reference to young voices. Sources that are available are by and large on the Internet (where they are often used for commercial gain to promote remedies) or from the international (mostly adult or professional) market. The majority of local school educators and private voice teachers find it difficult and too costly to buy international books or journals. These books and journals are also generally not available in public libraries and those at academic libraries are only available to registered students and staff of these institutions. The majority of these educators also teach in towns or areas where such institutions are out of reach. As many educators unwittingly put their learners' voices at risk through risky teaching methods or by not stressing the importance of avoiding detrimental practices and behaviour, it is important that they should be made aware of such a significant aspect of this very sensitive instrument.

Taking this idea into the school choir, it is the conductor's responsibility to ensure that the young learner develops his/her voice in an optimal way without damaging it. My own experience has taught me that it is possible for the conductor to develop ways in which to manage and guide both the soloist and the chorister. The choir is usually the first (and often only) contact situation where the young singer/learner may well be taught vocal hygiene and basic technique; if the conductor is incapable of making the most of this, it is an educational opportunity lost.¹

Although guides on choir singing and choral conducting abound, almost no sources are available on the assimilation of the young soloist into a choir. Because the learner doing voice as instrument is often used as voice group leader or soloist, there are aspects regarding vocal health and technique that need attention. As conductors are not always aware of this, young soloists

¹ See also footnote 3 regarding choristers who eventually even act as voice educators.
should be taught how to manage their own choir participation in a way that will not be harmful to the voice, but will optimize their enjoyment in participating, whilst also developing vocal strength and technique.

3. **Rationale**

The rationale motivating this study is in the first instance personal. To start with, it will serve as basis for my own career as voice educator. Although I majored in voice as instrument in my undergraduate studies in music education and am passionate about singing, I never attended courses in the teaching method of voice, but, in order to broaden the scope of my training and my subsequent employability, chose instead to enroll for courses in the teaching method of piano. As it is my goal to develop into a proficient and authoritative voice educator, I wish to research the available literature for useful teaching techniques and to find ways in which this might resonate with the thorough grounding in vocal technique, various aspects of vocal performance and teaching I gained through my years of study with Jill Nock, Port Elizabeth-based voice teacher, and to complement this also with what I have since learnt from my experiences as voice educator at schools.

Education involves lifelong learning for those who have the necessary enthusiasm, dedication, motivation and eagerness to learn and to teach. In addition, I hope that my experiences and phenomenological encounters as relative novice may present an alternative point of view and frame of reference with which the young, inexperienced and even under-qualified or unqualified voice educator can identify.

I am also keenly interested in vocal health and choir singing. This interest stems from my own experience as ardent choir singer/soloist and in this respect, unfortunately, also from some negative experiences regarding vocal health.

Boytim (2003: 64) distinguishes between song teachers and voice teachers or educators. The teaching styles of these two groups differ fundamentally in that song teachers focus on product, whereas voice teachers are educators who focus on both process and product.
A song teacher or vocal coach (who, as one with little, no or inferior training is unfortunately often found within the formal South African school education system) has the learner or teenage singer learn to sing songs with a taped recording of the melody that they make themselves, or often by singing along with the learner/singer. The teacher may well do a few warm-ups, but adds nothing further technically. Over a period of time, the learner/singer may at best have learnt a limited number of vocal technique skills and music fundamentals. A song teacher is often someone who sings, but does not have the proper credentials or motivation to be a quality voice educator.

The voice teacher/educator, on the other hand, teaches vocal refinement, technique, and all the skills necessary to make learners better musicians, with the ultimate goal of having individuals who will eventually be capable of teaching their own learners.²

Judging by the informal feedback received from several learners during their voice lessons, from educators in the Nelson Mandela Metropolitan area, as well as from my own experience, song teachers are to be found everywhere, whereas real educators teaching voice as instrument are extremely rare. It is hoped that this dissertation might serve as a guide to the many song teachers or music educators out there, who lack the fundamental skills, but have at least the motivation and dedication to develop the talents of their learners doing voice as instrument, so that they will be able to show true progress in their singing and will be able to become mature, skilled and independent singers who will have mastered the basic technique in order to hold their own and even eventually become effective voice educators themselves. Correct technique not only helps voice learners to optimize their natural talent, but also prevents bad singing habits and vocal injury, especially in young developing voices, so that learners studying voice will enjoy their gift well into maturity.

Apart from my own interest in this research, a second basic motivation for writing this dissertation is therefore my belief that there are not enough suitably qualified educators teaching voice as instrument for school subject

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² Characteristics of the voice teacher/educator is explored in Chapter 3: Section 2.2, p.40-43.
purposes in the Nelson Mandela Metropolitan area. The precarious situation of music educators in schools is made worse by the fact that they have to turn away potential learners doing subject music, if they feel that they do not have the skill or qualification to teach these learners properly in the instrument of their choice (for whatever reason), or for which they have a talent. It is hoped that this dissertation may go some way towards addressing the need for information and training in the teaching of voice on the part of many music educators, although, given the fact that subject music is accommodated as official Further Education and Training (FET) subject, it is of course ultimately the responsibility of the Department of Basic Education to identify this need and address it in a concerted, all-encompassing and organised fashion.

Voice as instrument is particularly suited to the situation in which learners and educators from previously disadvantaged communities find themselves. Providing voice as instrument in schools is a more accessible and cheaper option than private lessons and will definitely benefit these learners, as well as all other talented learners who do not have the means to pay for expensive lessons.

With the new 2012 curriculum applicable in all South African schools, learners are allowed to start with music as a subject in grade 8. Some of them have not had instruction in any musical instrument before. Voice is an ideal instrument for these late beginners. Music is also one of the FET learning areas that may be chosen for the Senior Certificate examination, starting in grade 10 when learners are generally between 15 and 16 years of age, which is the ideal age for starting with voice training. Many learners wish to do voice as their instrument, but there are few qualified educators for this instrument at schools and learners cannot be readily accommodated elsewhere. Some learners receive private lessons, but only a limited number of them can meet

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3 This is substantiated by informal and formal networking with colleagues from schools across the metropole, NMMU students and friends in the profession. A number of my friends who have had little more vocal training than a background of choral singing (some even still from high school) are voice educators at prominent high schools in the area. Some music educators (usually educators teaching piano) just “help out” to get voice learners through grade 12.

4 See Curriculum and Assessment Policy Statement (CAPS) – Creative arts for grade 8 and 9 – Music is part of this subject; see also Curriculum and Assessment Policy Statement (CAPS) – Music for the FET phase.
the expense of this, whereas most cannot afford the luxury of singing lessons outside of school or even the expense of the necessary transport.

A guideline to singing method should be helpful, especially if combined with workshops and proper guidance. Music educators at schools are involved in teaching other instruments and the other aspects of the syllabus for subject music. Doing voice instruction may therefore seem like an added burden, especially if the educator is not properly qualified to do so. The music educator/educator teaching voice is often involved with the school choir as well and the method proposed in this dissertation may serve as technical basis for this also. If the educator teaching voice is not the choir conductor at the school, he/she may use the singing method herein proposed to assist the choir conductor in training the choir members who are soloists. It is my wish, therefore, that the formulation of this basic teaching method for voice will assist music educators and contribute towards improving the situation for educators and learners alike.

4. The research problem

This study responds to the perceived need for the formulation of a basic technical method for voice teaching in the case of the teenage singer, within the following contexts:

- The dirth of literature on the topic devoted to this target group in particular
- The educational environment in which voice as subject is taught to this target group in South Africa in general, and in the Nelson Mandela Metropolitan area in particular, including the need to respond the graded syllabi of the external examining bodies for music (University of South Africa (Unisa), Amalgamated Boards of the Royal Schools of Music (ABRSM), Trinity Guildhall, etc.), the need to work within the parameters of the required learning outcomes of the graded syllabi for the senior phase of the Department of Basic Education General Education and Training (GET) band (school grades 8 and 9) and that of music as a subject within the FET band (school grades 10, 11 and 12), the need to acknowledge that most music educators within this
environment are not necessarily trained voice experts, and the need to acknowledge the relationship between solo singing and choir singing within the school

- The value of the so-called “phenomenological encounter” (Von Manen 1990), wherein “that domain of experience that occurs in our direct acquaintance with things, as opposed to what occurs secondarily through abstract reflection” (Barnacle 2001: 1) is afforded primacy of place in the research endeavour.

5. **Delimitations of the study**

The following delimitations are applicable in this dissertation:

- The study will not take into account the level of professional training of the educator, but will assume at least a reasonable knowledge of music and singing.

- The study will not attempt to predict or measure the success of said educators when using the proposed teaching method or remedial programmes.

- The study will not attempt to present any guarantees regarding curing vocal disorders.

- The learner cases referred to are limited to my own learners who are/were high school (grades 8 – 12) learners during the period of the research towards this dissertation.

- The study will not include reference to appropriate learning in music history, music theory, music appreciation or choral conducting.

6. **Definition of terms**

The term ‘voice educator’ is used in two contexts in this dissertation.

- First definition of voice educator: According to the definition previously given by Boytim, a voice educator, as distinct from a mere song teacher, is one who, in addition to repertoire, teaches vocal refinement, technique, and other musical skills (Boytim 2003: 64). However, for the purposes of this study, this definition will exclude reference to studies in music history, music theory or music appreciation.
Second definition of voice educator: To align the terminology in this dissertation with that of the Department of Basic Education, the term voice educator (educator teaching voice) will be used to refer to teachers of voice within the South African school or formal education context, especially in chapters 3 and 4.

Voice teacher: In contrast to the second definition of voice educator given above, the term voice teacher will refer to voice teachers in general, especially as in chapter 2, or to teachers in private practice.

Voice learner – To align the terminology in this dissertation with that of the Department of Basic Education, the term voice learner (learner doing voice) will be used within the South African school or formal education context, especially as in chapters 3 and 4.

Singer/Teenage singer: In contrast to the definition of voice learner given above, the term singer or teenage singer will refer to voice students (including teenage singers taking private lessons) or to singers in general, especially as in chapter 2.

Western classical singing – For the purposes of this study, the term classical as used in “Western classical singing” will refer to the more popular definition of the term as supplied by The Harvard dictionary of music (1970), denoting “music of established value and fame, as distinguished from ephemeral works that quickly disappear from the programs [. . .] art music . . . as opposed to ‘popular’ music or music for entertainment” (Apel 1970: 175, 176). In addition to Western art music repertoire, it may include songs from musicals and folksongs, and may refer in more specific cases to any songs from the syllabi of the Department of Basic Education or the external examination boards.

Grade: Although the context in which this term is used usually makes the differentiation between school grades and musical grades clear, for the purposes of this study, this distinction will further be indicated by capitalizing the musical grade (and naming the examination board, where applicable), e.g. Unisa Grade 3, whereas school grades will be.

5 See Curriculum and Assessment Policy Statement (CAPS).
6 See Curriculum and Assessment Policy Statement (CAPS).
7 Unisa, Trinity Guildhall and ABRSM.
written in lower-case letters only, e.g., as grade 12. This distinction in the use of the term “grade” is further obviated by the fact that musical grades for school purposes range from Grade 1 to 7\(^8\), whereas high school grades range from grade 8 to 12.

7. **Research design**

7.1. **Theoretical underpinning**

This is a qualitative study, drawing – at least in part – from the notion of the “phenomenological encounter”. Babbie & Mouton (2001: 33) explain the methodology of phenomenology and its association with the qualitative research approach as follows:

The insistence on an interpretive (Verstehende) understanding of the meanings and self-descriptions of the individual requires a methodology which emphasizes the following: unstructured observation and open interviewing; idiographic descriptions; qualitative data analysis (e.g. grounded theory), and objectivity understood as the inter-subjective attitude of the insider.

As a branch of philosophy and hermeneutics, *The Stanford Encyclopedia of Philosophy* defines phenomenology as “. . . the study of . . . the meanings things have in our experience. Phenomenology studies conscious experience as experienced from the subjective or first person point of view” (stanford/edu(entries/phenomenology 2008: 2). Von Manen stresses that “a good phenomenological description is collected by lived experience and recollects lived experience, is validated by lived experience and validates lived experience” (Von Manen 1990: 27). While in its ontological and epistemological grounding its intention is precisely to “ward off any tendency toward constructing a predetermined set of fixed procedures” (Von Manen 1990: 29), Von Manen nevertheless suggests that within the educational context, the following general guidelines may be helpful in the application of a phenomenological approach:

- Turning to a phenomenon which seriously interests us and commits us to the world
- Investigating experience as we live it rather than as we conceptualize it

\(^8\) Teenage singers are not ordinarily equipped to progress beyond Grade 7.
Reflecting on the essential themes which characterize the phenomenon  
Describing the phenomenon through the art of writing and rewriting  
Manipulating a strong and oriented pedagogical relation to the phenomenon  
Balancing the research context by considering parts and whole (Von Manen 1990: 30-31).

In this dissertation, phenomenological encounters inform the research in a number of ways. This study draws from my own lived experiences, firstly as teenage singer and later as student singer studying voice at the Jill Nock Studio in Port Elizabeth, secondly as one who has experienced vocal health problems in the past, thirdly as chorister of various Port Elizabeth based choirs over the years, and fourthly as voice educator and choir director at Framesby High School and Harvest Christian School (Port Elizabeth). It also draws from the lived experiences of others, in particular those of my teacher, Jill Nock, those of the medical practitioner Dr. John Black (as evidenced in the interviews conducted with them) and those of a selected number of teenage singers/learners whom I have taught in recent years.

However, whilst the notion of “lived experience” or the “phenomenological encounter” has undoubted value in the research process, this study also acknowledges what Robyn Barnacle describes as the “tension within phenomenological thought between theoretical and non-theoretical knowledge”, that “there is the danger that in the distinction between practice and theory the former will be valued over and above the latter; that the value that is attributed to what is learnt through personal experience, in other words, is done so at the cost of what might be learnt through theory or abstract reflection” (Barnacle 2001: 3). Instead Barnacle cautions that such lived experiences should be tempered with a return to its original intention, as contained in the writings of philosopher Edmund Husserl, namely, that “it [is] not that the objectivising, theorising and measuring practices of science

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9 See Appendix A. Learner cases (p. 248).
10 Barnacle here refers, inter alia, to Husserl’s seminal work of 1936, entitled “The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy”. 
should be abandoned, but rather, be re-situated in, and informed by, the world of perceptions and interest, valuation and action that constitute[s] our everyday experience of the world” (Barnacle 2001: 5). In order to achieve the requisite balance between lived and non-lived experiences of the issues at hand, therefore, this study draws from appropriate theory and literature in the field of vocal teaching methods as much as it does from previously-described phenomenological encounters.

7.2 Research methods
According to Denscombe (2002: 197-199), “proof requires that the ideas and explanations put forward by researchers need to be supported with reference to empirical evidence”, adding that “evidence can never prove that a theory is right, absolutely and for all time. The best that evidence can ever hope to achieve is support for a theory, for the time being.”

In the light hereof, triangulation of research results in this dissertation is achieved by applying the following three research methods to obtain information and supporting data, evidence and explanatory material:

- Critique of existing literature on the subject
- Semi-structured Interviews
- Personal experiences as examples of phenomenological encounters.

7.2.1 Literature
A list of literature that was consulted and referred to is provided in the bibliography. The results of this literature study are so presented as to provide a basis for theoretical abstraction against which data obtained through observation, interviews and phenomenological encounters are to be understood.

7.2.2 Interviews
Semi-structured Interviews were conducted with voice teacher Jill Nock, and Dr. John Black, Ear, Nose and Throat Specialist, under whose medical care I have been for the past nine years. The semi-structured approach was selected in order that each interview would proceed with the interview schedule as guide towards the information I was seeking, and yet to allow
each respondent the freedom to elaborate and even deviate from the interview schedule as they thought appropriate.11

7.2.3 Personal experience/Examples of phenomenological encounters

The phenomenological encounter is explained by Fisogni as one which stands in a dialectical relationship to academic dialogue or discourse, its research value and purpose deriving from the “phenomenological intuition that we cannot have any dialogue without an encounter”. Thus:

The encounter, far from being a simple “meeting”, plays a very strategic role in the building of the dialogue, because it poses the basis of the ethical commitment of the dialectic event (Fisogni nd:1).

As previously described, encounters used to illustrate the various arguments put forward in this dissertation are drawn from my involvement with voice learners and choristers in my capacity as high school voice educator and choir director, and from my own experiences as learner, student and chorister.

7.3 Research Objectives

Objective 1: To sketch a background and context for this study, calling for the need of a formulated method of voice education for high school learners.

Objective 2: To present a basic and comprehensive method for teaching voice to high school (grades 8 – 12) learners studying Western classical singing, including fundamentals of singing (like posture, breathing, emitting the voice, placing the voice, range, vocal technique, articulation and warm-up), choosing repertoire, learning a song, practice procedures, and preparation for examinations or performances.

Objective 3: To provide a basic overview of the anatomical and physiological aspects of singing, to serve as basis for the teaching of correct vocal technique and the identification and explanation of vocal disorders.

Objective 4: To give attention to the vocal health of adolescents in general and to provide guidelines in this respect. To highlight certain vocal disorders that may be suffered by this focus group and present courses of action and

11 See Appendix D. Transcriptions of interviews.
remedial programmes that may be implemented by the voice educator (where necessary, in collaboration with a medical expert/therapist in the field).

**Objective 5:** To explore the relationship between solo singing and choral singing in the case of the learner studying voice as instrument; to present courses of action and guiding principles to help such voice learners adapt to choral singing, maintain vocal fitness and strength and enjoy participation in a choir.

**8. Conclusion**

Although singing is perceived as the easiest way of making music, as the sound is produced by a natural “built in” instrument, the human voice is actually very complicated and phonation is more difficult to understand and examine scientifically than any musical instrument produced by man. As with most kinds of sport today, where a scientific approach urges the athlete on to greater heights, serious or formal singing is approached more technically and singers are taught to make the most of their talent and capabilities. For this a basic understanding of the physiology of the voice and optimal use of the vocal instrument will help improve technique and develop the voice.

Taking into consideration the great number of people performing on our stages and on television (e.g. at the Pop Idol auditions), who believe themselves to be good singers, while they really have little or no talent; it is clear that singing is much more difficult than most people think. The correct technique can go a long way towards improving the basic talent that a potential singer has, especially if it has been learnt from an early age. Therefore it is essential to have a good and thorough method of teaching the art of singing.

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CHAPTER 2

TEACHING VOICE – A LITERATURE SURVEY

1. Introduction

This chapter provides a survey of the literature pertinent to a teaching method used for the singing of classical music and light music\(^1\) of a suitable standard. Good methodological principles are equally applicable at all levels of classical singing, and therefore the principles highlighted in this chapter will inform those subsequently discussed in chapters 3 and 4, as these are to be applied in preparing high school learners for school and external music examinations\(^2\). In addition, these principles are not only applicable in classical singing, but form an excellent basis for vocal technique in any field. The singer who has mastered the rudimentary skills of classical singing should be able to apply these skills to any other genre.

This literature survey will be discussed against the background of my own tuition and experience as singer and as teacher/educator of teenage singers. It must be stressed that the purpose of this literature survey is to serve as information record for the voice teacher and any singer who should be interested in more detail regarding a specific aspect of singing. Though it is not the kind of information that needs to be presented to or learnt by teenage singers/learners in all its detail, Miller (2004: 209) states that “a child deserves the same genuineness of information as other people do. The style of presentation must be adapted to appeal to young minds, but the content must remain solid [. . .] A child, a youngster, and an adult all deserve to be given verifiable information, each at the appropriate level.”\(^3\) It may become part of their knowledge base through repetitive and casual mention by a knowledgeable teacher, but teenage singers should not be burdened by unessential facts or information not suited to their needs, level of development or grade. The priority of the teacher is that, while learning, the young singer should sing and enjoy it.

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\(^1\) Popular songs, musical theatre songs and folk songs.
\(^2\) See Appendix B. Examples of graded repertoire.
\(^3\) See also Appendix D. Transcriptions of interviews: Nock: Questions 4 and 5.
2. **Fundamentals of singing**

2.1 **Posture**

Before any singing technique can be taught, the suitable posture for singing has to be learnt. A great deal of muscle movement is going on inside the singer, so singing will be affected if the posture prevents these organs and muscles from moving freely. To sing efficiently, singers need all the body parts that are involved in breathing and the production of sound to be centered (lined up), thus allowing them to perform with as little tension as possible. If the body is slumped over, there will be more trouble taking the breath needed to sing, because bad posture and tension directly affect the muscles. Tension in the body also prevents the taking of a deep breath and makes singing more difficult (Phillips 2003: 17-25).

The part of the back involved in singing is from the bottom of the spine to the back of the head. This area is not naturally upright, that is, in a straight line, even in a standing position. There are four spinal curves (Figure 2.1) (Du Toit, Van der Merwe, Van Rensburg & Van Rensburg 1972: 128): one in the small of the back, one at the hips, one in the middle of the back and the fourth in the neck.

![Figure 2.1. The four spinal curves](image-url)

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The correct stance for singers is natural and very relaxed. Most faults related to poor alignment of the body can be corrected simply by making the singer aware of them, either verbally or with the aid of the mirror (Hayward 1994: 91). “In singing the body should be erect, balanced, stable and flexible, never rigid in any part, with the chest comfortably high. There should be a flexibly expansive ‘lift’ feeling in the chest and around the waistline with an accompanying condition of alertness and readiness for action” (Christy 1967: 33).

Common visual and audible mistakes relating to alignment include the following:

- Head tilted too high or too low
- Head or mouth tilted sideways
- Chin too high or too low
- Jaw thrust forward (usually related to a head tilted backwards)
- Raising the head for high notes
- One or both shoulders lifted
- The spine slumped forward, with shoulders and chest sagging and the abdomen pushed down
- One hip more forward, or standing with the weight mostly on one foot
- Knees pulled back
- Feet either too close together or too far apart
- Weight not balanced forward (Hayward 1994: 92).

Alignment faults should be corrected immediately since they contribute to additional faults and interfere with the correct functioning of the vocal instrument. Postural faults related to tension comprise either trembling, quivering and shaking, or rigidity. Muscles often shake because they have been held in tension for too long. Common visual and audible mistakes relating to tension include trembling legs; knees pulled back; shaking in any of the following: head, chest, abdomen, hands, arms, lips, jaw, tongue and throat. Since too much tension in one part of the body often influences adjoining areas, it is crucial that they should be located speedily, and the cause determined. Tension faults can generally be cured by doing relaxation exercises and by putting less strain on the muscles involved (Hayward 1994: 92-95).
2.2 Breathing for singing and for health

A well-developed technique of controlled breathing is invaluable for singers and beneficial for anyone’s general health. It will expand the chest with between 2 and 5 cm, tighten sagging stomach muscles and correct the posture. It also cleanses the lungs, re-oxygenates the blood efficiently and relaxes the tense singer. It is essential that the basics of breath control should be mastered before any formal singing is attempted. There are three aspects of breathing which the singer has to be taught:

- The ability to inhale large quantities of air
- The ability to snatch a good breath quickly.\(^5\)
- And the ability to control the escape of breath (Hewitt 1978: 1).

A singer has to breathe deeply to have enough air for singing long phrases and therefore has to use the full capacity of the lungs. The singer should learn maximum intake, how to use controlled minimum outflow and how to get the maximum use out of the outflow (Nock nd). Good breath control serves towards singing safely and adds power to the voice as breathing affects sound projection. ‘Singing on breath’ is the phrase that describes how the singer connects the breath to the tone or starts the sound by connecting it with air (Phillips 2003: 32).

The teacher needs to describe to the singer how the lungs are structured and the manner in which they work. Illustrations and demonstrations are essential.\(^6\) The lungs are pear-shaped – wider at the bottom than at the top. The narrow, upper sections are constantly used, but the broad parts at the bottom are rarely exercised. To fill them completely, the singer has to concentrate on the base of the lungs – not the upper chest. The diaphragm is positioned just underneath the lungs. In its resting position during exhalation it is in a convex position.\(^7\) On breathing in, the diaphragm moves downward into a concave position to make room for the lungs to fill with air. It moves on an involuntary basis so one cannot make it move other than with inhalation. The lower abdominal muscles are

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\(^5\) The “snatch-breath” technique is mostly for the advanced singer (in the senior grades), e.g. in long melismas (Baroque).

\(^6\) See Chapter 6: Figure 6.16, The respiratory mechanism (p. 141).

\(^7\) See Chapter 6: Section 5, The chest, lungs, diaphragm and trunk muscles (p. 140) for more detail.
primarily important in singing (Grant & Grant 2003: 35-39).\textsuperscript{8} They indirectly force and control the flow of air from the lungs. The lower abdominal muscles should relax on inhalation. This means that when the singer breathes out or phonates, the muscles will contract, pushing the air out and controlling its flow.\textsuperscript{9}

The word ‘support’, which is associated with breathing for singing, is difficult to explain in a simple way, and is therefore widely misinterpreted. The concept includes posture, relaxed respiration and command over the air pressure and expiration. In the Italian vocal tradition, the word for support is *appoggio*, meaning support from below. Support can be defined as all the work the muscles have to do to make the singing function as efficient and purposeful as possible. Marquart (2005: 47) defines the term ‘support’ as used by singers “to describe the conscious control of the air pressure within the throatic cavity (the chest). Its purpose is to produce ‘a singing tone’, rather than one which is breathy or weak.”

Unfortunately support is often explained in such a way that the singer understands it as pushing the abdominal muscles inwards. This creates a forced quality in the voice and results in wear and tear of the voice in the long run. A strong and good voice timbre does not rely on great air pressure under the vocal chords, even though it has to be the right compression. If the singer lightly massages the abdominal muscles just below the breastbone while singing and these muscles become too hard/tense, the pressure under the larynx is too great. This way the voice will sound forced (Bjørkøy 2000).

Hines (1997: 15, 17) describes the process of support and the *appoggio* as follows:

The diaphragm is often referred to as ‘the principle muscle of support.’ THIS IS FALSE!

... The diaphragm is involved in the process that is commonly called “support,” but it is not a muscle of support at all! ... The only function of any muscle is to contract. When the diaphragm contracts, only one basic thing happens: it flattens out and if the rib-cage is kept more or less immobile, as in the case of gentle breathing, the diaphragm moves

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\textsuperscript{8} During the Victorian era Ladies wore extremely tight bodices and the tuition they received on breathing was focused on the upper torso. Therefore many people erroneously believe that it is the diaphragm alone that supports the voice (Grant & Grant 2003: 36).

\textsuperscript{9} It is also interesting to note the width of the lower torso compared with the width of the neck. It is thus much safer to support the voice from the lower torso than from the much smaller area of the throat. If the singer has a big voice and a little body it is even more important to make sure that he/she is supporting the voice properly by literally ‘putting body’ into the sound (Grant & Grant 2003: 38).
downward in the chest cavity . . . producing what is commonly called ‘negative pressure,’ drawing air into the lungs through the remainder of the respiratory tract. Therefore the diaphragm, which can only contract and relax, is primarily instrumental in inhalation. ‘Support’ is called into action only during a particular kind of exhalation, which requires a more forceful expulsion of breath, such as needed in singing. It is not required for gentle breathing.

The diaphragm must provide the controlling counterpressure for the abdominals, otherwise the only other means of controlling the resulting violent air flow would be to precipitately close the vocal folds on each attack: a most effective means of prematurely ending a vocal career. It is this controlled use of strength and counterstrength that underlies the concept of Support/Appoggio. ‘Support’, or ‘holding up,’ is provided by the abdominals. ‘Appoggio’, or ‘leaning down upon,’ is provided by the diaphragm. One is essential to the controlled function of the other. To speak of ‘support’ without including ‘appoggio’ generally gives an incomplete picture of reality.

Miller (2004: 11) gives this description of the appoggio:

With the appoggio, the singer learns to stay in the position of inspiration for as long as possible . . . Appoggio technique results from breath retention, during which the inspiratory muscles do not early lose their tonicity. It makes certain that neither excessive airflow nor too much resistance to the existing air is offered by the vibrating vocal folds.

2.3 Preparation for emitting the voice

In these days of cinema and television [and the generally available recording technology of video, DVD and cell phone cameras] facial expression is much more important than when singers were primarily meant to give pleasure to the ear (Fuchs 1963: 45).

Giambattista Mancini (1716-1800) (cited in Fuchs 1963: 42-43) wrote in his Practical reflections on the art of singing:

It is necessary to explain, in a pleasant manner, to the inexperienced youth what is precisely the right position of the mouth, relative to his physiognomy . . . The rules for the opening of the mouth cannot be general, nor can they be made universally the same, for every individual does not open his mouth in the same way. Some have wide openings, some narrow and others medium. Add to this the irregularity of the teeth.

Ê or Ee (i:) as in “see” is the vowel most often heard performed poorly. Christy (1967: p. 84) describes singing this sound as follows:

*Attack the Ee with the lips in a forward Oo position (never the ‘grinning’ Ee), drop the jaw generously and feed the tone more breath energy than thought necessary.* Purse
the lips slightly to encourage roundness . . . An overbright Ee is always helped by comparison with the dark Oo, and vice versa. The Ee assumes its greatest freedom and blends best in a legato passage if the jaw is dropped well down. Considerably more breath support should then be given than for the Ah or Oh in order to obtain equal sonority in legato.

(eu)\textsuperscript{10} or Oh and Ū or OO should be sung with a rounded position, when the mouth is shaped into an exaggerated kiss. The starting-point for these vowels still has to be the natural position of the mouth. The lips come forward, but not the chin: only the lips should move. In the smiling position the teeth can act as resonators, which enrich the tone. Some singers try to imitate a smiling position by lifting the upper lip. This looks unnatural. Children, boys especially, often open their mouths too wide in a choir, possibly trying to sing louder. As they become adult singers, their exaggerated mouth-opening will continue. In singing the mouth should never be opened fully, except as an exercise to help with constant jaw-stiffness, where it can be practised as a slow smooth movement.

Singers should be encouraged to try the exercise shown in Figure A.13 (Unisa Grade 4 no.1).\textsuperscript{11} This exercise can be done on Wah and Mwah on each note. The sound placement needs to be in front. The jaw movement has to be exaggerated, like when chewing gum.

The exercise can also be done without jaw movement on the cluster “gunga” spreading over two notes as shown in Figure 2.2 below.

\textbf{Figure 2.2}\textsuperscript{12}

\begin{align*}
\text{gu-nga}
\end{align*}

All exaggeration should be avoided. For example, it is wrong for a light soprano or tenor to sing a phrase up to top C with a round mouth (Fuchs 1963: 46). For singing the mouth should be opened by the natural fall of the jaw only – the jaws should just be separated by the thickness of a finger (Armhold 1963: 31).

\textsuperscript{10} The typing of phonetic signs which are not available in the font used for the dissertation, causes unrectifiable differentiations in the set spacing of the dissertation.

\textsuperscript{11} See Appendix A: Learner case D (p. 253).

\textsuperscript{12} Nock \textit{id}.
The amount of space inside the singer’s mouth influences the sound of the voice. There are two jaw positions, namely the ‘chewing’ position and the ‘biting’ position. The difference can be felt by pressing the fingers close to the ear. While chewing, there is very little movement. When biting, the lower jaw can be felt moving from its socket near the ear and dropping to create space between the back teeth. In this singing position, increased space in the mouth amplifies the sound of the voice.\textsuperscript{13}

In the very high register the mouth opens wider as the jaw drops lower. Opening the mouth too widely does not improve the production of either low or high notes and prevents using the proper resonator. However, the mouth must be open enough to allow sounds to come out freely, and to prevent nasal tones. To regulate the mouth opening, it is useful for the singer to place a finger on the cheek between the teeth at the side of the mouth, when doing exercises. The cheeks should be a little raised in order to widen the nasopharynx\textsuperscript{14} and to cause the soft palate to extend loosely to the sides. The mouth opening should remain oval. This is at first not easy to do, as these are two opposite movements. As the singer tries to lift the cheeks, the mouth very often starts to grin broadly, which makes the position of the larynx too high and, at the same time, narrows the throat (Armhold 1963: 31).

Mentally the singer should visualize the upper jaw changing into a beak, protruding over the lower jaw. Although the lips should be kept loose, they should support the oval shape of the mouth so that the tone-stream will be directed forward through this resonance area (or resonance box). It is best for the singer to imagine the form of a triangle with the two points of the corners of the mouth and with an imaginary apex between the eyebrows just above the bridge of the nose. The singer must not let the tautness of the upper jaw cause the lower jaw and the throat to stiffen. The singer could imagine having the lower jaw anaesthetized – this will make it passive. The back of the nostrils has to be held slightly closed, like when pronouncing French nasal sounds or English nasal sounds (like \textit{ong, ang, ing}) (Armhold 1963: 31-33).

\textsuperscript{13} Occasionally this shape is not possible, e.g. when singing the vowel EE on a low pitch (Hewitt 1978: 11).
\textsuperscript{14} See Chapter 6: Section 4, \textit{The nose} (p. 139)
The tongue must be limp and loose. As the back of the tongue is so close to the larynx, it is easy to cause rigidity by consciously controlling the tongue. With proper breath control the throat will remain open and the root of the tongue will not press upon the larynx if it is limp and loose. With proper note production the tongue should lie concavely in the oral cavity, the thick front underside of the tongue slightly touching the roots of the lower teeth. The tip of the tongue is not dipped in the production of \( i \) (i:) and \( e \) (ει) but rather slightly raised and pointing to the upper jaw to the place where the consonant \( n \) is produced. By artificially trying to keep the tongue tip at the roots of the under-teeth, the clarity of the vowel sound will definitely be disturbed, especially with \( i \) (i:) and \( e \) (ει), when a lisp sound may occur. If at first the concave shape of the tongue is not achieved, the singer should not try it consciously. The tongue must at all times be limp and loose. A very slight yawn when inhaling would raise the soft palate. The relaxed lower jaw should loosen up the throat (Armhold 1963: 31-33).

Miller (2004: 241-242) has the following opinion regarding the position of the tongue:

Neither a retroflex tongue position (the tongue pulled back into the buccal cavity) nor an elevated tongue are advantageous phonetic positions for classical singing.

It is the location of the tongue that largely determines vowel definition . . . As a resonating room, the entire vocal tract extends from the vocal lips (the vocal folds) to the external lips. What the tongue does within that chamber largely determines language intelligibility and vocal timbre. Singers are aware of the innumerable configurations the vocal tract is capable of assuming in response to tongue action, but the effects these alterations may have on vocal timbre, especially in the singing voice, may be easily overlooked.

Miller recommends that the tongue be in the position of the articulatory speech mechanism being at rest, with the apex and rim of the tongue in contact with the inner surface of the lower front teeth. All vowels are formed at this posture of the tongue. The apex and rim of the tongue are then in contact with the inner surface of the lower front teeth. Many of the consonantal phonemes are also formed at this location. The singer should not pull the apex and rim of the tongue away from this initial location, where the voiced consonant (v) is placed. It should remain there regardless of the raising or lowering of the front of the tongue for front and back vowels. Non-phonetic shapes of the vocal tract will
produce timbre distortion. The position of the tongue may also affect laryngeal positioning. As the tongue is attached to the hyoid bone from which the larynx is suspended, tensions in the tongue can be transferred easily to the larynx – “For freedom of production during singing, therefore, it is essential that the tongue not be held in nonphonetic (sic) positions” (Miller 2004: 241-242).

Kagen (1960: 46) gives an alternative opinion, which does not necessarily have to contradict the above, but may add an additional perspective:

> The primary control a singer possesses over his instrument is not muscular but mental. It rests on a natural ability to imagine musical and speech sounds precisely, as well as on the natural coordination between the singer’s ear and his voice.

2.4 Resonance\(^{15}\)

Resonance is a very important aspect of vocal technique, which may also be considered challenging for the young singer.\(^{16}\)

At the top of the windpipe is the protruding front point of the larynx which is called the “Adam’s apple”. Inside the larynx (voice box) are two flat folds of muscular membrane. The space between them is the glottis or glottal chink. The free edges of the vocal folds are called the vocal chords. They almost join at the front, but are separately connected at the back with two triangular shaped cartilages. These and the muscles attached to them bring the chords together and also separate them. During talking or singing these muscles bring the chords together.\(^{17}\) The air from the lungs blows upwards and lets out a puff of air. Because they are elastic the lungs bounce downwards again only to be blown up once more. This vibration causes a stream of continuous sound:

> Resonation is the process by which the basic product of phonation is enhanced in timbre and/or intensity by the air-filled cavities through which it passes on its way to the outside air. Various definitions related to the resonation process include such terms as amplification, enrichment, enlargement, improvement, intensification, and prolongation, although in a strictly scientific usage acoustic authorities would

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\(^{15}\) More information may be found in Chapter 4; Section 2.1.4 Resonance (p. 79-84), as well as the following sources: Armhold 1963: 31-41. Fuchs 1963: 4-63. Grant & Grant 2003: 42-61. Hewitt 1978: 12-52. Phillips 2003: 79-94.

\(^{16}\) See Chapter 6: Section 2.3, The throat and vocal folds (p. 130-137) for illustrations of the vocal resonators and resonating chambers.

\(^{17}\) Refer also Chapter 6: Section 2.3, The throat and vocal folds (p. 130-137) for more detail.
question most of them... the end result of resonation is, or should be, to make a better sound.

...resonance is a relationship that exists between two bodies vibrating at the same frequency. A resonator may be defined as a secondary vibrator which is set into motion by the main vibrator and which adds its own characteristics to the generated sound waves.

There are two basic kinds of resonance – sympathetic and conductive... In sympathetic resonance there is no physical contact between two bodies. The resonator starts functioning because it receives vibrations through the air... In conductive resonance the resonator starts vibrating because it is in physical contact with a vibrating body (McKinney 2005: 120).

The factors which determine the resonant qualities of a resonator include (1) size, (2) shape, (3) type of opening, (4) composition and thickness of the walls, (5) surface, and (6) combined resonators (McKinney 2005: 121).

The resonating chamber comprises the spaces above the mouth, behind and inside the nose, which are natural areas for amplification. The spaces that amplify the voice are the throat, mouth and nasal cavities or head resonance. By developing the use of these resonances, the sound of the voice will be enlarged and beautified. There are three main areas of resonance where resonant vibration is felt – the head, the mouth and the chest18 (Nock nd).

McKinney (2005: 123) lists seven areas as possible vocal resonators – the chest, tracheal tree, the larynx, the pharynx, the oral cavity, the nasal cavity, and the sinuses. The most important resonators are the pharynx and mouth. The nasal cavity19 is necessary for the production of the three nasal consonants, (m), (n) and (ŋ), and the nasalized vowel sounds of languages like French and Portuguese. The pharynx can bring out the lower vocal tones, adding a full, warm, round quality. The mouth shapes the vocal tone into understandable units for communication by adding consonants and functioning like a megaphone to transmit the vocal sound (McKinney 2005: 128-129).

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18 See 2.4.2, Lower resonance (p. 26), on opinions regarding the role of the chest, and 2.5, Placing the voice (p. 27), concerning the distinction between registers and resonance.
19 See Chapter 6: Section 4, The nose (p. 139), for more viewpoints involving the nasal resonators.
2.4.1 Higher resonance

The resonance of the nasal cavity has a different quality than that of the throat and mouth. It is a brighter sound than the lower resonance – like a descant recorder compared to a cello. If developed, it adds brightness to the voice and helps to keep the singer in tune. Well-developed higher resonance adds to the carrying-power of the voice (Hewitt 1978: 28). Regarding the sinuses and the vibratory sensations they produce, the singer should be aware of the sensations and even encourage them; but should know, that they are the result of the sound being produced, not the cause (McKinney 2005: 128). Their primary function is to act as echo chambers.20

2.4.2 Lower resonance

In contrast to McKinney (2005: 123) who argues that the chest makes no significant contribution to the resonance of the voice21, Hewitt (1978: 28-30) states that the chest does help the principal amplifier for the lower resonance, which comprises the throat and the mouth space. These are bigger resonators than the nasal cavity and responsible for about three-quarters of the sound. Sound quality of the lower resonance is ‘broader’ than that of the nasal space. The sound is ‘thicker’, darker and warmer (Hewitt 1978: 28-30). It is especially the sympathetic resonance of the upper chest that is involved here. Bachner (1947: 64) states that the sympathetic resonance of e.g. the wall of the chest has some influence on quality of tone, but no effect on amplification. In the Internet article “Say ‘hello’ to the voice – head, chest or what?” (2010) chest voice or chest register is described as:

> Usually a deep or rich full sound that is most commonly used during speech. Air flows over the vocal folds which are fully apart and the vibration or resonance can often be felt in the upper chest. This is the area of the voice where you should be singing the lower notes of your range.

The structures responsible for vocal production vary from person to person and are responsible for the uniqueness of each voice. Their size, shape and quality determine the quality (character) of vocal resonance. The cavities are surrounded by muscles that modify their shape and size, producing the many

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20 Jill Nock Studio.

21 See Chapter 6: Section 5, The chest, lungs, diaphragm and trunk muscles (p. 140).
sounds unique to each individual. When speaking, thought is hardly given to the
muscles that control the resonance of sounds. Singers, however, have to be
able to ‘think’ to produce the sounds that they want (Marquart 2005: 47).

A resonant sound, in singing, is one which has brilliance, colour, intensity and ‘ring’. It
is sometimes denoted as a singing tone to indicate that the voice is not ‘going back
into the throat’ or ‘being swallowed’. It is a sound which ‘goes out’ into the audience; it
‘carries’; it is ‘forward’. Notice that all of these descriptions have one thing in common:
they are images which connote place. From this effect – which in fact has very little
to do with the actual physiology involved in the production of the sound – singers talk
about the ‘placement’\(^{22}\) of the voice (Marquart 2005: 47).

2.5 Placing the voice

Placement is the process which uses mental imagery to control resonance.
Consistent use of this imagery produces a sound that is focused, unobstructed
and tension free. By employing muscles that modify air pressure, the singer
consciously slows down and controls the outflow of air. Every sound and phrase
‘supported by the breath’ is correctly placed. If the technique is used properly,
correct sound production will develop naturally (Marquart 2005: 47-48).

2.5.1 Singing into the mask (placing the sound forward)
The ideal placement of the singing voice is ‘forward’, with the voice placed in
the facial mask. Singing into the mask (mentally placing the sound forward) is
one technique by which a buzzing or a feeling of vibration in some part of the
front of the face can be created. This sensation may be felt in the lips, the nose,
front teeth or even in the cheekbones. It varies from person to person, but, as
long as the vibration is being felt in the mask, the placement is said to be
forward. Placing (feeling) the sound far back in the throat, or just in the nose
(nasal resonance), or in the back teeth is incorrect (Marquart 2005: 47-48).

2.5.2 Placement in and beyond the ‘passaggio’
Singers who wish to sing classical repertoire need to develop the extremities of
their vocal range. Passaggio (‘pæsædʒio’) is an Italian word meaning ‘passage’
and describes the changes in resonance which occur naturally in the human
voice as the singer approaches another register. The term break is also used,
though many voice teachers do not like this term, as it implies a sudden rupture

\(^{22}\) See Chapter 4: Figure 4.12, Mental imagery for illustrating placement and resonance (p. 85)
or gives a false impression that the voice suddenly breaks off. By contrast, *passaggio* indicates a transitional area between two natural registers of the voice. For lower voices, the *passaggio* occurs in the area of B, C, C# that lies above the middle of their range. For higher voices, the *passaggio* occurs about a third higher – D, E-flat, E-natural above the middle of the range. Ideally, the registers should be joined seamlessly, so that the *passaggio* between them is no longer noticeable. This is done through placement. While singing in the *passaggio*, the singer manipulates the shape of the resonating cavities of the head and throat [by manipulating the vowel] to hide the transition between the registers – the resulting sound is ‘seamless’ and conceals the change of register (Marquart 2005: 50).

### 2.5.3 Onset or Attack (coup de glotte)

The expression *coup de glotte* (stroke of the glottis) does not mean a physical stroke, causing a harmful overlapping of the vocal chords. It is a mental image of the preparation before starting a note. The onset or *attack* involves the vocal chords (or vocal folds), the position of the tongue and the throat, the space in the mouth and the breath pressure. Altering any one of these will alter the sound (Hewitt 1978: 12-13). When preparing to say something or to sing, the vocal folds are automatically set in a ‘voice position’ and the compression between the chords is established. An ideal onset (attack) is both loose and firm at the same time. If too much air pressure is added against the vocal chords, this causes a *glottal sound* – on expiration, the air will push the vocal chords apart and a click on the voice will be heard. This puts strain on the voice and leads to bad intonation and timbre. The voice becomes ‘over compressed’. If the vocal chords are prepared in the attack to almost touch each other and the air is then released, a soft attack called a ‘sliding attack’ follows. If the compression between the vocal chords is too loose, the voice becomes ‘under-compressed’ and dies. To master attack, proper air pressure around the vocal chords and focus are vital (Bjørkøy 2000).

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23 The larynx mechanism is delicate and can easily be damaged by harsh treatment, especially in the young developing voice of the teenager. The word *attack* is not suitable to describe its action, as an aggressive start to the note is dangerous. It should be smooth and gentle. The singer has to compare the start of the note to smoothly letting-in the clutch of a car – there shouldn’t be a jerk or a shock. The singer can jerk the attack by being too earnest. He should be relaxed and ‘stroke’ the start of the note, using a gentle movement (Hewitt 1978: 14). Therefore the term “onset” is preferred.
2.5.4 Primal sound
Oren Brown (cited in Bjørkøy 2000) stresses the importance of the primal sound as being a healthy sound. We are born with primal sounds like crying, sighing and laughter. These sounds are spontaneous and involuntary. When starting the vocal warm-up, the easiest way to attack the sound is by starting off with the primal sound and the feelings and sensations associated with this. It is this spontaneous sound that will develop into a beautiful singing voice.

2.5.5 Ending the sound
The way that a note is finished can sometimes spoil what would otherwise have been a well-sung line. The singer must aim to make a smooth end to the phrase (Hewitt 1978: 19).

3. Range
The classification of a singer’s voice entails a diagnostic analysis in which the teacher estimates inherent vocal qualities and characteristics with all elements of tone production in mind. Personality, cultural background, age maturity factors, gender and the potential for artistic growth are all taken into account.

Voice classifications are made mainly for the purpose of prescribing appropriate practice materials and song literature that is most suitable to a particular voice at a certain stage of development. These classifications are usually temporary and evolving, as the singer’s voice will change and improve with training. The range, quality and scope of the voice may change to such a degree that reclassifications could be necessary (Fields 1984: 70).

Human voices are usually divided into six ranges, including three female voices (soprano, mezzo-soprano and contralto) and three male voices (tenor, baritone and bass). The normal range of teenage voices is (roughly) indicated as in Figure 2.3:
Apart from the compass or range, the timbre of the singer’s voice also distinguishes the respective singing types. In the first two grades of high school, grades 8 and 9, boys are an average age of between 13 and 15, and may still have soprano or contralto voices. From grade 10 to the end of their school career – that is between the ages of 16 and 18 – their voices undergo a change so that they normally distinctly range from tenor to bass. High school girls can usually be classified as either soprano, mezzo-soprano or contralto. The timbres of these voices will generally change in the late teens or early twenties and mature into adult voices.  

Choir music for mixed high school choirs is commonly written for SATB. From Grade 6 onwards, prescribed pieces for ABRSM and Trinity Guildhall external music examinations are prescribed for soprano, mezzo-soprano, alto, countertenor, baritone and bass. Unisa has the following voice classification:
Grades 3 to 7: High or medium high, low or medium low voice. For earlier Grades Trinity distinguishes between male or female voices (high, medium, medium low or low). Pitch notation used for ranges in all grades is indicated as in Figure 2.4.

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25 See also Appendix D. Transcriptions of interviews: Nock: Question 18.
26 Associated Board of the Royal Schools of Music.
27 “Songs listed by voice type in the Opera, Operetta, Sacred and Oratorio section of Group A must be sung in the published key. Songs in this section written before circa 1750 may alternatively be sung a semitone lower at baroque pitch. All other songs may be performed in any key, either published or in a transposed version supplied by the candidate” (Trinity Guildhall singing syllabus, including choral assessment. 2009: 34, 46).
29 Trinity Guildhall singing syllabus, including choral assessment 2009: 34, 46.
Voice types are defined in Figure 2.5 below.

**Figure 2.5. Singing types**

<table>
<thead>
<tr>
<th>Voice Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASS:</td>
<td>VERY LOW male voice</td>
</tr>
<tr>
<td>BARITONE:</td>
<td>MIDLOW male voice</td>
</tr>
<tr>
<td>TENOR:</td>
<td>HIGH/MID male voice</td>
</tr>
<tr>
<td>HIGH TENOR:</td>
<td>HIGH male voice ( sometime called counter tenor)</td>
</tr>
<tr>
<td>TREBLE:</td>
<td>Boy’s voice</td>
</tr>
<tr>
<td>CONTRALTO:</td>
<td>LOW female voice</td>
</tr>
<tr>
<td>ALTO:</td>
<td>MIDLOW female voice</td>
</tr>
<tr>
<td>MEZZO/SOPRANO:</td>
<td>MID/HIGH female voice</td>
</tr>
<tr>
<td>SOPRANO:</td>
<td>HIGH female voice</td>
</tr>
</tbody>
</table>

The natural range of the teenage singer’s (healthy) voice should be about one and a half to two octaves, although some people have a few notes extra.

4. **Vocal technique**

4.1 **Agility**

At times the singer (Grade 5 singers and up, according to the Trinity Guildhall syllabus) will have to sing fast-moving passages which demand vocal flexibility, like trills, decorations, runs, grace notes and scales. Figure 2.6 below is an example of a passage that really tests the singer’s fitness.

**Figure 2.6. Passage from Handel’s Messiah**

4.2 **Messa di voce**

An indispensable breath control exercise is the *messa di voce* – the Italian term for starting a note quietly, building a crescendo until it is loud, followed by a gradual decrescendo back to almost nothing (Hewitt 1978: 9) [without losing tone quality]. Singers should not start working on *messa di voce* before they have mastered head resonance and breath control (Fuchs 1963: 114-115).

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30 Grant & Grant 2006: 63.
31 See Appendix A. Learner cases: Learner C (p. 251).
33 The term *Messa di voce* should not be confused with *Mezza Voce*, which means singing with half the power of the voice (Fuchs 1963: 114).
4.3 Legato singing

Legato singing is like barre-work in ballet, where the aim is to make the movements as smooth, slow and continuous as possible. Fuchs (1963: 102) stresses the importance of training a singer in the technique of singing legato:

A teacher who lacks the necessary ear and patience for legato will never be able to build a voice properly. He should lay the cornerstone in the first lessons without bothering with too much explanation. As soon as a student has the rudiments of note-placement, he needs exercises, which link two and later more notes within a small compass. There should be no words to pronounce, and the intervals should be small. Simple songs and arias should not be sung until legato is learnt.

Legato means smooth and unbroken, whereas staccato means short and detached. Vocal music is concerned with the meaning of words and not only with sounds, therefore the singer has to be taught that singing involves phrases of words, not individual words, and phrases of sound, not individual notes. “Legato singing is intelligent singing, and one must always sing sustained phrases except when the composer wants staccato for an effect” (Hewitt 1978: 45).

4.4 Portamento

The glissando (slur, portamento\(^{34}\)), a term used frequently in string music, is useful in establishing a good legato sound. It is indicated in Figure 2.7 and 2.8.

Figure 2.7. Portamento 1\(^{35}\)

![Figure 2.7. Portamento 1](image)

Figure 2.8. Portamento 2\(^{36}\)

![Figure 2.8. Portamento 2](image)

The portamento specifies that all pitches between the first and last pitches indicated, should be played by sliding the finger over the string of any string

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\(^{34}\) Portamento is closely related to legato. The word comes from the Italian portare, to carry. Legato means smooth linking of two or more notes, whereas portamento means a slower sliding from one note to the next (Fuchs 1963, p. 103).

\(^{35}\) Marquart 2005: 60.

\(^{36}\) Marquart 2005: 61.
instrument. Although the voice is produced by an entirely different mechanism, the *portamento glissando* can also be used in exercises to help develop a legato line. The singer can furthermore use the *glissando* when the line of a song moves in and out of the *passaggio*. Here there are sometimes problems with placement, which make the vocal line break up. The *glissando* helps the singer to feel and establish the correct placement throughout the line. The *glissando* should however only be used in a particular piece for practise purposes. The singer should practise the exercises slowly, sliding from one note to another, but stop at each note to make sure of the correct pitch before going on to the next *glissando*. The slide has to be exaggerated so that a consistent placement of the sound is achieved. The *glissando* should be discarded as soon as the sensation of the placement into the voice is accomplished (Marquart 2005: 61).

In *The art of singing*, W.J. Henderson (cited in Fuchs 1963: 104) writes: “*Portamento* means the sliding of the voice through the infinitesimal gradations of tone lying between a note and the ensuing one. This languorous progress of the voice is capable of much expression when judiciously employed, but when it becomes a habit it is deplorable, because then it leads to scooping”. When singing *portamento*, the singer should always sing the higher note louder than the lower, whether the *portamento* is ascending or descending. This technique should be used with great care, as it can sound very ugly. Like *messa di voce*, the singer can only master it with the help of perfect head resonance and breath control. *Portamento* should not be used unless it can be used properly (Fuchs 1963: 104-105). Armhold (1963: 50) also stresses that: “*Portamento*, which means carrying the voice from one note to another, either up or down, should be used very sparingly and only applied when it is especially marked by the composer.”

### 4.5 *Staccato* singing

According to Armhold (1963: p. 50) *staccato* exercises, in which every sound is detached, help to get rid of muscular tension and stiffness. They help develop the flexibility of the diaphragm and the vocal folds. They benefit all voices, especially light soprano voices, as they present the sensation of the exact point

of moving into the head resonance. The singer should not start the staccato with an aspirate nor with a blow of the glottis. The resonance area should feel like a bell, in which the clapper (tug of the diaphragm) strikes the tone. The throat should be completely relaxed. The staccato sounds must end as soon as they are sung. The mouth stays open between the single staccato notes, but no fresh breath should be taken between them.

4.6 Piano and pianissimo

Armhold (1963: 51-52) describes the application of piano and pianissimo: A singer should use piano and pianissimo in moderation, and only apply it when necessary to add to the meaning of the words and music. The teacher should stress that the singer should support the piano and pianissimo notes with the diaphragm and not with the muscles of the throat. Singing piano requires the total resistant strength of the voice and demands even more breath control. Singing ‘half voice’, without sustaining the note, is destructive, like when blowing an ss or f, first forte, then piano. In forte dynamic the singer will use dynamic force and more breath, while in blowing piano less breath will be used, though the controlling action of the diaphragmatic and rib muscles will be felt. The best way for the singer to practise piano is by keeping the throat open by thinking of “sucking in” the tone and directing most of the breath-stream towards the upper head cavities, mainly to the point between the eyes, the top of the resonance box. All forte notes need most of the breath-stream directed to the mouth cavity. A correctly produced piano implies the possibility of increasing the volume, without taking away from the tone quality. On the other hand, an incorrectly sung piano tone cannot be reinforced smoothly.

5. Articulation – Communication

5.1 Vowels

The five Italian vowels are I E A O U and sound like this in English:
I (i:) as in cheese, his
E (ε) as in ever
A (a:) as in garden

38 Mezza Voce (See footnote 25 at section 4.3)
O (ɔ:) as in nor

U (ʊ) as in tool

These five sounds are the basis of the vowels of all western languages, to which four more could be added:

Ü has no equivalent in English, but in German it is found in blüthen and in Afrikaans skuur

E (ə) as in her

A (æ) as in hat

O (o) as in bog

These nine vowel sounds make up almost all the sounds in any language in the classical repertoire. The singer has to exaggerate the different vowel colours so that they are all distinct and pure.

I – (i:) as in cheese should be bright and wide. It sometimes sounds more like ü and becomes nasal. When practising on this vowel, the singer should open the lips wide enough and try to sing a wide, bright and resonant sound.

E – (ε) as in ever must be clearly different from (ə). It is a wider and clearer sound than (ə) and needs wide mouth space and more air (the singer has to think of ‘air’ when it is sung). When practising the sound, the singer has to precede it with an “I” (i:) sound (“I-E”) to give it more brightness. The soft palate has to be raised to give more mouth space. Whenever the singer tries to brighten the sounds, the bottom jaw should not be dropped wide, but the upper jaw should be imagined opening upwards. (The upper jaw cannot move – it is fixed, but the sensation helps to place the sound correctly.)

A – (a:) as in garden, needs plenty of mouth space and the tip of the tongue against the back of the lower teeth. If the singer can make a resonant “I” (i:) sound, it should be sung before the A to keep them both bright.

O – (ɔ:) as in nor, needs the tip of the tongue against the back of the lower teeth. The singer should give O plenty of mouth space when moving towards the top notes, as should be done with A.
U – (ʊ) as in tool, can be difficult. In practice the lips should not be pushed too far forward. The singer has to experiment with high resonance without making a nasal sound. Preceding it with M, N, and NG and with the vowel “I” will help.

Ü – as in the German blüthen, is a soft warm vowel. The singer should precede it with some chest resonance exercises.

E – (æ) as in her may present a problem. It needs only a moderate mouth space, with the lips a little forward. When singing this vowel, the tongue, mouth, jaw and throat should be in a relaxed state.

A – (æ) as in hat, needs a lot of space and a wide, bright sound. Precede it with “I” (i:) to help its brightness.

All vowels are made by the vocal chords. The lips and mouth only refine the sounds. So, in practice, the singer has to concentrate on a clear vowel made by the vocal folds, while not thinking too much about the lips (Hewitt 1978: 40-41).

5.2 Diphthongs
Most languages (Italian being one of the exceptions) have diphthongs or vowel mixtures. For example, the English word ‘join’ is made up of two vowels, O and I. When the singer sings a diphthong, then, a vocal adjustment has to be made on the second vowel, and the purity of the two vowels will represent vocal mobility. Another point about diphthongs is that their two vowels should be in speech-rhythm to make them sound natural. When a diphthong is spoken, emphasis and length are put on the first vowel and the second is placed at the end to articulate the word clearly (Hewitt 1978: 42).

5.3 Consonants
Consonants should be clear but inconspicuous, pronounced distinctly and rapidly, with some flexibility of the tongue, throat and lips. If the clothes-line is the smooth phrase that is sung, the consonants should be like clothes-pegs. The vowels make the sound, and the consonants should make the words intelligible without interfering too much with the line of sound (Hewitt 1978: 43).

There are two main groups of consonants, namely voiced consonants, such as l, m, n, r, English y, soft th, z, v, j, French j, and German j, s, w, and voiceless consonants, such as b, p, d, t, g, k, f, English s, th, ch, sh, Afrikaans g (spoken like German ch), and German sch, ch, ss, z.
The first group must start on the exact intonation of the proceeding or following vowel sound, otherwise it may lead to an upward scoop. The onset for the second group (voiceless) should be crisp, with a quick release. The singer should aim at the clear pronunciation of consonants and realize their value. If rightly produced, consonants help to lead the vowels towards their proper resonating spots and help to reduce the breath stream, preventing breathy tone (Armhold 1963: 48).

6. **Warm-up exercises**

The singer has to consider singing as a physical exercise or sport and keep training and doing exercises to improve the performance of the voice. A professional athlete would not compete in a competition without any warm-up exercises. The singer has to remember to do sufficient vocal warm-up exercises on a regular basis.

The advantages of doing vocal training exercises include relaxation. They also strengthen the vocal folds and larynx muscles. When doing vocal warm-ups singers should be comfortable and calm; if they are not, the necessary relaxing exercises should be done prior to the vocal warm-ups.39

Apart from preparing the voice, warming up should also contribute towards getting the body, breath and support going. It sharpens concentration and improves the timbre, intonation and articulation of the voice (Bjørkøy 2000).

With these exercises a good singing technique is built that is then transferred into the singing of songs. Warm-up exercises must be practised continually for improved technique, reading skills and extension of range (Boytim 2003: 30).

There is no value in itself in any exercise. Benefit from an exercise is derived only through persistent correct usage. The singer must always strive for beauty, ease and expressiveness of tone, accurate intonation and good vowel sound in any vocal exercise. Scale and arpeggio exercises should be done legato and slowly at first, until technique is effortless and secure. A further benefit from exercises is that they provide new concepts and techniques, which are transferred to expression in songs (Christy 1967: 195-196).

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39 See Chapter 4: Section 2.1.1.1, *Exercises for releasing tension* and gaining good posture (p. 67-69.)
7. **Conclusion**

The purpose of this chapter has been to provide a literature survey of sources available on voice teaching method. Although by no means exhaustive of the entire body of literature available on this topic, references included give a fairly comprehensive overview of the subject and may form the basis for further study by any interested teacher. In selecting sources for this brief survey, I was led by principles of clarity, simplicity and practicality, sound theoretical and scientific standards, and representative opinions of some known specialists in the field. Without entering into conclusive debate (which is not the stated aim of this dissertation), my aim has been to present different points of view, where applicable, while concentrating on the ultimate needs of the users of this information.

It should furthermore be noted that: “Theories, however valid and worthwhile they appear to be at the moment, could be shown to be false at any time in the future and, no matter how many times the theory has been corroborated by events to date, there remains the prospect that just one new event could show the theory to be inadequate” (Denscombe: 2002: 199). This is also true of theories of singing and vocal training, which may also evolve with changing styles and trends.

As seen in this study, the training of voices is a highly technical and difficult task, but the aim of this overview has been to bring together and simplify the concepts and principles involved, especially as a guide for the voice teacher/educator. The next two chapters will provide a practical application of these theoretical principles, with emphasis on the high school learner within the context of the South African education system.

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CHAPTER 3

THE HIGH SCHOOL LEARNER STUDYING VOICE – IMPORTANT METHODOLOGICAL PRINCIPLES AND PRACTICES

1. Introduction

This chapter will present a number of basic principles and contexts for consideration by the voice educator in the high school before a successful teaching method for teenage singers can be operationalised (the subject of chapter 4). These principles and contexts derive from a survey of pertinent literature, supplemented by examples from my own experience as singer and as educator of high school learners, and further highlighted by explanations and practical examples from the Jill Nock Studio in Port Elizabeth.

2. Setting the scene for successful teaching

“In the last analysis, our methods of training the singing voice are many and varied. But our success in teaching is a direct result of understanding and applying correct principles. A teaching methodology must therefore adhere to principle, but it must also be flexible and adaptable to individual needs” (Fields 1984: 114).

2.1 The vocal instrument

The first principle to remember when learning about singing, is that the voice is the instrument that is involved in music production. The voice is part of the physiology of the learner, and as a result the whole body is involved in phonation. Mental and physical health directly influences vocal production. Learners should therefore take care of their diet, sleeping habits, stress levels, environment, exercise and general health. Being a successful singer requires a great deal of commitment, which comprises almost all aspects of life. This also involves consideration of when, how and how much the voice should be used when practising, performing and even talking or shouting.¹

The voice educator should take into consideration the age and vocal maturity of learners and not start formal training at too early an age, or push them too much. Basic

¹ See Chapter 7 (p. 144).
instruction in physiology is important and visual material illustrating the inner workings of vocal production can be helpful.²

All vocal instruments are as individual as their possessors in their physical potentialities, in their possibilities of development, and in their responsiveness and reactions to the application of natural laws . . . In this individuality, the teacher should recognize the psychological as well as the physical interferences of the singer, and so adapt his means of procedure to each individual voice (Bachner 1947: 103).

2.2 The educator teaching voice

“[T]he preparation of successful singers really begins with the training of competent and successful teachers. This precept lies at the very foundation of the singer’s art. A good teacher of singing is a musician, an educator, a psychologist. He tries to develop good singers, not just good voices” (Fields 1984: 115).³

As with any other instrument, it is important that voice educators should be singers themselves. Even if an educator is not a professional soloist, his/her own voice should have been mastered sufficiently in order to illustrate and demonstrate what is expected from learners. In this way he/she can better empathize with their needs (Brown 1996: 237) and problems and can offer effective, practical advice. Brown (1996: 243-244) recommends that voice educators should continue to learn everything possible about their own voices. This will assist in working with learners more effectively, since they are then able to teach from experience.⁴

Brown emphasizes that knowledge of anatomy and physiology⁵ and other sciences pertaining to voice is valuable. If the educator does not know the potential and limits of the human voice, it is impossible to know what to expect from a learner (1996: 237).

Educators should not promise learners success, no matter how talented they are, but should give honest opinions about learners’ potential and offer to facilitate in developing their abilities. Learners should be realistic about their capabilities, whilst educators must offer the necessary moral support (Brown 1996: 243) and training.

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² See Chapter 6 (p. 127).
³ See also Appendix D. Transcriptions of interviews: Nock: Question 3.
⁴ Nock (2010) also stresses that the teacher/educator should personally be a singer in order to explain processes effectively and empathize with learners, especially during preparations for examinations and performances.
⁵ See Chapter 6.
Many educators, according to Brown (1996: 240), accept learners with no special problems and therefore have the reputation of being very good at what they do. Learners should keep this in mind when looking for a voice teacher. A good voice educator should also be able to get positive results with a learner who has problems or who is less than gifted, provided that the basic ability is present.

Often young new educators expect too much from their learners. Brown (1996: 241) suggests that these educators should endeavour to have a learner master just one new idea at each lesson. He advises that it is better to progress slowly than too fast: When learners undertake advanced music before their voices are technically ready for it, they will overexert and strain their voices. Therefore it is not desirable to have young learners study operatic arias. These pieces were generally written for fully mature voices.\(^6\)

Educators teaching voice should always have a positive approach in working with learners and not make negative remarks or emphasize mistakes, but rather concentrate on offering encouraging comments or giving constructive guidance.\(^7\) Swanson (2008: 223) emphasizes that they should exude professionalism by being organized and punctual and adds that they must be knowledgeable about issues regarding voice, vocal technique and development and should also know when to use certain exercises and repertoire. Lesson time must be used efficiently and good practice habits have to be fostered in young learners. Educators should seek out professional development for self-enrichment, as well as for the benefit of the young voices they teach.

According to my own observation and experience voice educators may find themselves in a range of different teaching situations in the South African situation. In our own city my colleagues and I find ourselves in diverse positions and circumstances:

- Some are full time music educators, fully qualified to teach voice
- Some are qualified music educators, teaching part time at a school, voice being one of their instruments or their specialized field

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\(^6\) Some carefully chosen operatic arias are being prescribed for the higher grades of external examinations, like Trinity. These arias, which are generally more suited to young voices should only be given to gifted or advanced students.

\(^7\) See Appendix A: Learner case K (p. 267).
Qualified music educators sometimes have to teach voice, even though they are not qualified to do so, because “anybody can teach voice”

Some teach voice (and maybe other instruments as well) at more than one school at the same time

Some teach at different schools on different days

At some schools the music/voice educators just come in to present private lessons to learners doing voice as a subject

Many voice educators from all these categories also teach privately

Some voice educators teach at private schools or conservatoires, while others work at government schools

At state schools some are being paid by the state, some by governing bodies

Some educators are associated with schools in affluent areas, while others serve schools in disadvantaged communities.

Full time voice education positions at South African schools are scarce, so to be able to live out their passion and/or to make ends meet, many voice educators combine some of these options.⁸

To be able to keep going in this way, voice educators have to be extremely organized. for instance, have different carry bags, files, and other organizing mechanisms for each situation. Colour coding systems may be used as well as clearly-marked filing systems on a laptop computer, the latter a “must have” in such a situation. Planning and preparation are essential. Punctuality may be difficult, but nevertheless non-negotiable. All this may put a great deal of stress on educators. Like the learners they educate, they therefore also have to take into account factors that may influence their health and voices negatively. They should try to minimize stress by avoiding crisis management, get enough rest and exercise, eat regularly and healthily and look after their voices by at least doing regular warm-ups. Choral singing helps to keep the voice in shape.

⁸ I combine several options – I teach at a private school in the mornings, travel to a government school on the other side of the city to present private lessons in the afternoon to learners doing voice as subject, after which I go home to teach private learners from various other schools, some doing voice as subject, until late afternoon – this, apart from studying, choir singing and conducting, solo performances and other extramural activities.
Teaching in itself puts a lot of strain on the voice, therefore voice educators would most likely at some stage have to choose between adding full time class teaching (in music, creative arts or any other subject) and destroying their voices, to teaching one on one – which already involves a lot of talking and singing.

Whatever the situation for the educator may be, the educating principles will remain the same for all. The same dedication and professionalism will be expected from all. The full-time educator has to be an asset as a staff member of a school – loyal, positive and willing to help with extra-curricular activities, especially those that involve the educator’s professional expertise. Part time educators (generally employed by the governing body of the school) have to show the same willingness to be part of the school and help out at least to the extent stipulated in their contract. It is also good to be present in the staff room from time to time and to get to know the other educators and the learners. Voice educators, whether full-time or part-time employees, should be present at music evenings at schools where their learners perform and even help out with the organization if they have the time and are requested to be involved. This means a lot to the learners and is good experience for the educator.

Teaching spells energy, drive, infinite patience, and unflagging interest in a pupil’s welfare. It includes a sound and levelheaded outlook on the future, a wholesome philosophy of life, a healthy physique with stamina and endurance that will not readily succumb to the nervous tensions generated by fatigue. There is also a resolute determination to acquit oneself creditably in every situation. Knowledge and understanding, emotional stability, and unselfish devotion to the welfare of others are keynotes of the teaching profession . . . Hence, the love of teaching for its own sake emerges as an essential qualification of the successful vocal pedagogue (Fields 1984: 115).

2.3 The studio/classroom

“First, the teacher is responsible for creating a studio atmosphere which is emphatic and congenial . . . A teacher will create a positive studio atmosphere when trial and error is accepted and allowed, when there is support and encouragement to reinforce proper technique and artistry . . .” (Bunch 1995: 20).

The most important piece of equipment in the studio or classroom is a piano. A digital piano or keyboard is another option. It is essential that these instruments are tuned on a regular basis. If none of the above is available, a guitar can be used to give the pitch, but this must only be used in exceptional cases and the educator must of course be
able to play the guitar. The educator will need a metronome to check tempos of song repertoire and technical exercises, especially for examination purposes. The learner requires a music stand next to the piano. A simple stand can be made from wood and does not have to be bought if money is a problem.

Near the piano there should be a quality cassette recorder (or a CD player/radio/cassette player combination that has a microphone recording facility, although these are becoming increasingly scarce) to tape music during the lesson. The cassette recorder is still the most economical and readily available means to make live recordings. It is also easy to operate and the pause/play/rewind functions which can be used for sections within a song make it ideal for practicing. Recordings are made of accompaniments played by the educator for practice purposes, or of songs and exercises sung by the educator or the learner. If a cassette recorder is being used, the educator must make sure that the learner has a cassette player at home as well. Any recording that is made in the studio should be made on a device that the learner will be able to play back on an appliance available at home. The reality of the South African situation is such that sophisticated equipment is rarely available in schools and even less at learners’ homes. If cassette recorders are not available, songs can also be recorded on a learner’s cell phone. At more advantaged schools digital devices like CD or DVD recorders with a recording microphone input may be used or recordings may be made directly on computers and saved on flash drives. Digital video cameras may be used and even VHS video cameras and video machines for playback, if these are still available.

A CD player should be available in the classroom to play musical examples to the learner of the songs being studied. Different styles of music could be played to give the learner an idea of how to interpret songs. If there is a computer/laptop computer and possibly a data-projector, or a TV and DVD player available at the school, the educator can play musical examples, e.g. from operas or music concerts to the learners doing voice as subject. At some schools these are a fixture in the classroom. At schools where none of these are available, educators, who may perhaps be in possession of laptop computers and portable CD players, may consider using. A desktop or laptop computer may have additional uses in the classroom, e.g. for administration work,
lesson preparation and research (especially if an Internet connection is available), but this is not a prerequisite for effective voice teaching.

A mirror above the piano is an essential tool in the classroom. The mirror should be fitted in a position where it is visible for the educator sitting in front of the piano, as well as for the learner in a standing position. Christy stresses the fact that “the personal appearance of the singer is of the greatest importance . . . Therefore, an easy, graceful, buoyant position is an essential and should be cultivated in front of a mirror from the very first lesson” (1967: 14). In this way learners can check themselves for requirements such as correct posture and facial expressions. The learner can also watch the educator who is teaching from behind the piano, while at the same time the educator can see the learner’s face and posture.

A photocopier is an almost indispensable teaching aid for any educator teaching music. If at all possible this should at least be available somewhere in the school. If not, the educator will have to make copies at public copiers, for instance in libraries or post offices. Care should always be taken to heed the copyright act (also when copying music, back tracks or DVDs) and to also stress the legal and ethical implications of copying when working with learners – this is part of the education process! With all the technical devices available today and the lack of values amongst many learners and adults, infringements are rife. Some schools have copyright licenses that cover some aspects of copying. Educators need to find out what the situation in their school is. Learners are usually not allowed to do external examinations from photocopies.

It would be useful if the following books could be in the classroom. (Otherwise they could be used in the school library, if the school has a library, or borrowed from the library for use in the classroom.) There should preferably be reference books, including language dictionaries for foreign languages such as German, Italian and French, as well as diction books for these languages to help with pronunciation. Although songs in the other official languages of South Africa are not part of the classical curriculum, dictionaries and guides in the official languages of a region may come in handy for school concerts, performances outside of school or for choir works that are arrangements of traditional songs. Advanced learners doing voice as a subject should, if possible, be encouraged to do their own research in their own time, either by using
their own resources or by working in libraries. It is very important that learners should always know what they are singing about, otherwise songs will not be interpreted correctly. Vocal technique and song literature books also need a place in the classroom.

There should be good ventilation in the classroom, so the educator should see to it that a window is open (Boytim 2003: 9-10). A welcoming and reassuring class is easily created without the means of a large budget by using posters, pictures, photographs of performances and any other suitable illustrative material. For this a wall mounting-board could be useful. Painting is an easy and relatively cheap way of changing the look and feeling of a room. Curtains, cushions and a discarded armchair or two may add to a warm and friendly atmosphere. Music in itself lends itself to artistic and creative adornment. If the voice educator is responsible for the interior decoration of the studio/class, this may reveal something of the educator’s taste and personality to the learner. Teenage learners are usually fascinated by detail like that and it creates an opportunity for conversation and openness.

2.4 The entrance audition

Before any teaching can take place, a learner should be auditioned in order to establish the ability and (especially) the potential of the voice to develop with training and to reach the standard that is necessary for achieving satisfactory results either at the end of grade 9\(^9\) (the senior phase of the GET Band), or if continuing with music as subject, at the end of grade 12 (exit level for the senior secondary phase, FET).\(^10\)

All educators have their unique methods of auditioning, but the following audition procedures can serve as general guidelines. An audition usually consists of several segments.

Prospective learners doing voice as subject should first be made to feel at ease with some light conversation. Start off by finding out the age of learners, or ask questions about the family, how many brothers and sisters they have, etc. What is their musical background or medical history? What experience have they had singing in choirs and at what age did they start? How long have they studied, if they have studied voice previously with another educator/voice teacher, and how do they feel about their past

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\(^9\) Curriculum and Assessment Policy Statement (CAPS) – Creative arts.

\(^10\) Suggestion: Refer Curriculum and Assessment Policy Statement (CAPS) – Music for more information regarding requirements and standards.
experiences? Learners could be asked about their objectives and about the kind of music they like. Having some conversation with the learners also serves as a means of evaluating speaking pitch and helps the educator to establish whether the speaking tone is natural and whether phonation and articulation are free (Brown 1996: 239-240). Before or after the conversation some of these questions could also be answered or ticked off on a form that could be filed for future reference.

Singing a song at the first meeting can be very informative. It will not only show the educator where learners are in their technical development, but it will also indicate what kind of musicians they are. Some vocalizing shows more about voice category and quality (Brown 1996: 240). For this purpose a portion of a song that has been prepared by candidates could be heard, which should be enough for a preliminary assessment of the quality and strength of the voice, some basic musicianship skills, the musical standard reflected by the audition selection and the level of singing confidence. Otherwise they may sing a well-known song like “Away in a manger” (Figure 3.1) that is pitched within a comfortable range.

Figure 3.1. “Away in a manger”11 – suitable version for audition purposes:

![Away In A Manger](image)

After having evaluated the learner’s ability in this respect, especially when auditioning a senior learner, a girl may be asked to sing the alto line and a boy the tenor or bass line of a four part song (which may be the same song as above, if the song has been arranged for SATB12). This will enable the educator to evaluate the learners’ music

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11 Kirkpatrick nd: 16.
12 Soprano, Alto, Tenor, Bass.
reading and aural abilities, and will also help to establish a sense of their willingness to rise to the challenge of trying to read another part.

Next, the educator vocalizes the prospective voice learner with a triad (starting around middle C), playing it as a broken chord going up to the top of the range followed by a descending triad to the bottom of the range. This gives an indication of the natural vocal timbre, basic vocal problems and current range.

The most difficult part of the audition is a tone matching exercise. The educator plays a series of four unrelated note patterns in various ascending and descending formations, as well as wide and close intervals, and asks the learner to immediately sing these four notes on “ah”. If the learner matches all four pitches accurately, he/she has a very good musical ear. When one or two notes are not accurate, this generally denotes a very trainable ear. When the pattern is sung back in opposite directions, or if there are no correct pitches sung, the learner either has musical ear problems (Boytim 2003: 23), has a problem concentrating, or may have a “lazy ear” which can be corrected. A good rendition of the prepared song may still be an indication that this candidate has the potential to become a good voice learner and that a musical ear will develop with training. If the learner also has had problems with this song, this signifies serious musical ear problems.13

Finally, the educator may ask why the learner wishes to do voice or take music as a subject. Within the school context, I have found that this may unfortunately often be only as a result of the better of some other less desirable subject options.14 It then usually is up to the educator to try to motivate such a learner, which may be somewhat taxing. Questions may also be asked about previous voice lessons, solo vocal experiences, school, community and church choir participation as well as instrumental experience and language study.

It is important to check the number of after-school activities and seasonal sports participation because of the possible lesson conflicts. The educator may enquire about transportation arrangements for getting the learner to lessons or home after school, especially if any lessons are to be taken after school hours. This information is often

13 See section 3 of this chapter: The importance of ear training (p. 50).
14 See Appendix A: Learner case B (p. 249).
only of academic value as many problems arise as the school year progresses and time tables have to be reviewed during the course of the year, especially as summer sports make way for winter sports. Transportation problems crop up as cars break down, parents lose jobs, bus companies go on strike, etc. The music educator usually has a hectic personal work schedule and it is difficult to arrange for substitute lessons. If I cannot make up enough lessons during the term, I try to fit them in during exam time, after learners have finished writing their daily tests. This is not ideal, but an advantage may be that it could serve as final preparation for their practical voice examination.

Some educators provide an intake form for the prospective learner to complete (Boytim 2003: 23-25). After a final evaluation of all that has taken place, the educator will accept, reject, put the learner on a waiting list, or suggest a year of lessons on another instrument (e.g. piano, recorder or flute) after which another audition will be required if they still consider doing voice. During the senior phase of the GET Band\textsuperscript{15}, from grade 8 to the beginning of grade 10, learners may still change from one instrument to the other.\textsuperscript{16} They may even start with music as a subject, but will have to ensure that they are up to standard with other aspects of the subject, e.g. theory\textsuperscript{17}, which may imply extra classes and effort and may even have financial implications if these classes cannot be accommodated in the school. Boys who are going through the voice change, will in any case only be accepted after the process is completed (which often happens during the first two years in high school). As from the start of the FET Band, that is from grade 10 onwards, (prospective) learners doing voice as subject will have to be ready to apply themselves to the demands of doing voice as subject till grade 12.\textsuperscript{18}

An educator will learn from every learner and will develop even greater teaching skills by working with less talented learners, as they are taught to pitch accurately and to read music. The learner with very bad musical ear problems, but a good voice or some potential and a keen desire to sing, should be given an opportunity to do so, at least for a year, in which time those who really wish to sing and are hard workers can learn to overcome these deficiencies to a large extent. It often happens that learners who began lessons barely able to pitch correctly go on to sing lead roles in school musicals.

\textsuperscript{15} Curriculum and Assessment Policy Statement (CAPS) – Creative arts.
\textsuperscript{16} See Appendix A: Learner case B (p. 249).
\textsuperscript{17} See Appendix A: Learner case E (p. 256).
\textsuperscript{18} Suggestion: See Curriculum and Assessment Policy Statement (CAPS) – Music for more information regarding requirements and standards.
become members of school and regional choirs, or develop as church soloists\(^\text{19}\) (Boytim 2003: 24-25). All evaluation, remedial work and catching up will obviously have to be done before the start of grade 10. Otherwise the learner should then be encouraged to do voice privately – if money is not a problem, doing a less demanding course with a sympathetic voice teacher.

Normally, a decision about accepting or rejecting the candidate is reached by the end of the audition appointment. After agreeing to accept the learner, the educator will briefly explain his/her style of teaching and what is expected from learners doing voice as subject.

3. **The importance of ear training/aural training**

The purpose of ear training is to make learners more aware of the pitch and rhythm variations they already hear, even though they may not know their names or written symbols. Ear training develops their response to pitches and rhythms through specially devised exercises. It brings together this natural pitch and rhythm discrimination with their visual perception (musical notation) and with their knowledge and recognition of the names of pitches, pitch relations, pitch combinations and rhythms. Ear training should, if possible, continue until their reactions to the written and verbal symbols representing pitches, pitch combinations and rhythms, as well as to pitches and rhythms they hear played or sung, become instantaneous and precise (Kagen 1950: 10).

Kagen (1950: 10-15) is of the opinion that, in practice, ear training cannot be expected to create a musical ear, although he believes this is theoretically not impossible, provided ear training is started at a very early age. Learners with a poor natural ear often expect ear training to improve their ability to imagine and reproduce pitches vastly, but Kagen does not expect this to happen without an almost prodigious effort. The possession of a good musical ear, or the ability to imagine and reproduce pitches, can be identified as the very first prerequisite necessary for a professional singer, even above the possession of a good voice. Singers have no keys, valves or strings which they could learn to control accurately enough even to estimate correct pitches. Therefore it seems logical to assume that the singer, above all musicians, must be able to imagine pitch. Without this ability no music can be made, even if the voice is

\(^{19}\) See Appendix A: Learner cases F and G (p. 258 and p. 260).
pleasant. Consequently it can be concluded that the musical ear necessary for a learner doing voice as instrument may be formulated as the ability to “carry a tune” effortlessly and accurately. This is the first requirement of singing. The more natural talent learners have in this regard, the better the chance will be that they would be able to make progress. This ability has to be present to some marked degree before studying voice.

On the other hand, Fields (1984: 53-54) states that it is evident that the ability to perceive and interpret tone is primarily a function of the brain and, like every other brain function or faculty, it is possible to be trained and improved under systematic guidance. Ear training is a process of learning through repetition. “When hearing deficiencies are not of organic origin, they may be caused by abuse, disuse, or neglect of the hearing function. Such conditions are amenable to instruction and will respond to ear training methods” (Fields 1984: 53). He continues that one of the first objectives of ear training is the recognition of tonal values. As a result, typical exercises may be presented to the learner in a graded progression, which uses all the song forms and conventional types of music as practice materials. After this the learner will be ready for lifelong study of musical appreciation. Establishing a thorough grounding in basic concepts relies on the educator’s guidance and instructional routine. The basic concepts support the initial recognition of musical language and form and cultivate habits of concentration and analysis that lead to musical thinking and artistic interpretation.

Within the school situation, the viewpoint of Fields is usually more applicable than that of Kagen, as long as the educator is patient, knowledgeable and dedicated. It is true that the naturally gifted learner will have an advantage and it is usually this learner who will decide to continue with serious music studies. The average high school learner should however also be susceptible to a level of training, which should be sufficient for school requirements and even a professional singing career in a less demanding genre.

Nock (2010)\textsuperscript{20} states that in her experience it is possible to teach a learner to develop a good musical ear, though this takes a lot of effort and a lot of patience. She has been successful with several pupils in this regard. There are limitations though — it depends on the amount of time learners will put in, how motivated they are, how much practising they will be doing at home and also their understanding of the extent of their problem. It

\textsuperscript{20} See also Appendix D. Transcriptions of interviews: Nock: Question 6.
can be a long term task. They will never get to the same point as the learner who has had a musical background and a trained ear, but a noticeable improvement is possible. The practical approach to ear training will be discussed in chapter 4.

4. **Sight-singing**

Sight-reading/sight-singing refers to the ability to perform a piece of music at first sight, without studying or practising it beforehand. Sight-reading requires an immediate understanding of the meaning of the notes as well as the ability to produce them more or less accurately, while shaping the musical phrases correctly. There is less emphasis on playing or singing every single note with complete accuracy and more on understanding the overall idea of a piece. Skill in sight-reading is important for professional musicians. It also makes amateur music-making more pleasurable (Ammer 1972: 325). Teaching of sight-singing skills is discussed in chapter 4.

It is suggested that skilled sight-reading requires the development of efficient input skills, especially ‘pattern recognition’ skills, ‘prediction’ skills and the ability to generate and use auditory representations. Musical sight-reading is a task of great interest to both musicians and psychologists. For musicians, it is a useful, or even critical, skill to acquire (Waters, Townsend & Underwood 1998: 123).

In many music-reading situations, the reader is required to perform the music at first sight, i.e. with little or no preparation. This is especially true for orchestral players and accompanists, choristers and solo singers. Furthermore, in many examination situations (e.g. the Associated Board Examinations, Trinity Guildhall and Unisa), musicians are required to perform a novel passage at first sight. One of the interesting features about sight-reading is that there appears to be a very tenuous link between performance ability and sight-reading ability. There are talented performing musicians who are reported to be poor readers (e.g. Kiri Te Kanawa and Artur Rubinstein\(^{21}\)). Many musicians consider sight-reading to be an exercise in pattern recognition. This idea is the starting point for understanding skill differences in music reading. Less skilled readers often complain that they cannot ‘take in’ the information quickly enough because they are reading the notes individually, whereas the more skilled readers


In learning to sing at sight, learners should read ahead – while singing the notes of any given bar, those of the next bar should be prepared in advance. Really good adult sight-singers can read several bars ahead, but the skill to do that can only come with time (Scholes 1954: 352).

Skilled sight-singers are efficient at processing individual notes, and this gives rise to their advantage with groups of notes. They can accurately recognize briefly presented intervals and chords (Waters, Townsend & Underwood 1998: 125). They can also identify rhythmic patterns. This aspect is crucial for the learner, as the key to passing a sight-singing examination is “to keep a basic pulse, despite slips on the way . . .” (ABRSM 2006). At a more advanced stage interpretation can also be taught. For this the learner has to be aware of the mood of the music, musical form, phrases and climaxes and dynamics. Theoretical knowledge of deep structural features (modulation, sequences, etc.) is essential for the advanced reader. This helps with pattern recognition and anticipation (Waters, Townsend & Underwood 1998: 126). At a very advanced level transposing at sight may also be attempted. This is only possible if a solid theoretical foundation has been laid.

4.1 Tonic Sol-fa

In South Africa Tonic Sol-fa was promoted through Christian missions as a means of evangelizing indigenous populations that did not have any access to music training. The Tonic Sol-fa became the mainstay of community choral singing. The use of Tonic Sol-fa was also introduced into government schools’ singing classes. African musicians, conductors, composers and teachers rely on the Tonic Sol-fa notation system should only be used as “a stepping stone to staff notation”. The Tonic Sol-fa music notation system is currently used extensively in South Africa as a choral teaching method and has been indigenized by the local
community choirs. John Curwen had exactly this in mind when he developed the Tonic Sol-fa notation method.

Presently choral singing is the most popular form of musical expression among a large part of South African population. The Tonic Sol-fa music notation system still plays a significant role in the development of a South African music identity.

Nell (2009: 98) lists some sight-singing abilities which can be improved by this system, which is perceived as simpler than the staff notation system. These include pitch accuracy, intonation, fluency in reading music notation, perception of the relationship between melody, harmony and rhythm, musical memory, intervallic awareness, interpretation of modulations and the reading and interpretation of scale passages or sequences.

5. **Practice procedures**

The learner should practise daily to receive the full benefit of lessons. Problem areas within exercises and songs need to be identified, examined and corrected at home. The proper use of practice time is extremely important and will vary according to the skill and vocal strength of the learner. It is advisable for young developing learners to sing only fifteen to twenty minutes at a time and to strictly stick to the schedule set by the educator. Ideally two or three short practice periods can be spread over the course of a day. These sessions may consist of 1) concentration on technique and technical exercises, 2) studying rhythm and texts, translating those in a foreign language and 3) memorizing songs. It is important though that each minute of practice is used carefully and with complete concentration. Fifteen minutes of careful practice is worth more than an hour of just singing, and keeps the voice healthy, while promoting consistent improvement of vocal technique. With experience, practice, learning techniques and rehearsal time will become more effective (Bunch 1995: 136).

Practice should be done in a standing position to get good body posture and support. As soon as a song is mastered, a learner who can play an accompaniment at the piano should play with a careful sitting position. The piano should only provide a pitch check or guide or an occasional accompaniment. Serious mistakes may be learnt when trying

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22 See Scholes (1954: 357-358) for further detailed reference to indications of tonality, pitch and rhythm according to John Curwen’s Tonic Sol-fa notation system.
to play the accompaniment before the song is thoroughly learnt (Boytim 2003: 30). It is for this purpose that recordings made for learners on tape will be of great help to them when practising, because through this the educator will be sure that they learn their songs and exercises correctly.

Brown (1996: 241) suggests that after a short time the educator needs to ask the learners to demonstrate how they practise at home. [When voice learners are away from the studio or school they are their own educators.] Learners often try to hear themselves rather than to concentrate on what singing feels like. The educator should ask the learners to describe their sensations, especially if they do not feel comfortable with a tone or scale. Teaching has to be a two way process – educator tells learner, learner tells educator.

6. Examinations, performances and auditions

Christy (1967: 1) maintains that “The first great principle in learning to sing is an attitude of enthusiastic interest, pleasure and confidence . . . Pleasure is the first condition for success . . . An artistic act such as singing is always a creative expressive act. One of the greatest pleasures in life is creative expression . . . Singing is fun, both artistically and physically . . . The greater freedom and skill in control, the greater pleasure that results.” From this can be reasoned that if singing is not enjoyable, if it is a source of stress and anxiety for the performer, it misses its purpose. As such it is important that natural fear or self-consciousness (as psychological enemy) should be managed in such a way that it will not take away the joy of performing, or of “just singing for the fun of it”.

Fear is often the cause of rigidity. When the learner relaxes, the muscles concerned in the control of singing can coordinate flexibly. The successful performer must be self-assured, with a realistic ego based upon self-control and justified self-confidence, resulting from previous experience, sufficient preparation and intelligent hard work. Discipline and calm and natural conduct reduce the emotion of fear. Nervousness is a sign of emotional sensitivity and is a familiar trait with the majority of great artists. Likewise most great singers are excited and anxious before a concert. However, they should never be really terrified unless they have no faith in their own memorization or
technical skill (Christy 1967: 4). Voice learners need to be so prepared that nervousness will not destroy the ability to perform well (Boytim 2003: 53). If the learner has mastered the subject matter and technique and has practised enough, extreme tension can only be due to an exaggeration of self-importance (i.e. self-consciousness) or to a lack of self-knowledge (Christy 1967: 4).

Working towards an examination needs careful planning from the educator’s side. The educator has to be familiar with the current school syllabus for music as a subject to know at what Grade the learner is required to be, as well as how many pieces are required. For an external examination the educator must be familiar with the skills needed by the learner to pass such an examination. The different syllabi must be studied carefully and the educator has to choose the most appropriate one for the learner. In South Africa the most common external examinations to do are those set by Unisa, the Associated Board of the Royal Schools of Music and Trinity Guildhall. An external examination gives learners something to work towards and can be a very rewarding experience. Some learners like the focus and challenge which comes with working towards an examination.

6.1. General preparation for examinations, performances and auditions

Christy (1967: 5) lists the following rules for reduction or elimination of fear:

- The learner should have an optimistic “I can” attitude.
- It should be realized that fear only exists in the imagination. After rationalizing that which is feared, fear is reduced and perhaps even eliminated.
- The learner has to concentrate on interpretation, the projection of meaning and beauty in the song.
- Experience should be gained in singing publicly and every opportunity should be used to do so.
- Thorough preparation is essential. The song has to be known and a number of rehearsals have to be done with the accompanist to be sure of routine. Confidence is boosted when the text, melody and interpretative factors have been thoroughly practised.

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23 The Curriculum and Assessment Policy Statement (CAPS) is to be implemented as from 2012.
• The educator has to make sure that the learner has mastered adequate technique for the demands of public singing.
• Natural, confident action, prepared speech, commanding posture and stage presence have to be practised.
• To release tension, the learner must breathe deeply and relax before singing.
• Fear may be conquered through participation in related fields such as drama, speech, debate, verse choir, choral ensembles, church choir, or any activity that provides opportunity for self-expression and appearance before the public.  

6.1.1 Examinations
The song selection for examinations must be done very carefully. Songs must be within a comfortable range and represent a variety. It is important that learners must also want to do the pieces chosen by the educator, since they are the ones who must sing and interpret the songs. If they do not understand them or cannot relate to the songs, they will find it very hard to interpret them.

It must also be taken into consideration that there are other concepts involved with an external examination, like sight-singing and aural tests. These abilities need to be acquired in advance and need to be practised regularly, because if it is left too late it will cause extra stress. For Trinity Guildhall examinations up to Grade 5 a choice can be made between sight-singing and musical knowledge and it is left to the educator's discretion to decide which one to choose and in which one better marks will be obtained. If the musical knowledge aspect is chosen the sight-singing must still be practised, because it is a very useful skill, whilst from Grade 6 onwards learners will have to do sight-singing as part of their examinations.

Communication and interpretation is just as important as correctly singing what is written on the page of a song. External examination boards, for example Trinity Guildhall, stress the importance of the communication aspect when performing a song. It is therefore useful if learners could try to memorize their songs, as singing without the music in front of them will facilitate better communication and interpretation.

In the Learner cases included in Appendix A it can be seen that most learners are very involved in other school activities. The three learners that have been involved in drama are definitely reaping the benefit of this (Learner cases C, E and H) (p. 251, 256 and 262).

See also Appendix D. Transcriptions of interviews: Nock: Question 15 for remarks regarding the choice between the examinations of the external examination boards.
6.1.2 Performances
Performing should be an integral part of singing. Learners should be encouraged to sing in front of the class or a small group of friends. The educator has to check the learner’s body posture and visual focus. It is easy to spend all the time working on technique and tone, only to find that during a performance the learner is as wooden as a board. To facilitate this whenever the opportunity arises, learners should keep a list of their repertoire. It builds their self-confidence to see how many songs they have ready for performances.

The educator must remember to tell the learners to warm-up their voices before the performance and not to talk a lot on the day of a performance. They also need to bring water with them, as the throat tends to get very dry as a result of nerves. If an educator has a number of learners that will perform at the same concert, their voices could be warmed up as a group by playing exercises which are known to all of them on the piano. The educator could let them all sing together, keeping their voice types in mind. Doing a simple hum exercise before the performance will also help.

The learner should not perform a song from memory if it has not been practised from memory beforehand. If learners perform with sheet music, it is important to tell them to make eye contact with the audience and not just fix their gaze upon the music in front of them. Music must preferably be put in a file that is black on the outside, because if it is put on a see through stand, different colours can be distracting to the audience. It is also important that learners should look neat when they perform.

If an educator does not play the piano well enough (or feels insecure playing) to accompany learners, a suitable pianist has to be found. In such a case the music ought to be provided well in advance. The educator is required to plan for a supervisory practice time with the pianist and learner together (Seleshanko 2002).

6.1.2.1. Microphone technique
For performances or auditions learners often have to use microphones. These may even sometimes be used for more formal school concerts, where learners frequently have to sing in school halls with bad acoustics. Rather than having to put strain on a young developing voice, the educator should resort to the use of microphones if
available. The learner will also be more relaxed if there is more assurance that the voice will be heard by the audience.

It is important to learn how to hold a microphone. Most microphones for live singing are 'directional', which means the sound works best when the learner sings directly down the microphone. The closer the learner is to the microphone the fuller the sound quality will be and the further away, the thinner it will sound. This is known as the ‘proximity effect’.

There is a large variety of microphones available for many different uses, depending on the situation. These include:

- **Lead microphone** – a hand-held microphone with a long lead attached to it.
- **Radio microphone** – a hand-held microphone that has no lead.
- **Head microphone** – a microphone worn on the head.
- **Lapel microphone** – also known as a clip microphone or tie microphone, this is the microphone that is clipped to the front of the clothes or, for the theatre, sometimes rests in the hair. A battery pack has to be worn on a belt or clipped to the waistband. This picks up the signal for the microphone to work.
- **Microphones for recording sessions** are normally quite different from the ones used in a live situation. The performer sings all the way round the microphone as it has a multi-directional function (*Omnı*).
- **Some producers and performers** like to use valve microphones, where a valve system is used in the inner workings of the microphone. This can make the voice sound warmer and fuller.
- **Ribbon microphones** also work well, giving the voice a smoother sound.

Different microphones work well for different performers. There are different types of microphone stands as well. An elbow microphone stand is ideal for guitar players and a circular base microphone should be used if the learner wants to pull the stand closer. Some microphone stands move up and down with hydraulic movement (Grant 2006: 105-107) to adjust to the height or position of the performer.

Baker (1947: 51-53) writes the following about microphone technique and, although technology is much more advanced now than in 1947, the general principles remain the same:
The microphone is like a powerful lens on a camera, it shows up all the faults remorselessly; that is why I think there will always be a market for the artist-singer whatever developments in mechanical reproduction the future holds in store. The microphone can be, and is, a great help to the singer in that it has made him clean up his technique. Hoarseness, faulty intonation, slovenly attack, throatiness, careless diction, chopping phrases instead of singing them, tobogganing one’s way through a song and untidiness generally, all these things are laid bare by the microphone . . . The microphone is an exceedingly sensitive instrument and does not take kindly to explosive singing. Sing easily and naturally. Whispering singers can be amplified until they sound like real ones, but I do not regard it as legitimate singing. From the strictly vocal point of view there is a very serious side to the question of adapting one’s voice to suit the microphone. Constant singing in half-voice relaxes the vocal apparatus to such an extent that the power to sing in the natural way is lost, and the voice will gradually die through lack of use; or more accurately, it will perish through improper use. The same advice therefore holds good for microphone work as for public singing.

Currently with more sophisticated equipment (which some schools may have available) even a very average voice can acquire star quality. This can be done electronically by putting on “reverb”, echoes, etc., adjusting timbre and volume, editing out mistakes or even transposing bad intonation. That is one reason why there are so many inferior singers today who are under the impression that they can sing. In some instances the singer may be able to get away with this for a time, but being completely dependent on an electronic crutch is a real risky business.

Sound checks and practicing with the microphone before performances are absolutely essential. It often happens that a performance is spoilt by acoustic interference, sound that is either too loud or not loud enough, inadequate microphone technique, an inferior system or shoddy work by the technician. It is sometimes reassuring to have the support of a microphone in an adverse situation, but a good voice usually “sounds better” without a microphone, so apart from strengthening the sound, the microphone does not present an automatic improvement on the natural quality of a developed and trained voice.

6.1.3 Auditions

For the audition song, learners should never sing something from the show for which they are auditioning, unless specifically asked to. Directors get tired of hearing the same songs over and over again and often have specific ideas about how they want the songs from the show sung. If it is not done that way, the chance may be lost. On the
other hand, learners have to choose a song that is similar in style and range to the character they are auditioning for. The audition song has to be learnt well.

Rehearsals have to be done with a pianist if it is an audition for a musical. For a singing competition that specifies that backtracks may be used, the learner must practise with the backtrack that is going to be used at the audition and should make sure that it is working and in a suitable key. If the learner makes mistakes during the audition, he/she should be encouraged beforehand not to stop. An audition is like a performance; the face or body language must not reveal the fact that a mistake has been made. If the audition notice requests a song of a particular length, the learner must not sing anything longer than that. A song of 2 to 3 minutes is suitable. Learners must not sing *a capella* (unless specifically requested) and should not choose a song that is difficult for a pianist to play, unless they use their own pianists, whom they know will be able to play it. The song must suit the performer. Hand and arm movements should be used only if they are natural. The learner should give a performance and feel the song – good acting is vital to good singing (Seleshanko 2002).

A friendly and courteous manner is extremely important. Cell phones have to be switched off.

### 7. Conclusion

Although the different topics discussed in this chapter have here been dealt with separately to the teaching method discussed chapter 4, it is crucial that they be considered an integral part of voice education and that they inform each and every voice lesson. For example, as a result of a lack of time aspects like sight-singing and ear/aural training are often neglected during the lesson. This should not be so. It is of no use to start with sight-singing and aural exercises a few weeks before an examination, or to give learners a book or CD/tape and expect them to do the exercises on their own. These are fundamental skills that need gradual cultivation along with all other techniques inherent to singing. Consideration of the total setting within which the lesson has to take place is also very important, before the educator can move onto actual teaching. This will be presented in the next chapter, where a method for teaching voice to high school learners will be presented.
CHAPTER 4

VOICE AS SUBJECT IN THE HIGH SCHOOL
– A PROPOSED TEACHING METHOD

1. Introduction

This chapter presents a practical method for teaching voice in the high school, one which is aimed at both the senior phase of the GET Band (grades 8 to 9, or 13 to 15 year-old learners) and at the FET Band (grades 10 to 12, or 16 to 18 year-old learners). This method will be based on the theoretical and methodological principles discussed in chapters 2 and 3, complemented and illustrated by explanations and practical examples drawn from various phenomenological encounters: from my informal observation at the Jill Nock Studio in Port Elizabeth, my own experience as learner doing voice as instrument, and as educator teaching voice.

The proposed method does not profess to be definitive or ultimate¹, but it does present that which I have found to work for me² and what I believe will be of value to other voice educators in similar teaching situations. Midgette (2004: 19-20) states that:

The art of singing has been described, quantified, analyzed and propagated for hundreds of years. There is a science of singing, insofar as there are certain physiological facts about the production of sound, but very few teachers are possessed of a complete knowledge of this science, and it’s not even clear that knowing it is necessarily going to help people to sing better.

One very important principle of studying voice: subjective perception is vitally important. Do what works for you.

The chapter will be supplemented by the information in the appendices attached to this dissertation:

- Appendix A: Learner cases as examples of phenomenological encounters in my teaching career.

¹ See also Appendix D. Transcriptions of interviews: Nock: Question 7 where she states that: “. . . there is no perfect method, but there is a good starting point.”
² See Appendix A: Learner cases.
Appendix B: Repertoire: Analysis and presentation of graded examples of teaching materials for the different phases (taking into account the different levels of development and musical Grades of the individual learners).

Appendix C: Repertoire Lists: Graded examples.

Appendix D: Transcriptions of interviews.

A good lesson should have a balance of technique, interpretation and performance. Christy (1967: 8) stresses that “technic (sic), feeling, and musicianship not only are necessary but are also inseparable triplets in the service of artistic singing”. According to Grant & Grant (2003: 33) good technique (both in exercises and songs) has to be followed through with learning how best to interpret a song vocally and render it with correct facial and emotional expression.

2. The lesson

The minute a previously auditioned new learner enters the studio/classroom the educator has to set the tone for all future lessons. In his/her mind there should be a “lesson plan” for every lesson and especially for this most important beginning session (Boytim 2003: 26). My experience is that good preparation remains the key element to any successful lesson. The educator has to emanate professionalism in a warm and friendly manner, without compromising discipline and respect. All the general rules and ethos of the school should also form part of the voice studio/classroom. These apply equally to the educator and learner. The learner has to be productively engaged for the duration of the lesson and for that the educator has to be prepared in terms of lesson material (like sheet music, photocopies, exercises, accompaniments, CDs, clean cassette tapes), background information, technical knowledge and technical lesson aids (if available).

The three essential singing topics – posture, breathing, and tone – are covered first. These skills should be firmly established. When the learner understands these three important topics, the singing capability will start increasing (Phillips 2003: 3).
2.1 Basic lesson plan

Beginners start with breathing for the first few lessons and complete the three-week chart.\(^3\) When they understand the principles of breathing, sound placement exercises should be incorporated. More formal lessons begin from about the fourth week. The educator has to give the learner a few warm-up exercises and then start with an easy study, while incorporating the aspects learnt thus far. After that an attempt at beginner song repertoire could be made.

The more formal lesson structure that I try to adhere to, could be presented as shown in Figure 4.1 below, a basic framework that can be adapted according to the grade of the learner, time available or special needs, e.g. preparation for performances and examinations.

Figure 4.1. Lesson plan

<table>
<thead>
<tr>
<th>Warm-up exercises/breathing</th>
<th>Warm-up exercises must be done with each lesson. Breathing must be done as needed.</th>
<th>5 to 10 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical exercises</td>
<td>For variation purposes the educator can start with general warm-up exercises one week and the next week with graded technical exercises.</td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Every second week work can be done on a study to build technique.</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Pieces (song repertoire)</td>
<td>One or two pieces can be done depending on the length of the lesson.</td>
<td>10 to 20 minutes</td>
</tr>
<tr>
<td>Sight singing</td>
<td>Sight-singing is a crucial part of singing and can be done at any time after the exercises.</td>
<td>5 to 10 minutes</td>
</tr>
<tr>
<td>Aural development</td>
<td>A genuine effort should be made to fit in aural development exercises, as these are very important.</td>
<td>5 to 10 minutes</td>
</tr>
</tbody>
</table>

\(^3\) See 2.1.2 Breathing (p. 69).
2.1.1 Posture

The learner should stand against a wall and notice the spaces behind the neck and at the bottom of the back. These curves have to be straightened, so that the body is as upright as possible, without being uncomfortable. The heels should be about 15 cm apart and the feet in a V-shape. Pressing the bottom of the back against the wall will straighten the lowest curve. The chin will then naturally align itself, while easing the shoulders towards the wall and keeping the other curves straight. Without changing this upright position, let the learner ease the body a few centimeters away from the wall and transfer the balance from the heels to the balls of the feet, relaxing a little in order to feel poised, not rigid. One foot can be put slightly before the other, to secure the balance. From the waist up, there should be a sensation of having stretched somewhat, with the ‘walk-tall’ sensation, which models have when they balance books on their heads. To keep the shoulders down, the learner should imagine carrying two heavy school bags (Hewitt 1978: 11) or having a heavy coat on his/her shoulders.\(^4\) During breathing the chest should be held raised without being rigid. The head rests freely on the end of the spine, so that the muscles of the neck and the organs within the neck, the throat and the larynx are relaxed. This kind of posture is ideal for singing, because it not only gives the visual impression of confidence (even if the learner does not feel confident on the inside), but it also improves the singing performance (Phillips 2003: 17).

\textbf{Figure 4.2. Correct posture}\(^5\)

\(^4\) Jill Nock Studio.
It is sometimes a good idea to encourage learners to stand before a large mirror and so evaluate their posture in order for the body to work better and to look better. Aligning the body properly puts all the muscles that help with singing in the right position. This helps them to sing better, and proper alignment gives an air of confidence and professionalism (Phillips 2003: 19-22). But watching the posture in the mirror should not be done constantly, as too much attention to the outward appearance would hinder the concentration on the performance of the singing muscles (Armhold 1963: 25).

The more progress is made in the freedom of the technique of emitting the voice, the more faults – such as staring eyes, a chin that is pushed forward, a trembling jaw, wrinkled forehead, lifted shoulders, swollen blood vessels at the side of the neck – will diminish once the inner cause of these faults is remedied. Correct and free voice production is always accompanied by freedom of the mouth, face and eyes. The eyes, especially, reveal the wrong or right production, as a good sound will always go together with a soft and relaxed expression in the eyes (Armhold 1963: 25). On the other hand, it should be stressed that whenever a mistake has been made the learner should be conditioned to keep a straight face – a shocked expression in the eyes, rolling of the eyes, or looking around desperately (or even accusingly at erring fellow learners!) will reveal a problem to an audience during the event of a possible performance, whereas a calm composure may hide the mistake from listeners. During their high school career learners doing voice as subject may be subjected to various public performances, often in front of very unsympathetic or silly schoolmates. Learners should be taught to keep their cool in front of such audiences. It may even happen that they appear on national television!\(^6\)

The hands should hang loosely at the sides or be lightly clasped (Armhold 1963: 25). The learner should feel prepared, balanced, poised and ready for action – like a high-diver at the moment just before diving from the board. Learners must experiment with this posture until feeling that it is right. To prevent slouching, this body-shape has to be maintained if they have to sing

\(^6\) See Appendix A: Learner cases: Learner H. This learner, who did well in the local rounds of the national Idols competition, has become somewhat of a celebrity at school, but now is also being made fun of because of the comments one of the judges has made about his appearance and especially the very distinctive pair of jeans he chose to wear for the occasion!
while sitting (Hewitt 1978: 11). Posture can be checked by means of the following simple test: The learner should stand with the back against the wall, touching it with the heels, shoulders and head. If the educator can put a hand in the space between the small of his/her back and the wall, the back is curling too much. If the educator cannot put a hand through the gap mentioned above, the learner probably has a very good posture (Hayward 1994: 91). The educator, of course, always has to take the natural (and normal) deviants in the individual physiological make-up of each learner into account. In some instances the natural curve of the back may be more pronounced than in others.

Teenage learners are notoriously self-conscious, self critical and sensitive regarding their physical appearance and posture and may take time to get used to physical handling by the educator. They may also take a while to relax from other daily tensions. I have found that exercises for releasing tension are beneficial, but the awkward teenager may even need a period of adjustment to relax sufficiently to become comfortable with these relaxation exercises. A little humour may help here, but never at the expense of the already embarrassed learner. Allow some giggling at first while the strange exercises are attempted. (Laughter in itself is an excellent relaxant.) They soon become used to them and will then take it in their stride.

2.1.1.1 **Exercises for releasing tension and gaining good posture**

Exercises for relaxing tension include the following:

a) The learner has to pretend to be a rag doll or marionette, without any tension in the body. A rag doll is supple and can move in any direction. The learner then has to drop over from the waist and take a few deep breaths. While breathing, notice the flow of energy in the body. Keep the knees bent to take the pressure off the back. The elbows may also be rested on the knees for support until feeling more comfortable dropping over further. Releasing any leftover tension, he/she can then gradually roll back up. While standing back up, the learner has to imagine stacking each vertebra of the spine on top of the other, in order to feel lift and height in the body. The feeling has to be created of a marionette being
pulled by the string attached to the crown of the head and growing taller without moving, until standing back up with correct posture.

b) Shaking out (jiggling, squirming, shaking, moving about) is a quick exercise for releasing tension.

c) Stretching like a rubber band is another sensation of releasing tension in the body. The aim of this exercise is to allow the learner to feel flowing motion in the body – stretching upward as if made of rubber and relieving any pressure on the joints.

d) An area that often generates tension is the forehead. The learner should have a flexible face when singing. If the forehead wrinkles during singing, a piece of clear tape could be put vertically onto the forehead between the eyebrows. The tape can be felt moving when the forehead is tightened. The eyebrows may move during singing or speaking, but the forehead should be kept free of tension (Phillips 2003: 23-25).

Exercises for gaining good posture:

Bjørkøy (2000) suggests the following exercises: When working on vocal technique, the whole body should be thought of as an instrument and it is very important how the learner sits or stands. The best way is to stand, and the exercises will be explained as if the learner is standing, but the same principles would apply for sitting. All exercises should be done with deep, calm and relaxed breathing:

a) The learner has to find equilibrium between the feet. The point of balance can be found by rocking back and forth. When the muscles on the back and front of the body no longer are tensing up, he/she will have found good balance. The eyes should be closed while doing this.

b) The learner has to slide the knees a bit forward in order to be free to move them. This gives proper relaxation and flexibility of the pelvic-area, which is important for an efficient breathing function. Be careful not to arch the small of the back too much.
c) Extending the body, the arms should be lifted over the head, stretching them even higher one at a time. The arms are then released, keeping the sensation of being tall when starting to sing, while always having solid grounding of both feet.

d) Moving the head to all sides, the neck-muscles and head should not be locked in a fixed position.

e) With a hand on each side of the lower part of the ribcage, the learner has to try to expand it slightly to the sides, elevate the breastbone a little but not too much. This enlarges the ribcage, which is important for both the air-volume and the breath-control. This exercise should be repeated a little every day. The learner has to breathe deeply with the abdomen while doing it. The shoulders have to be relaxed.

2.1.2 Breathing

The breath and support functions are complicated and in the beginning should be trained separately. For the young grade 8 beginner, it may be sufficient to simplify the processes and descriptions by using phrases like “the body becomes bigger when you inhale and when phonation (singing) starts, the body (abdominal area) becomes smaller. The older learner is capable of understanding and applying the underlying principles. According to Miller (2004: 10-11):

There is no reason why junior high or high school students cannot comprehend the primary mechanics of breathing, if those concepts are properly explained. An accurate understanding of the principles requires far less time to acquire than do the academic subjects that students of this age group are expected to master. An explanation of the musculature of the torso lies well within the comprehension of youthful singers. A few noncomplex anatomical illustrations may help. After a while breathing and support should also be taught in relation to attack/onset, continuity in sound production, timbre and articulation. To work with respiration can be a psychological challenge, because so many tensions are related to breathing (Bjørkøy 2000).

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7 See Chapter 2: Section 2.2 (p. 18-20), for definitions and descriptions of breathing and support.
8 See Chapter 6: A basic overview of the anatomical and physiological aspects of singing.
To help the learner to inhale deeply and efficiently, the following exercises might help:

- imitate smelling an odour, or
- imitate being frightened or surprised, and see how this affects inspiration; by pure reflex the lungs are filled up very quickly, and the air normally remains in the lungs for a while (Bjørkøy 2000).

Singing is an extension of speaking. Let the learner try imagining that someone has picked up his/her purse by mistake. The person is walking away quickly and has to be stopped. Keeping a hand on the lower abdomen, the learner breathes in, relaxing the abdominal muscles and calls out, ‘Hey! Come back’. If the muscles were relaxed during inhalation, they would have gone hard during the exclamation. This also happens during laughing or crying and should happen while singing. Getting these muscles involved will add power and strength to the singing voice (Grant & Grant 2003: 38).

Relaxing the lower abdominal muscles is the quickest and easiest way to inhale deeply and quickly, which is necessary for singing. It will be useful to show the learner an insert from an opera DVD to notice how the singers are able to sing very high notes while throwing themselves about the stage. This is because they are supporting their voices by using their bodies (especially the lower abdominal muscles) to control the breath. Stress the fact that singing should never hurt. If it does, something is done wrong. The only parts that should feel tired from all the breathing and support after a singing session are the abdomen and back muscles (Grant & Grant 2003: 39).

2.1.2.1 How to breathe.

a) Ask learners to lie on the floor on their back with the knees bent and to breathe as if going to sleep. They should feel the lungs fill during inhalation and also how the back presses into the floor. They are usually able to do it correctly in this position, but often have to work with this concept repeatedly before they can do it while standing up. It is especially difficult to work with ballet students doing voice, as they are taught to contract the mid-section of their bodies. Athletes who are used
to high clavicular\textsuperscript{9} breathing may also have problems understanding this concept (Boytim 2003: 58). The arms should be stretched above the head with the shoulders relaxed. The learner should feel the ribs lift during inhalation.

b) After that something heavy has to be held above the head and the way the air expands at the bottom of the lungs below the shoulder blades should be felt.

c) Next the learner should sit well back in a chair (this is best demonstrated by using a car seat) and feel the way the back expands and presses into the chair.

d) The learner should breathe in and then exhale as though busy cleaning a mirror on the aspirated “hah”. The body expands to inhale and then ‘squeezes together’ to get rid of the air. Now the learner should aspirate on hah, ho, ho, ho. Here the different ways the body could be used in controlling the outflow of air should be felt (Nock \textit{nd}).

Now that the learner has learnt what it feels like to breathe correctly, muscle exercises should be done:

a) Explain in simple terms how the diaphragm is positioned in the body. Tell the learner that it has no nerve endings and, although it is horizontally attached to the lower ribs, one cannot feel it as it moves up and down.\textsuperscript{10}

b) The educator has to place his/her hands on the sides of the ribs and then on the back to show the outward movement (like filling a bicycle tyre with air). Then ask the learner to do the same to him/herself.

c) Next, ask the learner to sit on a bench, resting the elbows on the knees and the head in the hands. When breathing this way, most learners are able to feel the outward movement in the lower back, and the educator should be able to see it.

d) Ask the learner to raise the hands (which should be clasped) high over the head. The elbows should slowly be lowered close to the body with

\textsuperscript{9} I.e. from the collarbone.

\textsuperscript{10} See Chapter 6: Section 5: \textit{The chest, lungs, diaphragm and trunk muscles} (p. 140).
the palms open and facing away from the side of the body, with the chest remaining high. In this position, most learners can feel the natural low breath (Boytim 2003: 57-58).

As the learner progresses with singing, breath control becomes more critical. Breathing deeply to have enough air for singing long phrases is especially important for senior grades (grade 11 and 12 learners, who often are at an external music examination standard equal to Grades 6 to 8). The learner can increase lung capacity by doing aerobic exercise like running, swimming or dancing. It can truly enhance a performance if a learner is able to run one musical line into another. To achieve this takes good breath control. If the learner's breath control is weak, it can spoil the performance of a song. If a word has to be broken up in order to take a breath, it loses its meaning. To demonstrate this, let the learner say the following line (with feeling), ‘You left me and my heart is broken.’ Now let them repeat it (with feeling), but let them put a breath in the middle of the word ‘broken’. Say, ‘You left me and my heart is bro-ken’ (Grant & Grant 2003: 41). The educator can also ask learners whether they would leave their shopping bags at the front door when they come in, or would they carry them through to the kitchen — thus relating the “carrying through” to a daily activity with which they are familiar.  

2.1.2.2 Exercises on breathing

a) While standing with the body correctly balanced, the learner has to lean forward over the front foot, keeping the body at ease, but in position, with the back foot slightly raised to help keeping balance. Both arms need to be extended forward as though begging, with the palms upward. The shoulders have to feel loose, with the stomach muscles contracting to support and balance the body. The shoulder blades should be felt turning outwards and, while breathing in, the intercostal muscles should lift and expand. Now the chest must be raised slightly, keeping the shoulders relaxed. While breathing in, the back muscles will be felt working and the abdomen tightening to support the contraction of the

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13. See the explanation in Chapter 8: Section 5.3.3: Breath management about the concept of “breathe, hold, contract” before phonation starts (p.224).
diaphragm. Keeping this position, the lungs have to be half filled, while small amounts of air have to be taken in and released through the mouth as if panting. The “soft place” beneath the breastbone should be felt quivering. The throat must feel loose and open and the chest and shoulders relaxed. The ‘panting’ feeling should be extended till it is felt in the flanks and near the shoulder blades. The lungs need to be completely filled, while expanding under the breastbone and slightly contracting the abdomen. The back and side muscles should get tired, but the throat should remain loose and open (Nock nd).

b) Standing correctly, with open hands spread around the waist to feel the movement, breathing in has to be done slowly through the mouth in 3 easy intakes (count them). While holding the breath, count to 4. Exhale slowly on “s” or “t” – count at least 8 (counts must increase for developing of lung capacity). The rib cage will collapse as the air flows out – the learner has to try to keep it lifted using the intercostal muscles in the back as he/she still has a lot of air (Nock nd). (Let the learner walk around the room while doing this, because this makes it is easier to keep the pelvic, shoulder and neck areas relaxed. It also gives greater flexibility on inhaling and exhaling.) The chest has to be kept high. Keep the pressure outwards to the ribs and the wall of the abdomen, when attacking a sound and while singing it. Avoid contracting the muscles too much while doing this (Bjørkøy 2000). The educator can supply a score chart, so that the learner can note the improvement in breathing. Score keeping can be done daily for a period of 25 days or less according to the learner’s progress.

In the above exercises the following skills are developed:

- Holding the rib cage up and expanded (If not, the outflow will be too rapid and the tone will be breathy. There will also be insufficient breath to complete a phrase).
- Being able to feel the contraction of the abdominal muscles and to exert pressure on the lungs from below, using the combined support of the diaphragm and abdomen. In this way these muscles act as a foundation on which the diaphragm can work,
allowing the pressure on the outflow of air to be sustained and constant. This describes in essence what is called breath control (Nock nd).

This process can be compared with holding an inflated balloon. The index finger and thumb represent the vocal chords – a sort of ‘valve’ – and the balloon represents the lungs. If the finger pressure is just right, the air will escape at a steady rate, but without help from the fingers the balloon will expire itself quickly. This is similar to what happens when singing (Hewitt 1978: 8).

c) Another exercise that works well is having the learner pretend to fill a balloon with air. With the learner placing his/her hands on the lower ribs, the educator has to give the instruction to take a breath and then over a slow exhalation, to make a strong “hiss” sound, then stop, and “hiss” again, then stop, until finally all the air is slowly hissed out. The learner feels the “kickback” and learns how to control the “hiss” stream of air (Boytim 2003: 58). Even if at first the hissing sounds uneven, with practice the difference in the evenness of the airflow will soon become apparent (Grant & Grant 2003: 41).

d) The following exercise helps to develop the breath control needed for singing fast songs with runs and ornaments, as required for external music examinations from Grade 5 to 8. It is therefore especially useful for the senior learner (grade 11 and 12).\textsuperscript{14} The learner must stand correctly and breathe in slowly. Count as in example b) and hold as before. Then exhalation should be done alternating on “s” and “f” and bouncing the diaphragm similar to panting, except that the contraction and releasing of the muscle has to be felt on each consonant. Count to about 10 and then exhale and relax the muscle for a while. The learner must be careful not to inhale in between, as this may lead to hyperventilation. Do not keep on with this exercise for too long at a time, as it may cause nausea and the muscle will tire. Rather do it for short intermittent periods.

\textsuperscript{14} See Appendix A: Learner case C (p. 251).
Through these exercises a combination of diaphragm and rib breathing (diaphragmatic and intercostals) is used, where they contract and relax together. It is necessary to balance the upward and downward use of the muscles of the body all the time, keeping the muscles of the throat relaxed and open (Nock *nd*). In addition, the low abdominal tuck prior to high notes could be taught. This should be done without disturbing the diaphragm action. The educator should ask the learner to cough or blow his/her nose while feeling the lower abdomen. In this way the action of support can be felt. This could be compared to putting the car in overdrive prior to passing another car. The educator has to stress that everything must be flexible with no rigidity (Boytim 2003: 58).

e) With the tongue tip slightly touching the base of the top teeth and the mouth open about the width of one finger, the learner should

- breathe in through the mouth only
- breathe in through the nose only
- breathe in through the combined nose and mouth (Nock *nd*).\(^{15}\)

Now he/she should exhale, keeping the tongue in place and whispering the “nga”- (voiced consonant) sound, while feeling the soft palate and the back of the tongue separate. The soft palate should lift as air is inhaled. This muscle (soft palate) is essential in the production of good sound and will be used extensively later. The open feeling in the throat and the way the soft palate lifts as the throat widens is called the inhale position (Nock *nd*).

f) The learner should practise inhaling through the nose and the mouth. Breathing through the nose has the advantage of moistening the air at inspiration, as well as opening up the throat by elevating the soft palate and lowering the larynx (Bjørkøy 2000).

g) A lip trill is an itchy exercise, but it helps with feeling the sensation of the exhalation. The lip trill resembles a horse blowing air through his nostrils.

\(^{15}\) Some learners find this difficult. I find that it helps if they are told to snore when they inhale. By doing this, they will feel their soft palate moving.
The horse’s lips flap in the breeze. In the same way the learner should take a low breath between the lips and let them vibrate. If the lips are too tight to vibrate, loosen the lips and just let them hang free as air is blown between them. If the lips are tight, a finger should be placed at the corners of the mouth, gently pushing the corners toward the nose while doing the lip trill:

i. Practise trilling the lips. After the learner has the lip trill moving easily, tell him/her to start counting silently.

ii. Sustain the lip trill for four counts. Inhale slowly and repeat the cycle. Take a good breath before the beginning of each trill. While counting to four, the learner should notice what moves in the body during exhaling. The aim should be not to collapse the chest during exhaling. The lower body has to do the work.

iii. Sustain the lip trill for four counts again, but this time, inhale on one count and repeat the cycle.

iv. Sustain the lip trill for longer periods of time as the endurance improves. Gradually increase the number by two counts. The object of the exercise is not to count to 50, but to work the endurance of the breath and make sure the body is working properly during expiration.

v. When the learner has mastered this technique he/she can lip trill to an easy tune like ‘Happy birthday’ or move up and down a scale. Each note should be connected to the next without a pause or without pushing the tongue against the teeth for each note, thus making it legato (smooth and connected).

vi. Tongue trills can be added to these exercises. The tongue trill works like the lip trill. Tell the learner to leave the tongue loose in the mouth and blow air between the tongue and the roof of the mouth. Make sure that the tongue is released or this will not work. As the air moves over the tongue, the tip of the tongue will raise and vibrate against the roof of the mouth.
vii. Next the learner can alternate between the tongue trill and singing on the given notes by, for example, singing the first two notes on the tongue trill and the last two notes on *ah*. Make a smooth transition from the tongue trill to the *ah*. See if the airflow remains the same (Phillips 2003: 36-37).

**Figure 4.3. Lip and tongue trills**

h) For the next exercise the learner will need a dry drinking straw. Breathing through a straw enables the air that is inhaled to drop low into the body, making it easy to feel the abdomen expand on breathing in. Air can also not be gasped or sucked in too quickly with a straw.
- Find a straw and cut it down to three inches
- The learner has to insert one end in the mouth
- Breathing through the straw, he/she has to make sure not to raise the chest or shoulders, and notice how low the breath drops into the body (Phillips 2003: 34-35).

i) Finally, here is another exercise, which will show how much air should be escaping. The learner should sing in front of a lighted candle without making the flame flicker. Air is not blown out; it is under pressure only as far as the vocal chords. Thereafter, it disperses and escapes through the mouth. It is not forced out of the mouth, and so the flame should not move if the learner is singing properly. With the candle about 22 cm from the face, he/she should sing a phrase or an exercise gently, with proper breath support. The flame should barely move (Hewitt 1978: 9-10).

A selection of these exercises (except for h, which can be done for fun) should be repeated several times a day in short 5 to 10-minute rehearsals to help develop and tone the muscles used for singing (Nock *et al*).

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When going on to warm-up exercises, learners have to stand with the hands on the lower ribs until obtaining a natural feeling for the breath support action. Some will grasp this quickly, and others will take several months of reinforcement and practice before it comes naturally (Boytim 2003: 58).

2.1.3 Preparation for emitting the voice

Good tone placement depends on the mouth position, and opening it too wide is as bad as closing it too tightly. Every learner’s mouth is differently formed, and the educator should discover the best position for each individual. Learners whose upper and lower teeth meet equally, and especially those with protruding lower teeth, will always have difficulty, and will need to prepare their mouth position. Many open their mouths with a slight jerk, the mouth being hinged near the ear. The educator must demonstrate what happens, by opening his/her mouth smoothly without jerking, and singing a note with the right mouth position. Then change the mouth to an incorrect position by pushing the chin forward – still sustaining the note. The change of quality and brilliance of the sound will be obvious. Most learners stiffen the lower jaw (this can be compared to the stiff wrist of a pianist or violinist). A beginner’s exercises aim at substituting stiffness with grace and smoothness. The best exercise to eliminate tension is by using a mirror and singing any sustained note (its placement must be sure) while moving the jaw slowly downwards without disturbing the free passage of the note. If the note placement is secure, the exercise should be practised without singing, by simply exhaling slowly. This exercise is particularly useful for heavy voices (Fuchs 1963: 43-44).

To begin the sound, the learner has to start with the ‘mm, nn, ng (ŋ)’ sounds (imitating having a bubble in the mouth) then open the lips to emit an ‘oo’ (ʊ) sound, keeping the “bubble” in the mouth. The image of the mouth being like the Cango Caves, with everything shaped within that space, could be used. Other comparisons that may be used to illustrate this action are having a light bulb inside the mouth, or blowing a bubble of bubblegum and then imagine that bubble inside the mouth.¹⁷

¹⁷ Example used by Junita Lamprecht-Van Dijk during choir practice, NMMU choir.
2.1.3.1 *Beginning-of-a-yawn position*

The beginning-of-a-yawn position is ideal for phonation and should be cultivated, although the full-yawn position, which is exaggeratedly low, should be avoided – this is known as the depressed larynx. Learning to maintain the beginning-of-a-yawn position represents the ideal way of understanding the concept of the “open” throat. The beginning-of-a-yawn does not cure all vocal problems, but it has the following advantages:

- It opens the pathway for silent and nearly effortless inhalation
- It positions the larynx in a suitably low position and keeps it relaxed
- It increases the size of the throat by lowering the larynx, lifting the soft palate and relaxing the constrictor muscles of the pharynx wall
- It relaxes the muscles controlling the articulators, so that they are free to operate (McKinney 2005: 131).

2.1.4 *Resonance*\(^{18}\)

Nock (2010) describes *resonance*\(^{19}\) by taking the learning experience from the known into the unknown and comparing it to being in a room where there are many curtains, so that the sound is dead. On the other hand, when walking into a big empty hall and then starting to talk, the voice echoes and resonates around. Another example is when calling to friends across the field and saying: “Helloooo!” The voice does not carry, but cupping the hands around will provide extra resonance and the voice will carry better. When using the nasal sounding consonants *m, n, ng*, learners will feel how they buzz, so that they can feel where the resonation happens.

To make the resonators function optimally, the educator has to encourage a relaxed and open throat. A low larynx, kept in a resting position, should be maintained to enlarge the throat resonators. The soft palate also has to be activated to lift and enlarge the throat resonators. This could be done through suggestions like “smell a flower”, “prick up your ears” and direct instructions like “puff out the cheeks”, which are all aimed at influencing the soft palate to lift and stretch. If this can be achieved, tone colour will be lighter and brighter. The

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\(^{18}\) See Chapter 2 for definitions and descriptions (p. 24-27) and Chapter 5 for faults relating to resonance (p. 116-123).

\(^{19}\) See also Appendix D. Transcriptions of interviews: Nock: Question 10.
tongue also has to be relaxed, especially when producing the vowel sounds like (a:) and (ɔ:), which need a flat tongue. If the tongue is tense, is pulled back or pushes down onto the larynx, resonance will be destroyed. The lips also have to be in the correct position for certain sounds. Freeing resonators is one of the main objectives of the voice educator (Nel 1991: 40-41).

2.1.4.1 Higher resonance
To develop higher resonance, the space behind the nose has to be used. Humming is the best way to activate it. This should be done on M, N and NG (ŋ), while feeling how the sound is made in the nasal cavity. Figures 4.4 and 4.5 are examples of the types of exercises that can be done in this regard. Humming must be done loudly and softly on ascending and descending scale passages, or on suitable tunes, to feel the bright higher resonance being used. Put an H before the hum and sing HM to activate the nasal air. Another good exercise to stimulate resonance is tapping the nose and the cheeks while humming. Sniffing and blowing out the air in short bursts through the nose helps to identify the space. Learners can do as much humming as they wish, throughout their range, on scales, slow or fast – it cannot damage the voice (Hewitt 1978: 24-25). Hum on a note, raise the cheeks slightly while trying to get a good buzzing behind the nose and then open the lips to sing the following exercise. The whole passage needs to be done on the same vowel sound throughout, e.g. (hum) moo throughout and then repeat the exercise with mee, etc.:

Figure 4.4. Exercise for resonance 1

The sound should be felt buzzing in the head, as it should be thought there. The sound should be imagined coming into the body, like when inhaling air in the inhale position. The resonance chamber of the mouth should be enlarged

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20 Nock nd.
by keeping the mouth open inside and the teeth separated, like having a bubble in the mouth. Now the sounds should be placed as before, but the tone has to be moved while keeping the voice in the correct area for resonance (Nock *nd*).

**Figure 4.5. Exercise for resonance 2**

The learner must remember to use correct breathing when breathing in and to relax while doing the exercises. In trying to obtain a high-placed, bright sound, the temptation to force breath pressure should be avoided — forcing will not correct the resonance. Too much strength will ‘over-blow’ the tone with a breathy sound. Phonation should be practised gently and slowly, concentrating on getting the nasal cavity ringing with bright sound. It will eventually come easily and the voice will sound ‘bigger’ and more resonant (Hewitt 1978: 27).

### 2.1.4.2 Mixed resonance

Lower notes in the voice involve more of the lower resonance from the upper chest area and the higher notes more of the higher resonance from the head. The low notes sound ‘thicker’ and the high notes lighter. When a phrase is sung that is made up of jumps of an octave or more, adjacent notes will sound alternately ‘thick’ and light, from the lower register and the head, breaking up the line of sound into separate notes of differing quality. This can be overcome by singing such phrases with the same resonance (or register) predominant throughout. The ability to carry the high and bright resonance down to the lowest notes has to be developed (Hewitt 1978: 27). Such blending of the voices is called a mixed resonance. An extract from ‘Somewhere’ from *West Side story* demonstrates this:

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21 Nock *nd*.
22 Jill Nock Studio.
Figure 4.6. First line from “Somewhere”\textsuperscript{23}, with jumps that require mixed resonance

Two exercises that help carry resonance through are discussed below:

Figure 4.7. Exercise for resonance 3\textsuperscript{24}

In the above exercise (Figure 4.7), the aim is to get a good bright sound on EE (i:). The learner should start with a hum and keep the high resonance in the voice while going down to the lower notes. When changing to AH (a:), the learner should think high and keep the cheeks raised to get a bright sound. There must be no breathing in the middle. The exercise should be started with EE (i:) towards the top of the voice and gradually be transposed down, with a consistent, smooth sound throughout the range (Hewitt 1978: 28).

The aim of the following exercise (Figure 4.8) is to retain the high resonance in the voice while going down to the lower notes and also to keep the sound forward and resonant while singing up the scale again.

Figure 4.8. Exercise for resonance 4\textsuperscript{25}

\textsuperscript{23} Bernstein 1957: 1.
\textsuperscript{24} Hewitt 1978: 27.
\textsuperscript{25} Nock \textit{nd}. 
The following exercise (Figure 4.9) is suitable for the more advanced learner and has to be sung pianissimo, with no pushing. It will enhance head tone quality and development of an even scale. The learner should mentally place the first note F at the level of the bridge of the nose, move to the F an octave higher, keeping the tone on the same level as the previous note – moving horizontally. Make a soft glissando from the first note to the octave note and back. The same resonance should be maintained. No crescendo must be made. Having mastered this exercise, the ng hum may be substituted with vowels like ah (a:), eh (ε), ee (i:), aw (ɔ:), oo (ʊ):

Figure 4.9. Exercise for resonance 5

2.1.4.3 Lower resonance

To develop the lower resonator, the habit has to be created of opening the throat and mouth as wide as is comfortable. The lower jaw needs to be dropped to increase the mouth space. While singing, the learner will need to get into the habit of keeping the throat wide open by yawning, imagining a sneeze or pretending to swallow a tennis ball. All of these will expand the width of the throat, raise the roof of the mouth, and keep the voice box low. It should first be tried with the teeth open just a finger’s width, as when singing the vowel EE (i:) – the throat can open widely independently of the teeth. The position for singing is the same as doing an imaginary yawn and singing at the same time. The mouth has to be opened widely, as well as the throat, while a few low notes are sung on AH (a:). This position gives the maximum volume of resonating air. It is impossible to sing all vowels at every pitch with a wide mouth: OO (ʊ) and EE (i:), for example, need a more closed mouth-space. But the throat and mouth should be kept as wide as comfortably possible whatever is sung (Hewitt 1978: 28-29).

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26 Hayward 1994: 139.
27 See Chapter 2: Section 2.4.2 for a discussion of lower or chest resonance (p. 26-27).
The following phrase (Figure 4.10) may be sung, while opening the lower resonators.

**Figure 4.10. Exercise for resonance**

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Slow
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Easy and relaxed, with a wide, yawning throat shape, sing on AH first and then try the more closed positions of EE (i:) and OO (u). Sing it in different keys and use all the vowels to become aware of the space adjustments.

In the next exercise (Figure 4.11), the sensation of upper chest vibration is felt when singing on the lowest note. The sympathetic vibration in the upper chest and the lower part of the neck will be felt, as though the chest itself is vibrating.

**Figure 4.11. Exercise for resonance**

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Slow
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Pitch the exercise to make the lowest note the bottom note of the learner's voice. The key, B-flat, suits fairly high voices (mezzo-sopranos or tenors). Lower voices should sing it in F or E-flat. Start with a buzzing or purring sensation in the upper chest. When this vibration is felt strongly, the mouth should be opened wide (keeping the vibration) to sing AH, and later all the vowels. Then carry this low resonance into every note of the exercise. The phrase can be extended to an octave or more, to add weight to the middle and upper notes. Care should be taken not to continue to notes that are too high, however, as attempting the top three or four notes from the lower resonance may strain the voice (Hewitt 1978: 28-30).

### 2.1.5 Placing the voice

Before attempting to teach various aspects of placement, the educator will have to differentiate between beginner and more advanced learners, as well as

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29 Hewitt 1978: 30.
between more musically able and average learners doing voice as subject, while keeping the requirements of the school syllabus and external examination boards in mind. This complicated, but very important aspect of singing should be explained by illustrating how the vocal chords (or folds), as well as the resonating chambers work.\textsuperscript{30}

Learners do not have to think about this while singing, but in order to place the sound and amplify it without straining the vocal chords, they need to think and understand what to do. Beginners will only have to know about the very basic workings of the vocal organs, but as they progress and more technically challenging work is attempted, more detailed information will have to be understood.

“Although the human vocal mechanism is actually incapable of placing, focusing or throwing a sound anywhere, the use of terms such as these are invaluable in assisting the student to experience the vibratory sensations that give him an indication of the efficiency of his phonation and resonance” (Hayward 1994: 124-125).

The following illustration (Figure 4.12) may also be helpful.

Figure 4.12. Mental imagery for illustrating placement and resonance\textsuperscript{31}

\textsuperscript{30} See further explanations in Chapter 2: Section 2.4 (p. 24-27) and physiological explanations and illustrations in Chapter 6: Section 2.3-2.3.1. (p. 130-137)

\textsuperscript{31} Lilly Lehman (1909) cited in Fuchs 1963: 125.
Based on the information obtained from the various sources on which this dissertation relies, it is evident that there is much confusion regarding the distinction between and definitions and delimiters of the concepts resonation, registers and placement. For the sake of explaining it to the learner the conclusion that may be drawn from all these descriptions is that:

- Resonance is a more physiological process, connected to the various resonating cavities.
- Register is closely linked to resonance as they both deal with certain changes that occur in the voice when moving from one extreme of the range to the other. Hayward (1994: 142) concludes that a vocal register is a series of tones that have been produced in the same manner (homogeneous sounds), by the same vibratory process of the vocal chords, which leads to the same audible quality. Registers are an acoustical and physiological phenomenon. Although there is no consensus on the number, it is generally agreed that there are three registers, which coincide with the three main resonating areas (chest, mouth and head).
- Placement is a mental process which projects all the resonance and tones of the vocal register outside the mouth.

Figure 4.13 is a personal attempt to summarize and illustrate this:

Figure 4.13. A representation of the relationship between resonance, registers and placement
2.1.5.1 Singing into the mask (placing the sound forward)

To experience the sensation of forward placement or singing into the imaginary mask, the following exercise should be done. Let the learner pick any note within a comfortable range and hum on ‘mmmm’, supporting the breath and sustaining the note for a reasonable time. Where is the hum felt? The learner can experiment by singing a higher or a lower pitch to see whether the vibration is felt in a different place in the mask. To establish and keep the coordination of the support with consistent forward resonance is a constant effort. One of the major tasks is to keep the sound forward, placing virtually all sounds in the mask. The educator has to warn the learner to guard against pushing out sound in the mistaken belief that this will assist forward placement. The sound should never be pushed out or forward by tensing the muscles of the abdomen or the throat (Marquart 2005: 47-48).

2.1.5.2 Placement in and beyond the ‘passaggio’

It is extremely important for a young learner (from early- to mid-teens) to approach both the high and the low extremities of the range with great caution. The voice is not yet mature and great care should be taken not to push the range up or down. Learners should develop these registers gradually and healthily through correct and moderate exploration and use. The development of these registers, especially the high register, usually takes years and cannot be hastened by forcing the voice or by over-singing (Marquart 2005: 49-50).

A major scale (Figure 4.14) should be sung, starting from the middle of the most comfortable range. This pitch will usually be around the G above middle C for the soprano and around the E above middle C for lower female voices.

Figure 4.14. Placement exercise

The scale should be sung on ‘ah’ (as if saying ‘aha!’), keeping the placement forward. Normally, as the voice reaches the fifth of the scale (more or less),

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tightness will be felt in the throat. To help achieve the transition through the passaggio, there has to be a change from the bright ‘ah’ (a:) vowel to the darker ‘oh’ vowel as soon as the constriction is felt in the throat. Ensure that *the same degree and quality of support is maintained and, especially, keep the same feeling of placement.* As the learner changes to the ‘oh’ (əʊ) vowel, the throat will open to accommodate the change of the vowel. To be able to sing high notes and to join the registers through the *passaggio*, more space has to be created in the back of the throat, resulting in darkening any vowel that is sung on these pitches. To experiment with this, the learner can practise opening the throat as if preparing to yawn. The sensation that is felt at the *beginning* of the yawn resembles the sensation of opening the throat to darken in the *passaggio*. Some educators refer to the cathedral ceiling (soft palate) at the back of the throat, which normally lies relaxed at the back of the mouth. Let the learner observe this in a mirror (Marquart 2005: 51-52).

Adding ‘oo’ (ʊ) or ‘oh’ (əʊ) to any vowel in the *passaggio* will have the following benefits:

a) It opens up the voice to make the upper register of the voice accessible.

b) It will then smooth out the *passaggio* to achieve a seamless transition between the middle and upper registers.

c) It will ensure that the voice maintains consistent resonance and brilliance throughout the range (another way of expressing (b) above).

d) It will eventually establish the placement (the resonance) to the point at which the opening of the throat in the *passaggio* becomes a natural habit. At this point, the vowel will not have to be modified so much anymore, since the muscles will have been fully re-trained and the muscle memory will enable the muscles to hold the correct position automatically (Marquart 2005: 52-53).

### 2.1.5.3 Onset or attack (*coup de glotte*)

There should be no “scoop or slur up to a note, instead of mentally preparing the note and starting it with a light, short and smooth movement” (Armhold 1963: 33). The start of the note has to be compared to smoothly letting-in the clutch of a car – there shouldn’t be a jerk or a shock. The learner should be
relaxed and ‘stroke’ the start of the note, using a gentle movement (Hewitt 1978: 14). The stroke of the glottis resembles a cough, yet it needs only a subtle action of the lips of the glottis and not a thrust of air (Armhold 1963: 33).

Many factors can affect the way a note is “attacked”. In the bars of the introduction, the exact pitch of the first note should be imagined. The learner should ‘hear’ and prepare the exact beautiful vowel sound that has to be sung and will then be able to produce it. Mental ‘hearing’ of the sound, vocal chord action, minimum breath, enough mouth space and tongue position all need attention (Hewitt 1978: 12-13).

Try the following exercises with the learner:

a) Let the learner say “a EGG” slowly, making a short break between the A and the E. The E of Egg needs a separate onset and there is a definite ‘click’ when the larynx opens and the air escapes. This ‘click’ starts the note, and it has to be a gentle ‘stroking’ movement. Starting it aggressively can damage the chords and ruin the voice. Minimum breath and maximum (comfortable) mouth space should be utilized. If the mouth is tight and stiff, the sound will be tight and stiff (Hewitt 1978: 14).

b) The onset of the note must be based on how the primal sound was started. A good flow of air must be maintained and, while aiming at beginning the sound before the inhalation is finished, the aim must be to get a sliding start, while keeping the onset firm enough so that the voice does not leak too much air. Let the onset of the sound be a little aspirated in the first exercises, thereafter firmer. Always start the exercises from above or the middle range of the voice (Bjørkøy 2000).

c) Transpose the exercises upwards and downwards in the vocal register, first legato, then portato and staccato. The learner should think flow of air and do the exercises in one breath. There should be no attempt to save the breath. Stress varying sounds in the exercises (Bjørkøy 2000).

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33 See Chapter 2: Section 2.5.4 (p. 29).
34 “A manner of performance halfway between legato and staccato” (Apel 1970: 689).
The singing voice is mainly a legato instrument, therefore during phonation there should normally be just one onset or attack in each phrase. The other sounds or notes in a phrase follow the onset-sound. The quality of the onset therefore determines the colour of the whole phrase. Singing like this is the most gentle on the voice and gives the best intonation, with effective breathing. An even, connected sound stream creates a good legato (Bjørkøy 2000).

2.1.5.4 Primal sound

Try the following exercises with the learner during the vocal warm-up. Start with the primal sound to attack the sound:

a) The learner has to start with a ‘haaaaa…’ sound (like a sigh or the impulsive sound that is made to confirm something that is said). This has to be followed up by saying “a-ah…” or “ya-ha”, first spontaneously and then by prolonging the last vowel to create a long legato sound. The sound has to float on the air stream in descending intervals while a good posture and support is kept. The sound produced can be short or long.

b) Thereafter this can be tried on pitches (Figure 4.16) like descending fifths or octaves. The sensation produced by using the voice in this way, is one of losing control while emitting the sound. Retain this

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spontaneity - do not try to control the sound or force the air out (Bjørkøy 2000).

Figure 4.16. Exercise for primal sound

2.1.5.5 Ending the sound

The sound should gradually die away until it stops naturally. This is done by continuously reducing the breath pressure until the sound eventually stops – almost unnoticed. The voice might be a bit shaky as it becomes quieter, probably because of nervousness and shyness at first and perhaps because of not using enough breath. Once phonating more confidently and strongly, the gradual decrease of breath will become easier to control. When learners are singing in duet or in trio, it is even more vital for voices to ‘phrase-off’ in this way, otherwise one will predominate and the blending of the voices or the balance will be spoilt (Hewitt 1978: 19).

3. Range

Problems which could be experienced in connection with range, are: (1) that some high or low notes are uncomfortable, and (2) that songs printed in a standard key are unsuitable for some voices. The first is temporary – technique can be developed to sing all notes in the range easily – and the second problem can be removed by transposing the music into a more comfortable key. Sustained high-pitched humming over time will make singing the higher notes easier. Humming will put the learner’s voice on a higher level and make the top notes more secure. Humming or singing a vowel on a top note should be tried quietly, or not at all. The breath pressure should be kept low, but well supported, and the sound sustained for at least twenty seconds. After this, exercises in arpeggios can be done to develop the higher range. The arpeggios should be started low and then moved up to where they can be sung comfortably (Hewitt 1978: 31-32).

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37 See Appendix A: Learner cases: Learner H (p. 262).
The following exercise (Figure 4.17) should be sung on every vowel:

**Figure 4.17. Exercise for range 1**

![Image](image1.png)

The following exercise (Figure 4.18) can be also be used:

**Figure 4.18. Exercise for range 2 (Trinity Guildhall Grade 7 exercise 2)**

![Image](image2.png)

As with the upper notes, humming on low pitches over a period of time will stabilize the bottom semitones. Let the learner do hums and vowel singing at the bottom end of the voice over a range of about a fifth. The secret of getting the low range right is relaxation and space. Many learners push from the throat down, constricting the throat space. They should yawn and relax and give the notes space, bringing in the chest resonance (Hewitt 1978: 33). Figure 4.19 gives a simple phrase to try once the above exercises have been mastered.

**Figure 4.19. Exercise for range 3**

![Image](image3.png)

The bottom note should be the learner’s lowest (the same phrase can be transposed up for higher voices). This should be done without any forcing, starting with the wide vowels and then the more closed ones, EE (i:) and OO (u) (Hewitt 1978: 33).

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38 Hewitt 1978: 32.
39 Trinity Guildhall *nd. (Various technical exercises).*
40 Hewitt 1978: 33.
4. Vocal technique

4.1 Agility

It is important to remember that to sing any phrase that requires speed or agility, one needs a light touch. The heavy, lower resonance voice, used to sing broad, sustained passages, just cannot move that quickly. Therefore the learner has to lighten the voice, think high and use the upper resonance in this kind of agility singing. When practising any difficult phrases like the examples below, the tempo has to slow down a little to a speed that can be managed, and then gradually increased (Hewitt 1978: 33-34).

The following exercises (Figures 4.20 and 4.21), which are suitable for advanced learners\(^\text{41}\) – learners doing Trinity Guildhall Grade 5 and up – may be used for practising runs.

**Figure 4.20. Exercise for improving agility 1\(^\text{42}\)**

\[
\begin{align*}
\text{Fast} \\
\text{AH}
\end{align*}
\]

**Figure 4.21. Exercise for improving agility 2\(^\text{43}\)**

\[
\begin{align*}
\text{AH}
\end{align*}
\]

All notes have to be articulated clearly, but sung as a phrase, not as individual notes. Movement or direction is given with accents on each group of four or eight notes to emphasize the skeletal melody underlying these groups. In the second exercise the skeletal notes (a major scale) are the first of each group of four, therefore each first note in such a group has to be accentuated to give the line momentum. The learner has to use the light head-voice. All passages like these from the repertoire can be broken down into simple tunes. The tunes have to be sung first, after which decoration notes are added, gradually building up the tempo to the correct speed (Hewitt 1978: 34).

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\(^{41}\) See Appendix A: Learner cases: Learner C (p. 251).

\(^{42}\) Hewitt 1978: 34.

\(^{43}\) Hewitt 1978: 34.
Practising runs goes hand in hand with scale practising. Scales should be practised (not too fast in the beginning) with rhythmic emphasis of the important beats of the passage, always making a crescendo on the ascending line and a diminuendo on the descending line. This will produce lightness and flexibility. The breath-stream has to be continually alive and behind the tone until the end of a scale or phrase (Armhold 1963: 51). The following exercise (Figure 4.22) could be tried for practising ornaments.

![Figure 4.22. Exercise for practising ornaments](image)

When practising the trill, the learner should always stress the top note, as this note often disappears. All trills should end with a turn (Armhold 1963:51). A metronome would be helpful for trill practising: start slowly at about crotchet = 60, and gradually increase the speed to crotchet = 120 (Hewitt 1978: 35).

The voice should be made flexible by practising runs and scales before starting with sustained tone exercises (and the trill). The learner should not attempt these too fast at first. If sustained tone exercises are attempted too soon, the voice box will be strained, resulting in stiffness of the throat, as the appoggio of a young learner is not developed enough to keep up a loose, floating tone. When the opposing strength of the vocal chords has been sufficiently developed, in co-ordination with breath control, sustained tone exercises may be tried on vowel sounds and phrases from songs and arias (Armhold 1963:50-51).

### 4.2 Messa di voce

A comfortable pitch in the middle of the learner’s range has to be chosen. While singing on OO or AH, or humming, a gradual and slow rise and fall in volume should be made, playing with the voice until control over the voice is felt. Then the learner should repeat the messa di voce twice if enough breath is left (Hewitt 1978: 9). When starting with exercises for messa di voce, they should

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44 Hewitt 1978: 35.
45 See Chapter 2: Section 2.2 Support (p. 18-20).
only be within a small range and never too high. The mouth should only be opened slightly to begin the note, but as it grows stronger, the mouth gradually opens wider. There should be no tension in the chin (Fuchs 1963: 114-115).

### 4.3 Legato singing

For the development of good legato singing, telling the learner to link the notes by thinking of “connecting the dots” (the notes) in a colouring book works well. Another image that can be used is that of painting a picture with water colours. This creates the effect of smoothness and a flowing sound. The educator can show an example of a water colour picture to the learner, if the learner does not know what it looks like. Consonants somewhat interrupt the tone, so they must be moulded into the *legato* line making the intrusions are almost inaudible. Vowels should glide into one another with no obvious interruption. Before starting a phrase, the breath-stream should be thought of as a continuously moving violin-bow, with the weight on the vowels. Consonants must be crisp and distinct with as little weight as possible. The learner has to be able to pass from one note to another without smearing, each note separate and sustained for its full value, but connected to the other. If a word finishes with a consonant and the next word starts with one, a hardly noticeable “e” may be put between them to preserve the line (Armhold 1963: 49-50).

Legato problems should be handled as following: The whole phrase should be sung, or even the whole song, on a comfortable vowel sound to emphasize the connection from one tone to the other. Now the phrase or song has to be sung using the vowels as they appear in the words. Finally the words should be sung as they appear with the consonants, but try to keep the flowing line that has been mastered with the previous two exercises (Verster 1991: 57).

Practising intervals *legato* is done by starting with small jumps of about three notes, slurring or sliding the voice between the notes. The learner should not make the pitch of the notes flat. Increase the speed of the slide until it is so fast that it is unnoticeable. When thirds have been mastered, bigger intervals are

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46 Jill Nock Studio.
introduced, until all intervals in the learner’s range have been included (Hewitt 1978: 49).

The exercises shown in Figures 4.23, 4.24 and 4.25 may be tried to establish a sensation of legato in the muscles.

**Figure 4.23. Exercise for practising legato 1**

Moderato

\[\text{Moderato} \quad mf\]

\[\begin{array}{c}
\text{ah} \\
\text{ah}
\end{array}\]

**Figure 4.24. Exercise for practising legato 2**

Moderato

\[\text{Moderato} \quad mp\]

\[\begin{array}{c}
\text{ah} \\
\text{ah}
\end{array}\]

**Figure 4.25. Exercise for practising legato 3**

\[\begin{array}{c}
\text{ah} \\
\text{o} \\
\text{ah}
\end{array}\]

4.4 Staccato singing

To explain staccato singing to the learner, the image of painting a pointillistic picture can be used. Again the educator can show the learner an example of this. The paintings of Jackson Pollock are good illustrations of this technique. A colour photocopy of an example should be kept in the educator’s file or may be put up against the classroom wall. Aids and examples like this may also serve to provide an opportunity for the educator to stress integrated learning outcomes with the Arts and Culture Learning Area (and even other learning areas like Geography, History, Biology, etc.) and expand the general knowledge of the learner. Where possible the educator should think of ways to exploit this aspect, as the integration of learning outcomes is a significant requirement in the GET school band in particular.

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48 Marquart 2005: 60.
51 The images of the Cango Caves mentioned in 2.1.3 (p. 78) and the water colour painting in 4.3 (p. 95) represent similar examples.
4.5 Other vocal techniques

Portamento and singing piano/pianissimo\(^{52}\) can be attempted by learners as needed and according to their levels of development. It is important that the learner should always keep the space open inside the mouth, otherwise the sound will disappear when the learner sings softly.

5. Warm-up exercises

Every lesson should begin with vocal warm-up exercises. Before a lesson it is beneficial, at the very least, to do some humming exercises (Boytim 2003: 30). Humming is a useful preliminary warm-up to singing. It can also be practised in a situation (e.g. backstage, before a performance) where singing would be heard by an audience or could be disturbing to others. Humming should be done with a free open throat and proper breath support. Alternating a vowel and a hum, as in Ah-m, Ah-m, Ah-m, will induce the proper open throat feeling for the hum. Lips should meet loosely, never firmly or tensely on the M sound of the hum (Christy 1967: 195).

It is better to start vocal warm-ups by exercising the learner’s midrange voice and then follow it up with the lower and upper registers. Huge changes between high-to-low and low-to-high could cause vocal damage (Three ultimate warm-up exercises 2010). Exercises have to be transposed up or down throughout the comfortable range of the learner. The learner should not sing any high notes until the voice is thoroughly warmed up; it is better to start with exercises of limited range and then progress to those with wider ranges as the voice becomes more responsive.

A warm-up routine should include sounds that involve activation of the jaw, lips, tongue and soft-palate (such as yah, bah, mah, ding, hung-gah, etc.) and sounds that will stimulate vibration in the head and chest (such as ding, boom, zoom, or a simple hum)\(^{53}\).

The following routine could be followed:

\(^{52}\) Discussed in Chapter 2 section 4 (p. 34)
\(^{53}\) “These sounds which stimulate vibration are referred to as resonance-inducing speech sounds” (McKinney 2005: 179-180).
Start with bending and stretching body exercises designed to loosen and tone the muscles.

Follow these up with particular exercises designed to relax the shoulders, neck and throat.

Do descending five-note exercises (5-4-3-2-1 in the major scale) which activate the articulators and develop resonance, starting on the middle note of the learner’s range and moving gradually downward by half-steps. Continue downward to the lowest note that can be sung without forcing, then return to the middle note on which the exercise was begun and start descending five-note patterns again. This time move upward by half-steps. Whenever the highest note in the pattern begins to feel strained, the learner should not go any higher.

Move onto arpeggio exercises, which start fairly low in the total range and extend upward, beginning with simple ones of limited range and then moving to wider ones. A good sequence might be 1) an exercise which does not exceed a fifth, 2) one that does not exceed an octave, 3) a tenth, and 4) a twelfth (McKinney 2005: 179-180).

Do resonance runs with the soprano/ bass voices starting in the low range.

Do exercises for tone.

Do dynamics exercises on vowels.

Do staccato exercises to loosen up the mouth and tongue.

Do scales (legato, staccato, rhythms).\(^{54}\)

Do exercises like the following: Figure A.13 Unisa Grade 4 no.1\(^{55}\), Figure A.12 Unisa Grade 3 no. 1\(^{56}\), as well as Figures 4.26, 4.27, 4.28 and 4.29 below.

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\(^{54}\) Jill Nock Studio.

\(^{55}\) See Appendix A: Learner case D (p. 253).

\(^{56}\) See Appendix A: Learner case D (p. 253).
6. Aural training

Although aural training and development forms a crucial part of voice training, it is often neglected during lessons, sometimes due to lack of time and often because educators do not consider it important enough. It is essential that learners do regular aural training, as there is such a close link between the use of the voice and the ears.

Ear tests are about listening and understanding what has been heard. For the early Grades assessment is done by simple forms of answering. As learners progress through the Grades, it becomes more important that they show that

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57 Trinity Guildhall nd. (Various technical exercises).
58 Trinity Guildhall nd. (Various technical exercises).
60 Trinity Guildhall nd. (Various technical exercises).
they understand what they hear and are able to interpret the music, as well as put it into a certain context.

Examination tests usually comprise music that the learner has not heard before, but educators may use short phrases from almost any piece of music as learning aids. The various examination boards have guides with examples for ear tests, often with accompanying CDs. These also include useful hints for doing examinations.

The basic elements that are covered in examinations are:

- **Rhythmic recall** – Clapping or tapping the rhythm of a melody. This becomes more complicated in the higher Grades where learners have to clap to identify the respective rhythms of harmonised passages.
- **Melodic recall and tonality** – Singing back melodies and identifying the tone of notes (higher, lower, major, minor).
- **Musical features** – Identifying *legato, staccato, forte, piano*, etc., in increasingly complicated melodies. From Grade 7 the broad musical style of the extract is covered.
- **Alterations** – Changes in rhythm, melody or pulse must be identified.
- **Harmonic context** – Cadences, and later cadential chords, need to be identified.
- **Diatonic perception** – Identifying notes of a tonic chord, notes of a melody, singing intervals, singing and naming notes within the context of the given tonic, describing chords drawn from the passage.
- **Modulation** – From Grade 7 the key to which music has modulated must be identified (Trinity 2000: 4).

The educator must make sure about the requirements for school examinations and also about those for the individual examination boards, as they all have different syllabuses.

### 7. Sight-singing

Singing or playing music that has not been seen before is an essential part of any musician’s life and the exploration of new pieces should be a pleasant and stimulating process. Reading music involves two main aspects: the ability to understand music notation on the page and the ability to translate what is seen
into sound and perform the piece. This includes imagining the sound of the music before playing it. To be able to do this, the reader should be familiar with intervals, rhythmic patterns, textures and dynamics (Trinity Guildhall 2001: 3).

Music that is unaccompanied will sometimes also have to be sung, which may create an extra challenge (Trinity Guildhall 2003: 3). For FET school examinations sight-singing is required from grade 10 to grade 12, all of which need to be performed unaccompanied. For the Trinity Guildhall examination sight-singing is done with accompaniment from Initial Grade to Grade 5, and for ABRSM sight-singing is done with accompaniment from Grade 1 to 8. Accompaniment can assist with confidence and the harmonic progressions can help predict the next note. When there is no accompaniment, there is no such support. For good sight-singing, it is therefore essential that learner start with a good foundation in aural training (Trinity Guildhall 2003: 3).

In an examination (depending on what exam is being taken), learners have about half a minute to a minute to prepare their performance of the sight-reading test. The examiner will usually play the tonic chord and the keynote before the learner reads through the music. It is important for the learner to use this time wisely. First of all the key and time signature should be noticed. The first note has to be established and the semitones and accidentals noted, particularly when they apply to more than one note in the bar. Breathing has to be planned and any large intervals or changes of key anticipated. A pulse should be set while the test is being read through, imagining the sound (Trinity Guildhall 2003: 38). Some learners will find this very hard to do, especially those who have limited musical background. They will need a lot more practice. To get a feel of the rhythm of the piece it might help to clap or tap the rhythm. The most important thing though is to get a clear idea of what the music will sound like. In some external examinations learners can try out any part of the test if they want to, although it is often a good idea to read through the piece first before doing this (Trinity Guildhall 2003: 38).

For higher grades the learner will have to take the effect of the dynamics into consideration (Trinity Guildhall 2003: 38). Phrasing is an integral part of music. Even the simplest melody should be phrased. The “two-phrase” melody can be described as “Question and Answer”. Required theoretical concepts must be in
place to ensure that learners are able to understand performance indications and terminology pertaining to tempo, mood, dynamics, etc., as well as the meaning of signs indicating dynamics, tempo, repetitions, etc. Knowledge of style periods is also advantageous (Waters, Townsend & Underwood 1998: 126) in interpreting the music correctly. This will enable the more advanced learner to render a truly musical performance of the test and not just a mechanical representation of its pitches and rhythms.

Learners must be able to pitch intervals both up and down from any note of the scale, major and minor. Singing is not about individual intervals, but about intervals in context. They should know what it feels like to sing a sixth from each note within a scale, and distinguish between major and minor sixths (or any other interval). Notes of the tonic chord can assist with the sound of the intervals. Remember: each note is more than one step away from the tonic chord. A note may be repeated with other notes in between: think back to the reference note in order to keep on course (Trinity Guildhall 2003: 3).

Advanced learners must also look for the level of modulation in melodies and establish if the modulation is going to a sharper key (like the dominant key), a "higher" (like the relative major or the supertonic key), a flatter key (like the subdominant key) or a lower key (like the relative minor). Here are some tips to bear in mind:

- Rising melodies tend to go flat. Learners should look out for wide semitones, tones and major thirds.
- Falling melodies can also go flat. Small semitones and minor thirds should receive special attention.
- Repeated notes can go flat. The learner must ‘think up’ the repeated notes so that they remain in the centre of the pitch.
- If the melody returns to a note, exactly the same pitch must be reached again (Trinity Guildhall 2003: 3).

When the examiner asks the learner to sing the piece in an examination, the tonic chord will be given and the key note again. The rhythm (pulse) is most important, therefore the learner has to keep going at all costs. If a mistake is made, the learner should not try to go back and change it, but rather concentrate on the next passage. If the melody is sung accompanied it has to
be sung at the pace set by the introduction. For Trinity Guildhall examinations the learner can tap or conduct the introduction (Trinity Guildhall 2003: 38).

Some of my learners have previously been introduced to Tonic Sol-fa, for example in the choirs in which they have sung. It is a good idea to use Tonic Sol-fa as a guide when assisting learners to prepare a sight-singing piece on staff notation – it is always good to work from the known to the unknown when explaining something new. Some learners doing subject music learn how to sing on Sol-fa during their aural training lessons. I will then use what they have learnt there when asking questions on the sight-singing piece they need to prepare; for instance, how does the melody end? This could then lead them to recognise and instantly sound out typical cadential melodic formulae such as soh-doh, re-doh or te-doh.

8. **Choosing repertoire**

Having once chosen a focus on Western classical music, for school purposes the repertoire should comprise songs that could be differentiated as such, prescribed by the school syllabus or the syllabus for an external examination board (like ABRSM, Trinity Guildhall or Unisa). This applies mostly to learners doing voice as subject in the FET phase. In grade 8 and 9 popular songs, musical theatre songs and folk songs of a suitable standard may also be added for learners who do not plan to continue with music as subject in the FET Band. The educator should have a wide repertoire, for the requirements of each individual learner are different (but always keep the copyright act in mind when copying songs and backtracks!). Each learner should be treated as an individual and, within the guidelines of the prescribed syllabus, should attempt pieces that would suit his/her personality, practice habits, musical habits, musical abilities, and vocal strengths and weaknesses. Songs must be appropriate for each person, musically worthwhile and technically suitable. The learner must be able to relate to the music in order to succeed (Boytim 2003: 38). Equally, choose a song with lyrics that are believable when coming from the specific learner. Hearing a teenage girl singing about divorce is not

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61 Although there are within the FET music-as-subject syllabus other options like Jazz or African music and in the case of Trinity Guildhall for example also the Rock School option, the focus of this study is however Western classical music.

62 As defined in Chapter 2: Section 1 (p. 15).

63 See Appendix B. Examples of graded repertoire (p. 274).
believable. Singing songs that have been made famous by great singers may be attempted, but have to be interpreted in a personal way or at least match or better the original performance. The learner should not try to copy the sound of other singers (Grant & Grant 2006: 93). Many learners (and educators) are only interested in finding famous display pieces which singers with exceptional voices perform. This lack of knowledge and lack of understanding of the problems involved in selecting suitable repertoire often hinders or even curbs progress (Kagen 1950: 103-106).

8.1 Learning a song

“Technic (sic) is the servant and not the master of expression, but these two must go hand in hand to achieve the heights of interpretation” (Christy 1967: 6). Along with learning technique a learner should also become skilled at how to interpret a song. Every song tells a story. The learner has to learn how to share this story through the voice so that the listener understands the story without seeing the learner – the voice on its own should be able to communicate the message. The learner should be taught how to think fully about the lyrics of the songs and not be completely preoccupied with the sound the voice is making. Sometimes it can be helpful for the learner to forget that he/she is a singer and rather pretend to be an actor or narrator. To this Bachner (1947: 105) adds: “Musical talent and musicianship enable the singer to absorb the musical content of a work; emotional sensitivity and poetic imagination enable him to feel the emotional and poetical content – its mood.”

There are two ways to help with the interpretation of songs. The first method is to see the performance as emotional – the more holistic approach. Rather than taking the song apart bit by bit, find out what emotion the song is trying to convey. If the learner tells the story and allows the emotion to come through the words, it will be easier to interpret the song. A technique the educator can use to help learners interpret their songs is one where questions are asked between the lines as the song is sung. Responses to the questions must be made with the lyrics of the song. The second method is technical, taking the song apart note by note and word by word (Grant & Grant 2006: 74-77).

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64 See Appendix B (p. 274).  
65 See Appendix C for analyses of graded examples (p. 281).
When a song is introduced, the text should be read out loud like a poem. The learner should vocalize the melody line on vowels or vowels preceded with consonants such as Noh or Koo, because these vowels help to place the sound forward. When pitches and rhythms are correct, the words should be added. It also helps to read the words in rhythm before combining them with the notes. In problem passages the educator should let the learner go back to the vowels first and then try to fit the words into the vowel positions (Boytim 2003: 30-31).

It is the learner’s responsibility to find out the meanings of all musical terms and symbols in each song. A music dictionary should be used, which can be supplied by the educator during the lesson, if the learner does not otherwise have access to one. Meanings should be written in above the terms in the music until they become familiar. In learning a new song, lyrics should be carefully read to discover what the writer is saying. The mood or emotional content of the song should be established, be this happiness, sadness or any other emotion. The learner must also be able to explain what the song is about. Songs convey messages to the listener and the learner must relay these messages to the best of his/her ability (Boytim 2003: 31).

The educator has to provide senior learners with dictionaries or any available special books to help translate foreign language songs into English. The learner should not sing a foreign language song unless he/she knows what the song is about. Translation is generally done by the educator, but the learner may be given a few words to translate or other background information to research. In the school situation the educator will be aware of the academic and linguistic skills of the learner and should treat the learner accordingly. Although the learner should at all times be encouraged to work independently, the educator has to be realistic as to the ability of the learner – after all, the learner is studying voice, not language. When singing (carefully selected) operatic arias, learners doing voice as subject need to read the story of the opera so that they know the character and where this aria fits into the context of the opera. The educator can supply the learner with this information. The musical style of the period within which the song was composed should also be taken into account, with attention to specific performance requirements of that

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66 Jill Nock Studio.
67 Or Afrikaans/isiXhosa.
68 E.g. as prescribed for Trinity examinations as from Grade 4.
period and the compositional style of the composer. The more senior learner may be sent to the school library or public library (if the school does not have a library) for independent research.

8.2 The study of vocal repertoire

“Vocal repertoire is so vast that practically every type of voice, even a voice to some degree limited and imperfect, can find enough excellent music which would not tax it beyond its natural capacity” (Kagen 1950: 103). When building repertoire, strengths and weaknesses of the voice must be realized. Learners should only sing pieces suitable to their skill and talent, without making unattainable demands upon the physical nature of their developing voices.

English and Afrikaans-speaking learners doing voice as subject should begin repertoire studies with English songs and airs written before the nineteenth century, e.g. by Dowland, Campion, Purcell and Handel, as well as composers of the eighteenth century such as Dr. Arne, which usually suit the young learner’s voice. The songs of contemporary American, British and Afrikaans composers, as well as folk songs, popular ballads and semi-classical songs could also be studied. As other languages are mastered, this procedure could be repeated, namely, the study of various styles of compositions, within one language group until a fair knowledge of pre-nineteenth century and contemporary vocal music of the English, Italian, German and French composers is obtained. Within these language groups there are many songs and airs suitable for the type of voice any learner may happen to have at a specific stage of development.

9. Conclusion

With systematic and goal oriented training of the voice, learners of all ages and stages of development can considerably improve their vocal technique, provided a reliable singing method is implemented. For the educator and learner to feel comfortable and confident with what they are doing, knowledge and skill provide the foundation for a self-assured attitude towards performances and examinations. Fields (1984: 114-115) summarizes this as follows:
Therefore, the test of any teaching device is its useful results; and these are determined by the patience, skill, and watchful guidance with which instruction is administered, as well as by the intelligent comprehension of a willing pupil.

So it may be said that methods of teaching are not invented; they are evolved. They derive from a planned procedure and are appraised in terms of predictable outcomes. But they must always be tested out in practice. Furthermore, they are never inflexibly applied to all alike. They must be constantly adjusted and modified to suit each pupil's needs. Any method may work wonders for one teacher and fail completely for another. Obviously, a method is a working tool. It must be skillfully handled to produce results.

The next chapter provides an overview of vocal faults that may arise in relation to the vocal techniques explained in chapters 2, 3 and 4, suggesting likely causes and proposing means through which educators can assist learners to overcome these.
CHAPTER 5

VOCAL FAULTS, INCLUDING STYLE AND INTERPRETATION PROBLEMS – IDENTIFICATION, INTERVENTION AND REMEDIAL PROCEDURES

1. Introduction

To be able to recognize a vocal fault the educator must have a thorough knowledge of the vocal apparatus and the way in which it works, as well as of voice production and vocal technique. Bachner (1947: 104) argues that:

> It is one thing to sense interferences in oneself it is a distinctly different thing inductively to sense these interferences and have the knowledge of how to correct them in others. The development in teaching is one that can only be brought about by years of experience. The exceptional teacher is as rare as the great artist. Such teachers are purely individual. They are uncommon. They do not produce schools of teachers, for the gift for the diagnosis of vocal causal ills cannot be taught. The basic principles of freedom of voice production, however, can be acquired and used by every teacher.

To this the following may be added:

> The ability to find remedies for each vocal fault is usually acquired through knowledge and experience. Although certain methods usually prove to be more successful than others, it is also true that the same method may not achieve the desired effect with all students. It is therefore useful to collect as many cures as possible (Hayward 1994: 234).

2. Vocal faults: Possible causes, indicators and corrective measures

In this chapter I have attempted to summarize a selection of some common vocal faults amongst school learners and to present them as a “troubleshooter” for ease of use by the educator. The faults have been divided into five main categories:

- **FAULT 1.** – Off-pitch singing/Intonation problems
- **FAULT 2.** – Breathiness/Lack of breath control
- **FAULT 3.** – Impaired vocal quality, tone and timbre/Resonance problems
- **FAULT 4.** – Style and interpretation problems
- **FAULT 5.** – Tremulous, weak or feeble voice.
Each of these categories are subdivided into POSSIBLE CAUSES/INDICATORS and POSSIBLE CORRECTIVES.

Figure 5.1. Vocal faults: a “TROUBLESHOOTER”

<table>
<thead>
<tr>
<th>FAULT 1. – Off-pitch singing/Intonation problems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POSSIBLE CAUSES/INDICATORS:</strong></td>
</tr>
<tr>
<td>a. defective or impaired hearing</td>
</tr>
<tr>
<td>b. lack of ear training or tonal imagery</td>
</tr>
<tr>
<td>c. exposure to or imitation of faulty models</td>
</tr>
<tr>
<td>d. local effort and forced intonation</td>
</tr>
<tr>
<td>e. weak glottal muscles</td>
</tr>
<tr>
<td>f. laryngeal instability or a rising larynx</td>
</tr>
<tr>
<td>g. lack of tonal initiative (too much</td>
</tr>
<tr>
<td>accompaniment)</td>
</tr>
<tr>
<td><strong>POSSIBLE CORRECTIVES</strong></td>
</tr>
<tr>
<td>o focusing on remedial ear training</td>
</tr>
<tr>
<td>where necessary.</td>
</tr>
<tr>
<td>o listening to and emulating good model</td>
</tr>
<tr>
<td>singers</td>
</tr>
<tr>
<td>o developing own vocal identity.</td>
</tr>
<tr>
<td>o corrected posture with a high chest</td>
</tr>
<tr>
<td>and stationary larynx</td>
</tr>
<tr>
<td>o thinking the tone before the onset (attack)</td>
</tr>
<tr>
<td>o vigorous singing within a moderate</td>
</tr>
<tr>
<td>pitch range that will energize and</td>
</tr>
<tr>
<td>strengthen enfeebled glottal muscles</td>
</tr>
<tr>
<td>o light onset exercises at any pitch level,</td>
</tr>
<tr>
<td>e.g. Figure 4.15: Exercises to prepare</td>
</tr>
<tr>
<td>for the onset</td>
</tr>
<tr>
<td>o rapid repetition of light staccato tone</td>
</tr>
<tr>
<td>on every pitch within the singable</td>
</tr>
<tr>
<td>range</td>
</tr>
</tbody>
</table>

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1 These references refer to all the information in the table (References for Figures will be individually made):
   Armhold 1963: 54-55.
   Fields 1984: 72.
   Jill Nock Studio.

2 See Chapter 3: Section 3. The importance of ear training/aural training (p.50-52); Chapter 4: Section 6. Aural training (p. 99-100).

3 See Chapter 4: Section 2.1.5.3 Onset or attack (coup de glotte) (p.88 -90).
h. excessive breath pressure or poor breath support
i. lack of energy or overtiredness causing weak breath support

---

j. bad tone production --
   i) *lack of overtones*, if the largest portion of the breath is directed against the mouth cavity instead of towards the focusing point between the eyes, where the head resonance is produced
   
   ii) *singing sharp*, often caused by forcing the breath into the head resonator, or by using just head resonance instead of using mixed resonance
   
   iii) *flat singing*, may be caused by forcing up loud low tones, or by weak posture and breath control, fatigue, heated temperature, lack of concentration or insufficient head resonance.

---

o paying additional attention to breathing exercises where necessary
o the *messa di voce* exercise (Figure 5.2) to enforce suitable breathing controls:

*Figure 5.2. Messa di voce*

---

o for overtones the learner should preferably practise on the closed vowel shapes *u* (u) and ü (German).

---

o for singing sharp the learner should apply the open vowel sounds like *ah* (a:). Use large intervals practised without the piano – only occasionally playing a chord or a note to check pitch accurateness.

---

o check the learner’s posture, breathing technique and breath control, as well as use of resonance.

---

o make sure that the voice is sufficiently warmed up.
<table>
<thead>
<tr>
<th>POSSIBLE CAUSES/INDICATORS:</th>
<th>POSSIBLE CORRECTIVES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. <strong>glottal inflammation</strong> (hoarseness)</td>
<td>• 24–48 hours of vocal rest (Castonguay <em>nd</em>)</td>
</tr>
<tr>
<td></td>
<td>• medical advice and treatment.</td>
</tr>
<tr>
<td>b. <strong>weak glottal muscles</strong> (poor adduction)</td>
<td>• use the glottal exercises recommended under off-pitch singing (FAULT 1 above).</td>
</tr>
<tr>
<td>c. forced breathing or shallow breathing</td>
<td>• check learner’s lifestyle and exercise patterns</td>
</tr>
<tr>
<td>d. poor posture</td>
<td>• chest position properly elevated and rib-cage muscles strengthened</td>
</tr>
<tr>
<td>e. abdominal tension (no breath support)</td>
<td>• laughter will strengthen diaphragm</td>
</tr>
<tr>
<td>f. physical inertia or fatigue</td>
<td>• vocal endurance tests on a timed hum, “ah” vowel, or slow, long, legato phrase to control breath emission&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
<tr>
<td>g. excessive breath intake</td>
<td>• the lighted candle test&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td>h. chest and shoulder heaving</td>
<td>• thinking breath retention during sustained intonation</td>
</tr>
<tr>
<td></td>
<td>• eliminate spasmodic breathing effort.</td>
</tr>
<tr>
<td></td>
<td>• the learner should breathe deeply and control from below with the whole body.</td>
</tr>
</tbody>
</table>

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<sup>4</sup> Chapter 4: Section 2.1.2.2 *Exercises on breathing* (p. 72-78).
<sup>5</sup> Chapter 4: Section 2.1.2.2 *Exercises on breathing*: Exercise I.
i. breathing in the wrong place:
   i) breaking line of singing for breath at other places than those determined by punctuation, the sense of the words and the music
   ii) running out of breath, before end of phrase

---

j. faulty attack

k. ‘woolly’ or ‘breathy’ sound, manifesting as a sort of ‘hoot’

l. too much breath escaping, not much voice produced

m. voice lacking focus and edge of sound:
   i) vocal chords not sufficiently close together, air will escape and be wasted
   ii) diaphragm not supporting or adding force to pressure of air from the lungs to the chords, air pressure inside the lungs will fall, producing a vacuum, which hampers a strong sound

---

- the text should be read aloud by the learner and appropriate snatch breaths must be determined, according to the text and the flow of the music
- revise vocal endurance tests, etc. as above.

---

- correct the start of the note and develop a good breath support. Try this exercise (Figure 5.3):

Figure 5.3. Breath control exercise 1

---

- ‘I’ is the best vowel, because it puts some tension in the vocal chords (but don’t sing HI). Other vowels can also be tried. Lowered air-pressure inside the lungs, which produce the weak ‘woolly’ sound, has to be replaced by constant pressure from contracting the stomach muscles, assisting the support from the diaphragm.

---

**n. wobble, excessive vibrato**

excessive, uncontrolled vibrato making an unsteady sound, caused by poor breathing and breath control – not enough breath being inhaled and a lack of muscular support of the air-pressure in the lungs; hyperfunctional breathing and hyperfunctional phonation.

- exercises on breathing and breath-control like Figure 5.4 – Figure 5.13.
- taking a good breath, humming on a fairly high note, while keeping the same volume for at least 20 seconds to encourage support muscles to work:

Figure 5.4. Breath control exercise 2\(^7\)

\[\text{Hum} \]

- when the steadiness of the hum can be controlled, add vowel sounds:

Figure 5.5. Breath control exercise 3\(^8\)

\[\text{Slow, steady, quiet} \]

- keeping the volume steady throughout, the learner has to stay aware of the stomach muscles supporting the sound. Dynamics must be added gradually, steadily and controlled, keeping the note in tune, without wobbling:

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\(^7\) Hewitt 1978: 70.  
\(^8\) Hewitt 1978: 71.
More exercises for breath control:

Figure 5.7. Breath control exercise 5
Repeat this exercise on each vowel

Figure 5.8. Breath control exercise 6
Repeat this exercise on each vowel

Figure 5.9. Breath control exercise 7
Repeat this exercise on each vowel

---

Figure 5.10. Breath control exercise 8

ah eh ee oh oo mah meh mee moh moo lah leh lee loh loo

Figure 5.11. Breath control exercise 9
Repeat this exercise on each vowel

Figure 5.12. Breath control exercise 10
Repeat this exercise on each vowel

Figure 5.13. Breath control exercise 11


### FAULT 3. – Impaired vocal quality, tone and timbre/Resonance problems

#### POSSIBLE CAUSES/INDICATORS:

a. forcing or overblowing the tone with a breathy sound:
   i) **harshness** (muscle fatigue, local effort)
   ii) **attempting to make a bigger sound than being equipped to make** (esp. boys) particularly when singing dramatic music, high notes and when trying to sing against loud instrumental sound – amplified music or orchestral music. Forcing or overblowing produces discordant, uncontrolled sound which can harm the delicate vocal chords:
   iii) **shrillness** (nervous tension/forcing)

b. **fatigue** (through excess/lack of rest)

c. **poor posture, inertia, lack of motivation, etc.**

d. **laryngeal instability**

e. **poor breath support**

f. **lack of tonal imagery or impaired hearing.**

#### POSSIBLE CORRECTIVES:

- teaching the learner that singing the high placement in the proper resonator while balancing breathing power with the resisting force of the throat and larynx, will achieve the maximum loudness of which the voice is capable
- exercises should be done in a comfortable *mezzoforte* tone, applying correct breathing, an open throat and the proper resonator.

- glottal muscles must be strengthened as indicated under off-pitch singing and breathiness (FAULT 1, 2 above)
- use swallowing exercise followed by a light, repetitive glottal attack of tone
- let the learner do body-building and posture exercises to develop the extrinsic muscles in the vocal tract\(^{17}\)
- use breath-retention exercises\(^ {18}\) and sustained *messa di voce* (see FAULT1 above) at different pitch

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\(^{17}\) See also Chapter 4: Section 2.1.1.1 *Exercises for releasing tension* (p. 67-69).

\(^{18}\) See Chapter 4: Section 2.1.2 *Breathing* (p. 69-78).
g. copying the tone quality of other singers.

- the head hum should be practised to encourage optimal resonance with minimal effort\(^\text{19}\)
- rest/vocal rest
- practising mental or silent singing
- ear-training exercises\(^\text{20}\)
- singing easy songs.

h. dull, flat, lifeless vowel colours.

- listening to and emulating good model singers, without trying to copy them slavishly
- teach the learner to develop own individual tone.

- these need to be brightened up.

Work from the brightest sound (usually i (i:) ), adding some of its brilliance to the other vowels, like E (ε), A (a:) and U (u), by preceding the dull sound with the bright sound, thus developing consistently bright sounds\(^\text{21}\)

i. faulty register changes when the 

- teach the learner how to control the

---

\(^{19}\) See Chapter 4: 2.1.4.1 Higher resonance (p. 80-81).
\(^{20}\) Chapter 4: Section 6. Aural training (p. 99-100).
\(^{21}\) See Chapter 2: Section 5.1 Vowels (p.34-36).
singing a wide-ranging phrase, with the different qualities of the registers sounding like different voices, breaking up a phrase and making it inconsistent. use of resonance, carrying the chest sound up to the higher notes and the brighter head resonance down to the lower notes. In a descending phrase, try to coax the high resonance down and the chest resonance up. 

- develop the middle register first
- with aspects like breath control, purity and position of vowels and onset having been mastered, singing in the middle register should improve
- mental imagery could be used to explain the concept
- utilize practising downward scales
- aim to blend the characteristics of the registers
- Exercises for equalizing the tone (register faults), Figures 5.14 to 5.16.

Figure 5.14. Extending the range to the top
Transpose for all voices.

---

22 Chapter 4: Section 2.1.4.2 Mixed resonance: Figure 4.7. Exercise for resonance 3, Figure 4.8. Exercise for resonance 4 (p. 79-84).
23 Hayward 1994: 156.
j. dull, lifeless, colourless voice
caused by not using the available resonance.

k. throaty sound
caused by the tongue
choking the nasal opening in the throat space (collapsed tongue muscles or constriction).

l. voix blanche or whiteness:
   i) loss of vibrato, a mechanical effort,
      lacking interest or warmth
   ii) sound extremely bright, too open or
too forward (tone colour/timbre), too

--------------------------------------------

- vocal sound is produced mostly by the resonating chambers of the throat, mouth and nasal space, which should be utilized fully to create a brighter, stronger sound.

- the tongue has to lie flat, forward in the mouth away from throat.

- consequently the learner may 'yawn-open' the throat, producing a free unconstricted sound.

- after checking on posture, breathing, and support, use general body-loosening exercises.

- use exercises designed to relax and loosen the neck, throat, and articulators.

26 Chapter 4: Section 2.1.4, Resonance (p. 79-84).
27 The position of the tongue is discussed in Chapter 2: Section 2.3, Preparation for emitting the voice (p. 20-24).
28 Chapter 4: Section 2.1.1.1, Exercises for releasing tension (p. 67-69).
much emphasis on oral resonator
iii) whiteness caused by lack of space in the pharynx due to action of constrictor muscles and/or elevation of the larynx
iv) tension in the walls of the pharyngeal resonator making it too selective
v) exaggerated mouth opening, pulling the lips back in a forced smile, or protruding the lips too much
vii) disproportionate tension in the muscles of the lips, tongue, jaw or palatal arches
viii) too bright sounds often are associated with a high laryngeal posture. Starting to sing with a lower voice, the larynx is comparatively low and then is raised progressively as the pitch goes up, almost like an elevator. In the case of singing with a higher voice, the larynx is elevated as soon as phonation starts, forcing the high voice even higher for the upper pitches.

- apply exercises for establishing and maintaining the beginning-of-a-yawn position\(^{30}\), thus reducing constriction in the pharynx
- since the vibratory sensations the learner feel can be moved around, suggest that the sound should be thought more towards the inside of the body, more internally, further back, or use similar expressions to call attention away from the mouth
- most beginning learners have to imagine a deeper, richer, more dramatic kind of sound than that with which they usually sing and should keep this sound in mind
- back vowels which require lip rounding, such as o (ɔː), o (ɒ) and u (ʊ) and are less tense than frontal ones can contribute toward a darker sound, especially if combined with the beginning-of-a-yawn feeling and preceded with (b), (m), or (j) to reduce articulatory tension.

\(^{29}\) Chapter 4: Section 2.1.1.1 Exercises for releasing tension (p. 67-69).
\(^{30}\) See Chapter 4: Section 2.1.3.1 Beginning-of-a-yawn position (p. 79).
m. dark sound quality:

i) sound extremely dark, too muffled, too swallowed, too covered or too far back (tone colour)

ii) overuse of the “yawning” muscles, resulting in a too open throat and/or depressed larynx

iii) lack of oral space due to lip, jaw, or tongue position

iv) slack pharyngeal walls without enough muscle tonus to give character to the sound

v) tongue pulled back into the pharynx

vi) too much or too little tension

vii) lack of activity in the articulators, like not moving the lips or not opening the mouth widely enough.

• check for breathiness in addition to darkness as it is easier to work on breathy sound first31, which is a phonatory problem – often darkness will disappear when breathiness is eliminated

• the lips must be moving and that the mouth sufficiently open. The learner must practise in front of a mirror

• use images like bringing the tone forward, singing towards the outside of the body, singing a brighter sound, trying to feel vibration in the front of the face (in the mask)

• if the tongue is being pulled back, it should be stuck out over the bottom lip while singing “ah” – though this is not an ideal singing position, it will provide some new vibratory sensations

• practising with the tongue over the lower lip is a good counter-measure

• exercises on the frontal vowels, such as i (i:) or ü may brighten the sound.

Figure 5.17. Exercise for resonance 532

31 Chapter 4: Section 2.1.2, Breathing (p. 69-78).
32 Hayward 1994: 137.
n. nasality (malfunctioning soft palate)

i) **excessive nasal resonance** *(hypernasality)* with a tight, pinched sound appearing to be focused in the nasal cavity

ii) *nose is the predominant resonance system* even on non-nasal sounds

iii) nasality may present either as *post-nasality* *(nasal honk)* or as *forced nasality* *(nasal twang)*

iv) may be caused by *pharyngeal constriction*

v) there may be a lack of oral space

vi) faulty breath support and poor posture may result in forced vibrations in the nose leading to the formation of a small high pitched resonator or the emphasis of high overtones by means of muscle tension

---

- establish the reason why the nasal tone is used — was it the method of a previous teacher, is it a tonal preference or is it found to be easier to sing that way

- try to develop a new tonal model for the learner — demonstrate and contrast a twangy tone and a balanced one, caricaturing the twang while explaining its tonal limitations.

- use loosening-up exercises for whole body first, providing for elimination of unnecessary tension (constriction) in the pharynx and larynx

- use exercises to relax and loosen the neck, throat and lower jaw — rolling the head around in circles, nodding the head, flopping the jaw loosely while saying “yah,yah,yah,” or “mah,mah,mah” to open the throat

- experiment with words like *ding, gone, zoom, hung, bum,* and *voom,* with the initial consonant firmly in place and the nasal consonant sustained while repeating each word several times — though nasal sounds are being used, palatal activity is important
vii) **insufficient nasal resonance** (hyponasality), with a resulting denasal sound

viii) a denasal sound may be brought on by a bad head cold, or by adenoids, a deviated septum or polyps.

- the juxtaposition of a syllable ending in NG (ŋ) with one starting in G is useful, such as in *hung-gah*
- plosive consonants, like P and B, are good for they require closure of the nasal port
- while the learner is sustaining a sound, the mouth should be opened wider (dropping the jaw), while imagining the sound drop down from the front of the nose into the mouth
- the use of more oral space has to be encouraged by opening the mouth freely and cultivating a more mouth-centred tone.

- humming exercises and vocalizes centered around the nasal consonants could be done
- vocal rest
- medical treatment
**FAULT 4. – Style and interpretation problems**

<table>
<thead>
<tr>
<th>POSSIBLE CAUSES/INDICATORS:</th>
<th>POSSIBLE CORRECTIVES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. singing slower in <em>pianissimo</em> phrases</td>
<td>➢ the learner should be taught suitable and effective interpretation</td>
</tr>
<tr>
<td>b. too little variation of dynamics</td>
<td>➢ a basic knowledge and understanding of the style of the song is important</td>
</tr>
<tr>
<td>c. inability to make gradual <em>crescendos</em> and <em>decrescendos</em></td>
<td>➢ background information on the period, composer, etc. will help</td>
</tr>
<tr>
<td>d. inappropriate <em>decrescendos</em> in long phrases, due to lack of breath</td>
<td>➢ the meaning of the text should be made clear</td>
</tr>
<tr>
<td>e. inappropriate accents</td>
<td>➢ the learner should practise in front of a mirror to improve expression</td>
</tr>
<tr>
<td>f. habitually singing <em>forte</em> on high notes</td>
<td>➢ dynamics and rhythm should be explained and demonstrated</td>
</tr>
<tr>
<td>g. singing loudly most of the time, with little contrast due to lack of soft singing</td>
<td>➢ technical aspects should be attended to</td>
</tr>
<tr>
<td>h. rigid, mechanical, inflexible tempo</td>
<td>➢ breath control and stamina have to be developed.</td>
</tr>
<tr>
<td>i. pointless <em>rubato</em></td>
<td></td>
</tr>
<tr>
<td>j. premature <em>ritardando</em></td>
<td></td>
</tr>
<tr>
<td>k. breaking of tempo between phrases to catch a breath</td>
<td></td>
</tr>
<tr>
<td>l. slow articulation of initial consonants because of bad timing and lack of breath</td>
<td></td>
</tr>
<tr>
<td>m. singing too slowly (dragging)</td>
<td></td>
</tr>
<tr>
<td>n. holding high notes to display technique and ability.</td>
<td></td>
</tr>
</tbody>
</table>

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33 See Appendix C: *Repertoire: Analysis and presentation of graded examples* (p. 281) and Chapter 4: Section 8 (p. 103).
## FAULT 5. – Tremulous, weak or feeble voice

<table>
<thead>
<tr>
<th>POSSIBLE CAUSES/INDICATORS:</th>
<th>POSSIBLE CORRECTIVES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. wobbly larynx</td>
<td>• using body-building, relaxation and breathing exercises</td>
</tr>
<tr>
<td>b. weakened laryngeal muscles</td>
<td>• remedy any posture faults</td>
</tr>
<tr>
<td>c. lack of breath support</td>
<td>• applying a light glottal cough to strengthen the glottic closure</td>
</tr>
<tr>
<td>d. unstable tongue position</td>
<td>• raising the posterior tongue surface during sustained whispering,</td>
</tr>
<tr>
<td>e. local effort</td>
<td>alternated with sustained phonation in the same position</td>
</tr>
<tr>
<td>f. weariness or fatigue</td>
<td>• practising staccato scale passages</td>
</tr>
<tr>
<td>g. timidity, nervousness, worry or fear</td>
<td>• alternating spoken utterances and commands using a loud whisper with a sudden use of full voice</td>
</tr>
<tr>
<td>h. ill health</td>
<td>• using breath compression exercises like candle-blowing,</td>
</tr>
<tr>
<td>i. vocal disorder</td>
<td>gasping, loud yawning, sighing, laughter and crescendos</td>
</tr>
<tr>
<td>j. external stress factors</td>
<td>• using linear vocal projection to an imaginary listener (distant)</td>
</tr>
<tr>
<td>k. detrimental life style factors.</td>
<td>• using the head hum</td>
</tr>
<tr>
<td></td>
<td>• giving the learner more frequent exposure to an audience</td>
</tr>
<tr>
<td></td>
<td>• supporting and motivating learner</td>
</tr>
<tr>
<td></td>
<td>• rest/vocal rest</td>
</tr>
<tr>
<td></td>
<td>• possible identification and treatment of physical or mental/emotional stumbling blocks through medical or therapy (chapter 7 of this dissertation).</td>
</tr>
</tbody>
</table>
After diagnostic preliminaries and routine correctives have been made, the learner should be given the opportunity to express himself/herself musically in rendering some simple songs. It is better to select songs that are well within a learner’s range so that a sense of accomplishment is achieved, especially if a previously corrected fault has been remedied (Fields 1984: 72).

3. **Conclusion:**

Fields (1984: 70-71) maintains that for diagnostic purposes vocal training may be regarded as a combination of five physical actions, which together constitute singing: posture, breathing, phonation, resonation and articulation. Corrective action should involve all these elements, together with musical, artistic rendering and interpretation.

Every vocal fault has a cause which has to be located and removed through corrective exercises. The entire body, chest, abdomen, neck, throat, larynx, tongue, palate, ears, nose, as well as mental and emotional components, must be considered as an integrated unit. No part should be overlooked in the process of identification, diagnosis and treatment of the problem.

It should however always be kept in mind that all teaching and therapy “have the ultimate purpose of achieving proficiency in the art of singing and the performance of song literature, and not merely technical skill in vocal tone production” (Fields 1984: 71). To this, Nock (1990)\(^\text{34}\) adds the satisfaction the educator experiences when a remedy has been successful or when a learner experiences “what Oprah calls the ’aha’ moment. You will see their recognition of ‘okay, this is how it happens, this is . . . what I can do and it works’ and they then start applying it.”\(^\text{35}\)

The next chapter provides physiological information that not only further contextualises the vocal faults discussed in this chapter, but also serves as introduction to the chapter that follows.

\(^{34}\) See Appendix D. Transcriptions of interviews: Nock: Question 15.

\(^{35}\) See Appendix D. Transcriptions of interviews: Nock: Question 17 for remedial vocal technique for voice learners who also play a brass or woodwind instrument.
CHAPTER 6
A BASIC OVERVIEW OF THE ANATOMICAL AND
PHYSIOLOGICAL ASPECTS OF SINGING

1. Introduction
In this study of the voice, phonation will be regarded as a physiological
process whereby sound is produced by the vocal folds in the throat and the air
that is being forced over them. The role of this physiological process will be
considered in vocal production and singing, providing a basic overview of the
anatomical and physiological aspects of singing, thus serving as basis for the
teaching of correct vocal technique and the identification and explanation of
vocal disorders. The purpose of this chapter is to provide a context for
educators of voice against which the teaching method set out in the previous
chapters of this dissertation should be understood, and also to introduce the
discussion of vocal disorders that will be discussed in the following chapter.
However, learners should not be confronted with such information in all of its
technicalities. Instead educators should develop the ability to select from this
whatever explanatory material and teaching aids might be applicable for the
enhancement of any given teaching and learning experience, according to the
level of advancement of the individual learner.

2. The physiology of the vocal mechanism
The human voice is produced and influenced by several organs. Each of
these organs plays a unique role in the production and quality of sound. The
vocal mechanism will be discussed in relation to the following primary parts:

- The mouth
- The tongue
- The throat and vocal folds
- The larynx.

After this the secondary role of the ears, the nose, the chest, lungs,
diaphragm and trunk muscles, as well as the lips, face, eyes, jaw and teeth
will also be examined.
2.1 The mouth

Two cavities make up the mouth: the buccal cavity, between the lips and cheeks and the front of the teeth; and the oral cavity, between the rear of the teeth and the pharynx. The lower boundary of the oral cavity is formed by the floor of the mouth, consisting of the tongue and the teeth of the lower jaw. The roof of the oral cavity consists of the bony, hard palate in the front portion, and the fibrous soft palate in the rear, which ends at the pharynx in several loose, membranous folds. The sides of the soft palate blend with the pharynx, but its lower border is free, allowing it to vibrate when sound is produced. To the back of the soft palate is the uvula, a small cone-shaped structure. The space left between the arches of the palate on the two sides is called the isthmus of the fauces. It is bounded above by the free edge of the palate, below by the tongue, and on each side by the pillars of the soft palate (pillars of the fauces) and the tonsils. Figure 6.1 represents an illustration of the mouth.

After the pharynx, the oral cavity or mouth is the second most important vocal resonator. Its location, size and adjustability serve to make it an effective resonator. Its dimensions may be changed by movements of the tongue, soft

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Hayward 1994: 36-40.
Slater nd: 28-29.
palate, jaw, and lips, while the shape and size of the front and back of the oral cavity can be altered. The main functions of the mouth are to form the vocal tone into understandable units by supplying consonants for communication, to get the sound out where it can be heard, and to join with the pharynx in the formation of vowel sounds (McKinney 2005: 126). Figure 6.2 is a frontal view of the tongue and oral cavity.

**Figure 6.2. The intrinsic muscles of the tongue, pillars of the fauces, tonsils and uvula**

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2.2 **The tongue**

The tongue is a strong muscle covered with a mucous membrane and small projections called papillae, which give it a rough texture. The extrinsic muscles attach the tongue to external points in the floor of the mouth. The intrinsic muscles, which run vertically through the thick part of the tongue, transversely, and longitudinally, allow it great range of movement and facilitate the formation of vowels and consonants in speech. This is illustrated in Figure 6.3:

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3 Bunch 1995: 121.
Hayward 1994: 36.
Slater *nd* 28-29.
2.3 The throat and vocal folds

The throat is the passage leading to the lungs and the stomach, located in the neck in front of the spinal column. It contains the pharynx, larynx and the upper parts of the oesophagus and the trachea (windpipe). The larynx is situated in the upper front of the neck, between the root of the tongue and the trachea. The pharynx is the part of the alimentary canal between the palate and the oesophagus (the tube through which food passes from the mouth to the stomach), and is a passage for air and food.

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5 Bunch 1995: 120.
Grant & Grant 2003: 18-21.
Hayward 1994: 36.
Slater nd: 12-27.
Because of its position, size and extent of adjustability, the pharynx is the most important resonator. As a result of its size, the pharynx is capable of bringing out the lower vocal tones, adding fullness, warmth, or mellowness. The upper portion of the pharynx is called the naso-pharynx, which can be shut off from the rest of the pharynx by the movement of the upper constrictor and the elevation of the soft palate. The part behind the mouth is the oro-pharynx, while the lower part is called the laryngo-pharynx, which can be cut off from the rest of the pharynx by putting the back of the tongue against the wall of the pharynx (McKinney 2005: 125-126). Figure 6.4 illustrates a midline section of head and neck.

Figure 6.4. Midline section of head and neck

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7 Bunch 1995: 59.
2.3.1 The larynx

The frame of the larynx (Figure 6.5) consists of cartilaginous structures (Figure 6.6 and Figure 6.8) joined together by muscles and ligaments (Figure 6.9) to form a triangular casing. The largest cartilage is the thyroid cartilage, which consists of two flat, more or less square cartilages, joined at the front to form a projection known as the Adam’s apple. At the back each cartilage is connected to the hyoid bone (which supports the tongue), situated just above the larynx. These two cartilages are not joined at the back – the opening between them is covered with connective tissue. The ring or cricoid cartilage is situated directly underneath the thyroid cartilage. The bases of the two pyramid (arytenoid) cartilages are standing on top of the broad rear part of the ring cartilage. The rear portions of the thyroid cartilage are connected to the circular cricoid cartilage, which has the function of keeping the laryngeal passageway open at all times. On each side of the rear upper border of the cricoid cartilage is a small, movable arytenoid cartilage.

The larynx can be manipulated to generate sound with a specific frequency or pitch. The sound is altered as it moves through the vocal tract, being influenced by the position of the tongue, lips, mouth and pharynx. While passing through the filter of the vocal tract the sound is changed into different vowel and consonant sounds, as well as different tones. Like the lungs, the larynx creates pressure differences required for sound production. The manipulation of the vocal folds by the cartilages of the larynx is responsible for the formation of the different source sounds (discussed below).

Figure 6.5. The larynx

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8 Du Toit, Van der Merwe, Van Rensburg & Van Rensburg 1972: 332.
Figure 6.6. Lateral and frontal views of the laryngeal framework

Figure 6.7. Lid of the larynx (Epiglottis)

The lid of the larynx can be raised or lowered. During swallowing it closes the entrance to the larynx.

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10 Husler & Rodd-Marling 1965: 15-16 + plate facing p. 17.
The epiglottis (Figure 6.7) is a thin, lid-like flap of yellow elastic cartilage, which is normally pointed upwards, but during the flow of solids and liquids from the mouth into the oesophagus, is folded down over the glottis, the opening between the vocal folds, to prevent food from passing into the trachea.

The cartilages of the larynx are illustrated in Figure 6.8:

**Figure 6.8. The cartilages of the larynx**

![Cartilages of the larynx](image)

The larynx and its supporting strap muscles are illustrated in Figure 6.9:

**Figure 6.9. Anterior view of the strap muscles, part of the contractile mechanism for supporting and depressing the larynx**

![Anterior view of the strap muscles](image)

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12 Bunch 1995: 68.
Two pairs of vocal folds\textsuperscript{13} are present in the larynx. They are made of elastic connective tissue covered by folds of mucous membrane. One pair, the false (or vestibular) vocal folds, extends from the epiglottis to the angle of the thyroid cartilage and narrow the glottis during swallowing. They are functional in keeping food and drink out of the airway, breathing, and phonation (speech) and have a minimal role in normal phonation (singing), but are often used to produce deep sonorous tones.

Figure 6.9 and Figure 6.10 show the working of the vocal folds:

\textbf{Figure 6.10. Position of the vocal folds in the larynx}\textsuperscript{14}

\begin{center}
\begin{tabular}{l l}
\textbf{a. Vocal lip} & \textbf{b. Vocal fold} \\
\textbf{c. Vestibular fold (false fold)} & \textbf{d. Elastic cone} \\
\end{tabular}
\end{center}

13 Vocal chords vs, vocal folds – Brad Liebl.
14 Husler & Rodd-Marling 1965: 15-16 + plate facing p. 17.
The vocal folds can be held close together (by drawing together the arytenoid cartilages), so that they vibrate. The muscles attached to the arytenoid cartilages control the degree of opening between them. The thyroid cartilage rocks forward and backward on the cricoid cartilage, thereby controlling vocal fold length and tension. This is done either directly by contracting the cricothyroids, or indirectly by

- changing the vertical position of the larynx
- manipulating the tension of the muscles within the vocal folds
- moving the arytenoids forward or backward.

This causes the pitch produced during phonation to rise or fall. In most males the vocal folds are longer and with a greater mass, producing a deeper pitch.

Below the false vocal folds are the true vocal folds (vocal lips\textsuperscript{16}), fixed to the pyramid (arytenoid) cartilages in the back and extending from there to the angle of the thyroid cartilage in the front (Figure 6.10). Vibration of this pair of folds by air passing out of the lungs causes the formation of sounds and sound waves that are amplified by the resonating nature of the voice box (throat, nose, mouth and sinus cavities in the frontal bones of the skull), shown in Figure 6.12.

\textsuperscript{15} Slater \textit{nd}: 18-19.
\textsuperscript{16} Husler & Rodd-Marling 1965: 17.
The volume and speed with which the air is forced out also influences the intensity of the sound. The pitch of the sound is voluntarily controlled by muscles in the sides of the larynx that rotate the pyramid cartilages (slackening and lengthening the folds) for low tones, or shorten the chords and pull them taut for high-pitched tones. During respiration the vocal folds are fairly slack and separated by a space called the chink of the glottis. In order to produce vocal sound, these folds have to be stretched and at the same time brought closer together, so that the chink of the glottis is almost closed. The size of the larynx differs from person to person. This, together with the extent of the angle formed by the plates of the thyroid cartilage, determines the depth of the human voice.

Since the larynx contains the vocal folds, which function as the primary vibrator, the fact that it may also serve as a resonator could be overlooked.\textsuperscript{18}

\textsuperscript{17} Nock \textit{nd}.
\textsuperscript{18} The larynx is not under conscious control, but whatever produces “ring” or brilliance in the voice can be encouraged indirectly by a knowledgeable singer (McKinney 2005: 124-125).
3. The ears

One of the functions of the ears, illustrated in Figure 6.13, is to receive sound waves and to transmit the sensations to the brain, which will interpret them as sounds. The passages inside the ears, nose and throat are connected and interdependent, therefore the ears also influence voice production. The middle ear is in direct communication with the back of the nose and throat by way of the eustachian tube, which allows for passage of air into and out of the middle ear. A person who has a cold and is incapable of hearing clearly, often speaks too loudly and likewise placing the voice is affected when singing. Deaf people have difficulty in producing sound, because they cannot hear themselves – from there the reference to deaf mute. In olden times, before modern techniques were available to teach deaf people to speak relatively clearly, it was often incorrectly thought that deaf people were automatically mute as well, as they were unable to produce sounds correctly. A good ear is therefore essential for good voice production.

Figure 6.13. The auditory apparatus

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Du Toit, Van der Merwe, Van Rensburg & Van Rensburg 1972: 236-238.
Mills 1913: 236-250.

4. **The nose**

The nose (Figure 6.14) serves as air purifier for the respiratory system. It also gives resonance to the voice. The nasal cavity or nose is the third most important vocal resonator. It can be switched in or out of the resonance system to varying degrees by the action of the soft palate and related muscles. The nasal port is the opening between the back of the mouth and the back of the nose. Like the inside of the lungs, the interior of the nose does not distinguish itself as a resonator.

McKinney (2005: 127) is of the opinion that “[t]his means that the vibratory sensations experienced in the roof of the mouth, the nose, the cheek bones, or the sinuses by many singers may feel good and may provide evidence of a good sound, but contribute nothing to the external sound being produced.” He adds that blocking the nasal passages with gauze does not alter the sound – so like the chest vibrations, they may supply valuable feedback, but that is all:

Authorities are not in complete agreement as to the nature of the transmission of these vibratory sensations. There is some feeling that the vibrations are carried to the bony structures of the head by conductive resonance, but others feel that the nasal cavity is made to vibrate sympathetically by the vibrations of the hard and soft palates, even when the nasal port is closed. These vibrations may testify to a good phonatory process or to the fact that the pharynx and mouth are functioning effectively as resonators, but, if so, it should be remembered that the vibrations are a result, not a cause of the sound you are producing.

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**Figure 6.14. The nose**

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5. **The chest, lungs, diaphragm and trunk muscles**

The two lungs are situated within the thorax (rib-cage). A protective membrane called the pulmonary pleura covers them. The ribs support the body wall of the thorax, which has a domed base formed by the diaphragm, a dome-shaped muscle, which separates the chest and lungs from the stomach area (Figure 6.15). The ribs slant downwards and forwards; when they are raised by the action of the outer-intercostal muscles, the volume of the thorax is increased. The volume of the thorax is also increased by downward contraction of the muscles of the diaphragm. Within the thorax, the lungs are held close to the body wall by atmospheric pressure. When the thorax expands, the lungs also expand and become filled with air drawn through the upper respiratory passages, that is, through inspiration (breathing in or inhalation), the diaphragm is flattened and pushed downwards, and the abdominal muscles are pressed down and out.

![Figure 6.15. Front view of the chest](image)

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Rose 1962: 49-73.
Slater nd: 7-12.

24 Shakespeare 1920:10.
In breathing out (expiration or exhaling), the abdominal muscles and the diaphragm return to their original positions, the rib-cage contracts back to its original position by the action of the intercostals muscles and between them they squeeze out most of the air. The direction of the movement when breathing in is outwards and downwards, and the direction of movement when breathing out is inwards and upwards. To some extent the depth and pace of breathing can be voluntarily influenced. This is often done during speech and especially during singing and may result in a difference in the tone and volume of the voice. The process is represented by Figure 6.16.

According to McKinney (2005: 123) the chest is on the wrong side of the vocal folds to act as significant resonator and the lungs are not designed to reflect sound waves back to the larynx. Vibrations felt under the hand result from conductive resonance and stop in the chest. However, they can supply feedback about sound production.

**Figure 6.16. The respiratory mechanism**

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25 Nock *nd.*
The framework within which the breathing mechanism operates is supplied by a number of trunk muscles, which supplies the necessary “scaffolding” (Husler & Rodd-Marling 1965: 34). The main muscles include: the long inner back muscles, stretching from the coccyx to the nape of the neck, where they are attached to the base of the skull by strong sinews; the intercostal muscles; the lower abdominal muscles (from the waist downwards) and certain muscles of the buttocks (Figure 6.17).

Figure 6.17. a) Inner back muscles and buttocks, b) Outer back muscles, and c) Inner chest muscles

6. The lips, face, eyes, jaw and teeth

The lips and facial muscles are also functional in the production of sound. The lips are especially important in producing plosives (especially bilabial sounds, e.g. p, b) and the resonance of sound inside the mouth. The facial muscles around the lips, as well as those around the eyes play a significant role in the production of sound. When facial muscles are taut, the vocal folds will be strained too. The expression of the eyes and face also adds to the emotive value of the words or sounds. Freedom of the jaw enables the tongue to

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26 Husler & Rodd-Marling 1965: plate facing p. 31.
27 Armhold 1963: 25.
Hayward 1994: 36-38.
articulate different sounds and allows the larynx to move freely. Even the teeth have a part to play in sound production and are essential in the execution of certain consonants, e.g. the fricatives.

7. **Conclusion**

It has to be stressed that the information in this chapter serves as illustrative and background material and the learner should only be confronted with it, or aspects of it, as and when deemed necessary. The level of physiological detail provided should also match the developmental stage and age of the singer. The details and illustrations in this chapter also provide the basis for the discussion of vocal health related issues and medical matters in the next chapter.

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CHAPTER 7

THE VOCAL HEALTH OF ADOLESCENTS – PHYSIOLOGICAL, PSYCHOLOGICAL AND PEDAGOGICAL CONSIDERATIONS

1. Introduction

The entire body is the singer's instrument, and, just as an organist must have a comprehensive understanding of the mechanism and acoustics of the organ from the pedals to the pipes, so too should a singer have at least a basic knowledge of the vocal organ. Learners should not experience the technical aspects of singing as inexplicable and mystifying. Educators who consider the technical workings of singing a mystery inadvertently admit to a lack of knowledge on the physical and acoustic nature of the voice, thus treating it as "an idiosyncratic structure built on intuition and trial and error" (Miller 1996: 211), and teaching their learners to do likewise.

The ideal professional educator has to understand that young amateur voices have to be considered and treated differently from those at a university level and beyond, and should know the specific reasons for each exercise assigned to the learner. Learners should be able to take for granted that they are being taught the proper techniques in breathing, phonation and muscular action and that all exercises have specific functions. If an educator should suspect a voice problem, no matter how small or insignificant it may seem, she or he has to take the following steps

- Investigate the learner's vocal history to look for signs of possible vocal abuse and/or misuse
- Make sure that posture and breathing are uninhibited during speaking and singing
- Inform the learner and/or the parents of these suspicions
If the problem is not resolved on its own, direct the learner to a laryngologist or Ear, Nose and Throat specialist (who is skilled in treating singers) for a visual diagnosis, or to rule out the possibility of a benign mucosal disorder.

If nothing can be seen on the vocal folds, get an informed aural and visual diagnosis by a voice therapist (usually a speech-language pathologist).

Not endeavor to try out “voice therapy” without having done the essential training and research involved.

Not let personal pride stand in the way of the possibility of the learner receiving treatment from a more appropriate source (Brunk 2008: 617).

The difference between the vocal instrument and all other musical instruments is that the singing instrument is a living instrument, a part of our living body, subject to all laws to which the body itself is subject. Therefore, a wrong method of singing is worse than a wrong method of violin playing. In the case of the violin, the instrument is not harmed; in the case of the voice, the instrument is destroyed (Bachner 1947: 28).

1.1 A personal experience

Brunk (2008: 616) states that “A healthy singer/teacher with a flourishing career may not want to think about the possibility of a voice disorder and the horrifying ‘what if’ that comes to mind. No singer chooses to imagine life without one’s instrument.”

My own story starts a few years before I had to come face to face with this dreadful reality. I started voice lessons at the age of 15 in the last term of my grade 9 school year, as I planned to take voice as second instrument from grade 10. Piano and violin were my first instruments at school from grade 8 until grade 11. Practising these two instruments for both internal and external exams lead to the development of a ganglion cyst in my wrist for which I had to undergo my first surgery in grade 11, so that I would be ready for grade 12. That was my first experience with surgery and general anaesthesia. At the time I was more
concerned about the anaesthetic tube\textsuperscript{1} harming my larynx, than about my hand. For grade 12 I chose to do only piano, with voice as second instrument. I still continued with my violin lessons privately and successfully completed a Trinity Guildhall Grade 7 violin exam at the end of grade 12, together with an ABRSM Grade 8 piano exam. My voice teacher had to get me to a Grade 6 level for matric, because I had decided in the interim that after school I wanted to study music with voice as main instrument. Although I loved the other two instruments, especially violin, voice turned out to be “my instrument” and singing had become part of what defined me as a person, as it is to this day.

Choral singing has always been a very significant part of my life.\textsuperscript{2} I sang in the provincial children’s choir and in high school I sang first soprano in the school choir. Eight years on I am still a member of the university choir. Choir singing is a passion without which I can hardly imagine my life. But it is choir singing that would eventually be the cause of my vocal problems.

It all began in my grade 12 school year. At the beginning of that year, the school choir together with the school drama group started practising for a music production that was to take place in August. The school choir had a practice day on a public holiday and it was this day and the following two days that took its toll on my voice. Our choir day consisted of practising for six hours that day. We started practising at about 9:00 and finished at about 17:00. We had a repertoire of about 13 SATB songs that we had to practise for the production.

During that first day I had to overcompensate sometimes, as I had to sing numerous high notes and sometimes alone, when the other sopranos could not reach them or were too scared to try. Since I was the only one doing voice lessons, they relied on me to take the high notes or the conductor would ask only me to sing these notes. At that time, when the conductor showed that she

\textsuperscript{1} See section 5.3 of this chapter (p.193).
\textsuperscript{2} See Chapter 8 (p. 199).
wanted more sound, I would try to do this without thinking of the consequences to my voice, because I did not want to let the group down.\(^3\)

Near the end of the choir day, we practised Andrew Lloyd Webber’s *Pié Jesu*, for which I sang the first soprano solo part. Ironically, the reason for its inclusion in the show was the fact that it happened to be part of the repertoire I was busy preparing for my grade 12 school music examination. The conductor (who was also the music teacher at the school) had decided to include it in the show so that it could be assessed as an ensemble piece for my examination. We repeated this song about three times from the start. This was what I considered to have been the cause of the damage to my already tired voice. By the end of the second day I could not even speak anymore.

I made an appointment with the Ear, Nose and Throat specialist recommended by my voice teacher. After having done a thorough\(^4\) examination, Dr. Black diagnosed me with having soft nodules\(^5\), which fortunately could disappear with a period of vocal rest. Hard nodules in most cases need to be surgically removed. I had to rest my voice for about three months. This involved partial voice rest, allowing limited talking and no singing. This meant that although I still took part in the production, I had to mime the singing and my solo was taken over by someone else. If my voice had not been such an essential part of my future plans I could perhaps still have taken a chance, but in the light of my intended singing career, I just had to accept this. I was devastated, but I learned a valuable lesson from all of this and that was to listen to my voice and not to keep on singing when it was feeling tired. I also could not sing my grade 12 practical exam. My CASS\(^6\) marks had to be used for my practical mark. I only did the viva voce part of the exam at my end of year examination. It was terrible not knowing if I would be able to study voice the following year. Near the end of the year my voice teacher

\(^3\) See Chapter 8 (p. 199).
\(^4\) See Section 5.2 of this chapter (p.190).
\(^5\) Discussed in Section 4.3.1 of this chapter (p.174-177).
\(^6\) Continuous assessment, i.e. year mark.
had to put me through a rehabilitation process to restore my voice and recover my physical strength and stamina, as well as my breath control and support.

At the time Dr. Black diagnosed me with the nodules, he diagnosed me with a deviated septum\(^7\) as well and as I regularly suffered from bouts of acute sinusitis coupled with laryngitis, he recommended that this should be operated on, as the deviation of the septum was causing nasal congestion which was making me more susceptible to infection. After my grade 12 examinations I had this operation, at the beginning of the school holidays to give me enough time to recuperate for my voice studies at university. I also had to go for allergy testing and it was found that I was allergic or sensitive to almost all environmental allergens, except feathers. I had no plan of getting rid of my cats, though – they just had to be “managed” more effectively.\(^8\)

At the beginning of my first year of music study, my voice remained hoarse and I was becoming really worried. Just before another choir camp the symptoms became particularly bad. As I did not have time for a doctor’s visit before the camp, I phoned Dr. Black for a prescription for “something for my throat/sinus infection/laryngitis”. I had a difficult time at the camp and the medication did not improve my symptoms. Back home, I made another appointment with the doctor. An examination of my nose and throat showed no real signs of sinus infection. I again assured him that I did not suffer from heartburn. Further examination, which included a gastroscopy (under conscious sedation), a colonoscopy and a laparoscopy (both under full anaesthetics) followed. After having excluded other options, laryngopharyngeal reflux\(^9\) – Dr. Black’s preliminary diagnosis – was confirmed. I was also suffering from irritable bowel syndrome (IBS), for which I was put on a special colon diet.

This was a result of the bad eating habits of my first year at university, when I had to stay on campus for long hours and only came home late in the evening.

\(^7\) More about this in Section 4.7.1 of this chapter (p.174-177).
\(^8\) See Section 2.5 Environment (p.157-159).
\(^9\) See Section 4.10 Laryngopharyngeal reflux (p.187-189).
after choir practice. I was still very tense after the stress of the previous year – the worry over the matric examination for which I had studied very hard, two advanced external music examinations, the show, the voice trauma and the septum and wrist operations had all been contributing factors.

During my university career I went through good and bad experiences. I enjoyed singing in the university choir and went overseas on choir tours a few times. At the end of my first year I was asked by a grade 12 learner from a local school to do his ensemble piece with him for his end of year examination, so I eventually had my chance to sing for a grade 12 exam, albeit a year late! I passed the Grade 8 Trinity Guildhall voice examination with distinction in my second year. At the Jill Nock Studio I sang the title role in a studio performance of Offenbach’s *La belle Hélène* and have since had the opportunity to do several solo performances with the studio and in the community. Apart from having had to go for a tonsillectomy in my fourth year, about four months before my final university practical examination, my health and the state of my voice have improved considerably. I only have to manage my diet fairly carefully and stick to a generally healthy lifestyle – as all singers and voice learners are supposed to do. My confidence in the ability of my voice and my vocal technique have developed to such an extent that I plan to enter for the Trinity Guildhall Performance Licentiate in Voice in the foreseeable future.

2. **General vocal health – guidelines for the high school learner**

2.1 **Lifestyle**

Taking care of the vocal folds and larynx is very important for learners doing voice, as they use their voices more often and for much longer spells than most other people. The vocal folds are made up of very delicate tissue and can easily be damaged. It is crucial that learners understand how to take care of their own voices (Keller 2010).
Good health, physical vitality, balance and stamina are essential for successful singing. Learners doing voice as instrument must accept and adhere (in some instances rigidly) to certain definite life style restrictions that are crucial for vocal progress. The voice learner has to be even more careful than the athlete about health habits. The athlete may have a huge meal and work off most of the effects in one vigorous practice, whereas the learner doing voice who overindulges may suffer the consequences for several days. Lack of exercise, bad diet, insufficient sleep, excess and indulgence are very serious to the singer as they negatively impact on vitality. It is interesting to note that the vocal problems of adults that come to see Dr. Black are more life style related than those of high school learners.

Some learners tend to go to the other extreme – pampering themselves excessively, worrying about their health, living in fear of developing a cold or having a sore throat, taking all kinds of medicines, leading an entirely abnormal life, and often, as a result of all this tension, developing stress related conditions. A normal, balanced approach towards eating, sleeping, working, resting and exercise is unquestionably the most sensible option. After having suffered severe vocal trauma, the learner may tend to become neurotic about the state of the voice. I have experienced that even though I had to keep the condition of my vocal folds and vocal tract in mind, I just had to let go, otherwise history would have repeated itself over and over again.

Factors which may afflict the voice are excessive eating, drinking of intoxicants, smoking, laryngitis, head colds, singing out of doors, cheerleading, yelling at sports events, allergies, fear, and emotional disturbances such as worry, pessimism and jealousy (Christy 1967: 9), late-nights, lack of sleep, too much talking, lack of exercise or, on the other hand, over-exercising.

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10 See Appendix D. Transcriptions of interviews: Dr. Black: Questions 7 and 8.
2.2 Stress

Stress occurs so generally in the learner's life and is such an important lifestyle factor influencing the voice, that it needs special mention. Stress will cause the voice to tense and stiffen. It depletes the required energy levels, which are needed for singing. Some of the causes of stress are lack of sleep, an empty stomach and an unhealthy diet (Keller 2010). In the case of the learner, problems at home or school, tests and examinations, too many demands by educators or parents, emotional or health problems, romantic relationships, etc. may all add to stress. Such demands can sometimes overwhelm a learner's vocal abilities.

These circumstances may lead to vocal strain and cause problems with phonation. As stress increases muscle tension also increases, causing neck, shoulder and tongue tension, increased gastric acidity and a higher occurrence of laryngopharyngeal reflux (related to heartburn) (Davies & Jahn 2004: 51).

Exercising for at least 15 minutes per day may help to reduce stress. The learner should eat fruits and vegetables (avoiding eating on a regular basis those that might cause heartburn), and should take vitamins B6 and B12, which greatly reduce stress.

Enough sleep (at least 7 to 8 hours) is essential, as too little sleep may cause swollen vocal folds and the body will also not be able to function correctly in supporting the singing voice (Keller 2010). Unfortunately sleep is usually the first to be neglected in a hectic school schedule, especially during examinations, when assignments are due, during (final) rehearsals and performances of school and choir concerts, on sports and cultural tours, during eisteddfods and music examinations, etc. It is during these periods when the diet also suffers – unfortunately precisely when the young body is most in need of that sleep and nourishment. If a body is physically tired, its resistance to infection is decreased. Infections, in turn, put strain on the immune system (Davies & Jahn 2004: 54).

Stress is usually caused by a combination of physical and psychological factors. For example, anxiety-related dryness of the vocal tract may cause a slight voice
change, which in turn may result in additional anxiety. This can lead to the larynx overcompensating for the lack of vocal performance, with increasing vocal fatigue and further voice change. A tension headache occurs very generally and muscle-tension related vocal problems, associated with excessive neck and tongue activity may eventually lead to vocal nodules. Coffee, taken to overcome fatigue, as well as aspirin, taken to treat headache and muscle aches, aggravates gastric irritation (Davies & Jahn 2004: 54).

Deep breathing helps to get rid of stale air and helps the body relax.\textsuperscript{11}

\subsection*{2.2.1 Stage fright}

All singers experience some form of stage fright, particularly the inexperienced, which include most school learners. The fear of being struck dumb or forgetting the notes or lines is a common anxiety. There is a fear of failure, with rational thought being suppressed by self-induced dread. Stage fright can be experienced as butterflies in the stomach, cold clammy palms, hot flushes, sweating, rapid heartbeat, a sensation of pain or tightness in the chest, muscle ache and tension, fatigue, jelly legs and a dry mouth (Davies & Jahn 2004: 52). For the latter it can be helpful to bite the tip of the tongue (not too hard though). This will stimulate the flow of saliva.\textsuperscript{12} Stage fright may cause hyperventilation leading to dizziness, shortness of breath, tightness in the chest, nausea or a feeling of losing control.

Even with these factors under control, the voice may still reveal signs of any underlying stage anxiety. Hysterical hoarseness may develop when a learner is under severe pressure. The learner could become so frightened that acute hoarseness may already appear on the day before a performance or singing examination. In some instances the educator may find it difficult to establish whether the problem is stress related, or has some physiological basis. The learner has to be supported and helped to rationalize the situation, so that confidence can be regained (Bunch 1995: 130). During my school years I

\textsuperscript{11} See Chapter 4: Section 2.1.1.1 and 2.1.2.2 for relaxation exercises (p. 67-69 and p. 72-78).
\textsuperscript{12} Jill Nock Studio.
sometimes suffered from hoarseness a day or so before a concert. This also
used to occur before my first performances immediately after having recovered
from the vocal nodules, which was an indication of my psychological state of
mind – the fear that the nodules would come back or that my voice would let me
down. With experience and growing confidence in my technical ability and
preparation, this seemed to have diminished. I also found the guidelines
discussed below particularly helpful.

Breathing out slowly and thinking of calming images should help (Davies & Jahn
2004: 52-53). Learners should be taught to feel in control and be so well-
prepared and rehearsed that it should be possible to prepare and visualize the
situation before the actual performance. The educator can teach them to look
above the heads of the audience and not in their eyes, and to smile. Rescue
Remedy, a harmless natural product available from pharmacies without
prescription, may be used to calm the really stressed learner. Only if the problem
persists after all the necessary preparation has been done and possible remedial
action has been taken, the learner may be advised to use safe, non-habit forming
tranquilizing drugs. Inderal (for which a prescription is needed) is a beta blocker,
which stops overproduction of adrenalin and has a calming effect. Two types of
Inderal may be used – short term (4 hours) and long term (24 hours).

2.3 Exercise

A voice learner needs regular, rather than excessive strenuous exercise. 
Exercise that is so demanding or that is continued for so long that it lowers vitality,
hinders rather than assists the vocal performance of the learner. Over-strenuous
competitive sports, swimming and diving may well need to be avoided. 
Swimming and diving are outstanding body builders, but may cause irritation of
the mucous membrane of the nose and throat and may damage hearing.
Exercise should be adapted to the individual; what is too strenuous for one may
be just right to keep another in top condition. Learners should do exercise or
sports that they enjoy and which helps to maintain vitality (Christy 1967: 10).

13 Jill Nock Studio.
Whereas Christy suggests that learners doing voice refrain from swimming, Bunch (1995: 126) highlights dancing, jogging, walking, calisthenics, tennis, swimming and stretching exercises as being particularly beneficial. However, she advises voice learners to refrain from diving and underwater swimming because of the associated risks of nasal congestion and ear trouble. In this case the learners will have to find out what works for them. If they are prone to nose, throat or respiratory problems, a choice will have to be made between swimming and serious singing. Weightlifting overdevelops the muscles of the neck and the adductors of the vocal folds (Bunch 1995: 124), and is therefore also not advisable.

My own experience as voice educator has taught me the possible conflicts that can arise between the physical demands of sport and that of singing. I had a grade 10 learner who was very good at sports. She put a great deal of pressure on herself to do well in her sport and that showed during her vocal lesson. She would often be so tired and irritable during her voice lessons that it made the teaching process very difficult for me. Progress was also made at a very slow pace. If a learner takes singing seriously, some adjustments, choices and prioritization will have to be made, otherwise it should be expected that vocal development will suffer; the learner (and educator) will either have to live with that, or otherwise give up voice as subject entirely.

2.4 Alcohol, smoking and drugs

All voice learners should avoid drinking alcoholic beverages before singing, as it uses a lot of water from the body to metabolize alcohol, which would result in dehydrating the vocal folds. Alcohol does not necessarily damage the voice, however it causes impaired control of vocal co-ordination and depletes the body’s water (Keller 2010). This has a drying effect on the tissues of the vocal tract too and in time can cause irritation evidenced by the typically raspy or hoarse voice of the chronic drinker (Bunch 1995: 131). Alcohol causes the blood vessels in the body to dilate, which is harmful to the vocal folds. As the blood vessels dilate, the blood is diluted and comes to the surface, which makes the
vocal folds more susceptible to a hemorrhage ("Vocal health" 2010). Alcoholic beverages like sherry contain a high percentage of sugar, which causes phlegm. Consuming alcohol gives a false sense of security and leads to a loss of focus. The teenager, who is in a dangerous and experimental phase, should be made aware of these risks. The performance is more reliable when inner resources, confidence and technique allow emotions to flow freely (Bunch 1995: 131).

The learner should also be careful with prescription drugs and should altogether avoid using any illegal drugs. As drug abuse is often encountered amongst high school learners, it would not be out of place for voice educators to make a point of warning their learners about the inherent dangers thereof\textsuperscript{14}. Drugs like marijuana, cocaine, heroin, ecstasy and other narcotics can damage the voice. Marijuana irritates the vocal folds and damages the lungs at least ten times more than cigarettes. Cocaine can harm the sinus and nasal passage, which can jeopardize the voice. Heroin and ecstasy have endorphin effects, which put a great amount of strain on the voice (Keller 2010). Any drug which is inhaled, swallowed or injected may have an effect on the muscles and tissues needed for phonation. In the long run a drug addiction dooms a voice learner to failure. Performers singing under the influence of drugs may perceive their tone as freer, while the actual sound heard by the audience may be garbled and uncontrolled. “Sometimes before a performance a singer will take a tranquilizer or muscle relaxant to 'calm his nerves'. Unfortunately such drugs may relax the laryngeal muscles, and one performance will simply be comfortable or so relaxed that the singing is off-key” (Bunch 1995: 130-131). Therefore such drugs have to be used under strict supervision and only in severe cases of stage fright. Drug use should be abandoned as soon as enough confidence has been built by other means, e.g. sufficient technique and practice. If the learner remains unable to handle the stress, the educator should consider restricting performances to (compulsory) examinations and to choral or ensemble singing.

\textsuperscript{14} See Appendix A: Learner cases: Learner M (p. 271).
Even a so-called safe drug like aspirin, which is taken for headache or periods, thins the blood, which can cause tinnitus and vocal fold hemorrhage (Keller 2010: 3). It is recommended that the learner does not sing while taking these. Brown (1996: 231) adds that aspirin enlarges the blood vessels as do birth control pills. Cortisone should also be avoided if possible and only taken under a doctor’s guidance. Cortisone makes the vocal folds and all mucosal surfaces more friable (easily broken). With overuse of the voice it can bleed under the skin or under the mucosa. That will happen much easier if voice abuse continues.\(^{15}\)

The learner should refrain from using local anaesthetics when singing. The anaesthetic effect masks any signs of an underlying throat (vocal tract) problem (Castonguay nd: 1). Treatment of endometrioses (which may occur amongst teenage girls), often includes pharmaceuticals which cause permanent vocal changes. A doctor should be informed about the fact that the patient is a singer if treatment for this disease is prescribed (Castonguay nd: 2). Certain hormones will affect the voice. Steroids (testosterone) will markedly increase the size of the vocal folds resulting in a very deep pitch, a decrease in vocal range and breaks within the vocal registers. Steroids should not be abused for bodybuilding (Keller 2010), or any other sports.

Cigarette smoke causes the throat to get irritated and this leads to inflammation that makes it difficult for the learner to sing. Learners should be advised to refrain from smoking and avoid secondhand smoke as best they can, especially if they are prone to allergies (“Vocal health” 2010). The use of tobacco is extremely harmful to the lungs and the larynx. It dehydrates the mucous membranes that line the vocal folds, larynx and trachea. The toxic elements of smoke damage the cells of the respiratory tract. Smoking is one of the causes of lung cancer and there is a connection between smoking and other cancers of the respiratory tract and between smoking and heart disease (Bunch 1995: 131-132). The learner who smokes for the calming effect, is responding to a nicotine addiction, which

\(^{15}\) See Appendix D. Transcriptions of interviews: Dr. Black: Question 17.
should be broken as soon as possible (Davies & Jahn 2004: 60). It is much easier not to even start smoking and not to succumb to peer pressure in this regard, or follow the bad example of smoking parents, educators or other adults.

2.5 Environment

The environment may be responsible for allergic reactions in some learners suffering from hay fever or allergic rhinitis, which affects the nasal passages. Symptoms include sneezing, itching of the nose, running nose and eyes, red and swollen eyes, etc. The throat and the rest of the respiratory tract may be affected as well (itching or sore throat and bronchospasms), thus impacting upon the vocal apparatus. Air pollutants, dust, second-hand smoke, as previously mentioned, and toxins all affect the voice, so learners should try to avoid areas where they are exposed to these factors. According to Dr. Black about 20% of his patients constitute high school learners, with nasal allergies being the most predominant medical condition for which teenagers in general seek treatment. Using special effects like theatrical fogs and smoke in musicals, school productions, night clubs and amusement and theme parks, holds a risk for learners with respiratory problems and allergies and especially for asthmatics. Symptoms of exposure to theatrical fogs and smokes include dry or irritated eyes, nose and throat, dizziness, headaches, upper respiratory tract congestion, coughing, blurred vision and nausea. In such cases dry ice is the safest substance to use and is recommended, except in conditions where the carbon-dioxide level would achieve an intense and dangerous concentration (Davies & Jahn 2004: 70-71).

Air conditioning can cause dryness of the mucous membrane and eyes and ultimately sickness. Dry, artificial interior climates must be avoided. Laryngologists recommend a humidity level of 40 – 50%. Much body moisture is lost while breathing air in low humidity climates, i.e., in air conditioned or heated rooms (routinely 10 – 20%), cars, busses (Castonguay nd) and aeroplanes.

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16 See Appendix D. Transcriptions of interviews: Dr. Black: Questions 5 and 6.
Running the hot water in the shower very slowly while dressing or preparing for bed in the evening, provides moisture. It also helps to keep a supply of lemon drops or gum handy. Breathing through the nose is a good habit, as well as drinking lots of water (Brown 1996: 229). People prone to “air conditioning sickness” should not set the temperature too cold during summer. The heat should not be too high during winter, as heating dehydrates the body (Keller 2010). The learner should try to avoid going out into the cold air after being in a heated room as it is easy to catch a cold, because of the quick change in body temperature. Air conditioning may also cause sick building syndrome, which is the result of the continuous circulation of used, even polluted air through the building and air conditioner. This leads to chronic respiratory and other illnesses.

Seasonal changes can have a negative effect on health and the learner should take the necessary precautions. It can be helpful to get a flu vaccination and take zinc and Echinacea to help build the immune system (Keller 2010), as well as vitamin C. A singer who is prone to gastric reflux has to be careful with vitamin C, though, as it creates acid in the stomach, especially when eating too much fruit like oranges and apples. As these medications do not affect everybody in the same way, the learner may have to experiment with several antihistamines before finding a medication which will get rid of the main symptoms whilst not having a drying effect (Davies & Jahn 2004: 70-71).

Flowers near allergic performers may be problematic, therefore the performance venue should be inspected beforehand or it should be requested that there should be no flowers near the area where the learner will be performing, or no flower arrangement on the piano.

If the learner is found to be allergic to pets, contact with pets should be avoided at home and dogs and cats should at least be kept out of bedrooms and from beds. The voice studio should also be kept pet-free as far as possible, in case of learners who are sensitive to pets. These allergies are fairly common.
Moulds and dust are also problematic. In older theatres, concert halls, school halls and classes, the problem is increased by accessories like curtains and backstage drapes, as well as by outdated dressing room facilities and poor ventilation. Even in modern, clean theatres, old sets which contain mould may be used. If the environment is really dusty, an industrial filtering mask or a surgical mask that does not contain fibreglass can be helpful. Treatment ideally consists of avoiding the harmful irritant and taking various suppressive medications and desensitizers. Nasal congestion often interferes with sleep, so, to keep the nasal passages open, it helps to sleep with the head of the bed elevated about 10 cm. Surgery can sometimes bring dramatic and long term relief, but does not really help in the case of the truly allergic nose. Certain nasal sprays containing topical steroids such as beclomethasone dipropionate (Beconase) or budesonide (Rhinocort) may be helpful in order to decrease the swelling of the nasal mucosa. This takes a few days to begin working and should be used at the minimum therapeutic dose (Davies & Jahn 2004: 70-71). Dr. Black\(^\text{17}\) recommends a new product, \textit{Avamy}, as well. This is a true once-a-day nasal spray whereas the others often have to be used twice a day.

\subsection*{2.6 Diet}
Singing involves vocal strength and flexibility, abdominal support and respiratory functionality and reserve. Physical stamina and mental and physical endurance are essential to vocal performance and longevity. To this end vocalists should eat normally and wisely – sensible and well-balanced diets – and never overindulge. Indigestible or fattening foods should be avoided, especially overeating of sweets, desserts and starchy foods. Carbohydrates produce a quick high, but are followed by a sudden low. The learner should rather focus on low GI foods and snacks, which release energy more slowly and sustainably. In general, high carbohydrates are also more indigestible than other foods and, when taken in excess, lead to obesity and lower vitality. The recommended diet for singing would consist of plenty of lean meat (or other suitable protein sources in the case

\footnote{\textsuperscript{17}See Appendix D. Transcriptions of interviews: Dr. Black: Question 16..}
of vegetarians), high fibre cereal foods, eggs, fruit, salads and vegetables and 
dairy products (this last group in moderation).

On the day of the concert the learner should eat normally and not overeat (as 
digestion uses energy and hinders breath control), or eat less than three hours 
before singing. Most learners should not completely eliminate a meal before a 
performance, as is sometimes recommended, since this may cause 
nervousness, irritability and lowered, rather than increased, energy. Prior to 
singing, vocalists should stay away from cream, milk, cheese, yogurt, chocolate, 
nuts, pizza, popcorn, refined sugars, too much salt, junk food or any kind of food 
that might stick to or irritate the throat (Christy 1967: 9-10). Nuts and spicy foods, 
such as chilies and curries, should be avoided, as not only can they stimulate 
coughing attacks and throat-clearing, but they may also be gastric irritants 
(Davies & Jahn 2004: 96). Dairy products are not bad for the voice, but since 
they increase viscosity\textsuperscript{18} of phlegm, which makes it harder for the vocal folds to 
function and thus more difficult to produce higher notes, they should be avoided 
for at least two to three hours prior to singing. Orange and citrus juices can affect 
the lubrication of the voice, but are not as unhealthy as caffeine drinks such as 
coffee, which dry the vocal folds and may even lead to exhaustion, causing 
oedema (swollen vocal folds) in extreme cases. Learners should avoid the so 
called energy drinks, such as \textit{Red Bull}, which is loaded with caffeine and 
detrimental to the voice (Keller 2010).

If the voice is going to be used for long periods or intensively over a long time – 
like when practising for and performing in a school revue or preparing for an 
examination – large amounts of salt and refined sugar, spicy food such as 
Mexican or Chinese food, as well as excessive amounts of food and/or alcohol 
should be avoided (Castonguay \textit{nd}).

Drinking enough water is extremely important for singers. The vocal folds need to 
be properly hydrated to vibrate effectively. I instruct my learners to bring a bottle

\textsuperscript{18} Noted by Dr. J. Black.
of water to their lessons. The learner has to drink water at room temperature throughout the day. The vocal tract is warm and drinking icy water will make the pharynx contract with the cold. This causes tension, after which the voice has to be warmed up again. It takes time for the water to be absorbed by the vocal folds and drinking water at the last minute does not help. Smoking and drinking alcohol and caffeine have drying effects on the voice, so learners have to make sure that they drink enough water to counteract this (Keller 2010: 3).

2.6.1 Anorexia nervosa and bulimia

Learners, especially girls, may suffer from anorexia nervosa or bulimia. These eating disorders are psychologically induced and are becoming more and more prevalent in our schools. Both these afflictions will negatively influence voice learners as they impact on their performance physically and psychologically. The learner with anorexia nervosa will mostly lack energy and stamina, while the bulimia sufferer may present symptoms of laryngopharyngeal reflux. If a patient who tends to be underweight complies strictly with treatment advice for laryngopharyngeal reflux and does not show improvement within a month, more significant gastro-intestinal dysfunction, like bulimia should be suspected, in which case constant self-induced vomiting can cause dental erosion with poor gum hygiene (Davies & Jahn 2004: 88-89).

2.6.2 Obesity

Gradual weight reduction is recommended for obese learners. Dieting should be done slowly and steadily. The aim has to be to lose 1 to 1,3 kg per week. Rapid weight loss should be avoided, because this can cause minor metabolic changes, which may influence vocal quality and endurance. Suppressant drugs should only be used if absolutely necessary, and then under strict medical supervision. A balanced low calorie diet, supported by exercise, is a healthy weight loss option (Davies & Jahn 2004: 96-97). In my experience, unwise crash diets can be extremely harmful to the teenage voice. For example, I had a grade 9 subject music learner whose mother convinced her that they should try a specific diet together. This had disastrous consequences for the learner, who
was not overweight. Furthermore, the diet she went on was not healthy at all. The diet created such a build-up of stomach acid that she became ill and could hardly speak. The doctor referred her to a dietitian, who rectified her eating habits, but she was unable to sing for about three weeks.

Singing involves vocal athletics and a fit body and mind is essential to achieving competence in the field. Good abdominal support, excellent respiratory performance and capacity, physical strength and mental and physical stamina are essential to a successful career and vocal endurance. All these are negatively influenced by obesity, which is also associated with medical problems like hypertension, elevated levels of cholesterol, heart disease, diabetes, respiratory problems, arthritis, a greater anaesthetic risk during surgery and on the whole having a shorter working life. Overweight learners become extremely tired and are frequently depressed as a result of this as well as a low self esteem (Davies & Jahn 2004: 96-97).

In the past it was thought that fat contributed to resonance. This fallacy arose because drastic weight loss caused by virtual starvation, led to loss of both physical and vocal energy, and the loss of fat rather than energy was falsely blamed for the decreased vocal quality (Bunch 1995: 124). Physical weight does not contribute to resonance. The ideal weight for singing is the perfect weight for most physical endeavours. Weight loss is a positive factor both visually and vocally. This also refers to the overweight educator, who has to set the example when giving advice (Miller 2004: 175-176).

A pleasing visual appearance in the performance world is also becoming increasingly important. Stage movement and dramatic credibility become more difficult for the overweight performer, who may have deficiencies of breath management, resulting in a wobble and uneven breathing and tone. Noisy breathing, torso displacement, phrase-end collapsing and irregular vibrato are among the results of obesity. It is hard to locate where lateral/abdominal wall expansion is occurring, which makes it difficult to judge technique. An educator is morally compelled to counsel the obese learner tactfully, to explain the
uncomplimentary role corpulence plays in technique and in career advancement. Learners need to seek professional help. Most persons who suffer from obesity do so because of overindulgence and a lack of exercise (Miller 2004: 17 -176).

Because of current dietary habits, South Africans are becoming more and more obese, with the incidence of diabetes becoming a national disaster. Another factor concerning diet that needs mentioning is the fact that in South Africa as a developing country many people do not always have the means of affording healthy food. This can lead to a diet that is high in starch, like mealie-meal, potatoes, samp and bread which can easily lead to obesity. Even when people “move up in the world”, this kind of diet to which they are accustomed may remain part of their way of life, with more refined foods added. Therefore it is essential that learners are educated in this regard and made aware of the impact of diet and obesity on their health, voice and future singing careers.

2.7 Use and abuse of the voice

Abuse of the voice includes screaming, speaking too loudly – for instance when singers are in a room where the music is loud and they need to be heard above the noise level – or continuing to sing when the voice is already tired. Singing songs that are not in the correct range for singers make them strain their voices to reach the high or low notes. Singing when sick is detrimental, because then the vocal folds tend to get swollen, and singing with swollen vocal folds can hurt the voice.

Avoid hyperfunctional use of the voice, like incorrect speech habits that can put stress on the voice\textsuperscript{19} and in severe cases will have to be remedied with the help of a speech therapist. The learner should learn to use the voice with as little effort and tension as possible. A high school learner in training should be able to sing for about 2 hours per day (when healthy) without adversely affecting the next day’s singing activity. If it cannot be done for this length of time without some disablement, a re-evaluation of present singing or speaking habits should be

\textsuperscript{19} More information on this in Hayward 1994: Chapter 5.
considered. The degree of individual vocal conditioning and vocal endurance relate directly to the amount of singing or speaking that can be done in a day.

The learner should avoid singing in a register which is continually near the extremes of his/her own range (both high and low). Carefully pace the use of register extremes, such as pushing the chest voice into the upper range, i.e. belting\textsuperscript{20}. Misuse or overuse here can be vocal suicide. Before singing or using the voice in unusual ways, as for public or dramatic speaking, some vocal warm-ups should be done. As in any physical activity, the warm-up should progress from general stretching through less strenuous to more demanding usage. Loud volume and high range are the most taxing of usages; therefore, the learner has to begin in the mid-range with easy production. At every stage along the way, the vocal condition of the specific day should be evaluated and rehearsal activity adjusted accordingly. Every voice is different, but 7 – 10 minutes of warm-ups is usually the minimum. General voice use needs to be reduced prior to a concert. While travelling to a performance by bus, learners should conserve energy for the recital. Necessary coughing and sneezing should be as gentle and as non-vocal as possible.

Dr. Black\textsuperscript{21} is of the opinion that the majority of teenage singers seeking treatment have problems associated with vocal abuse or misuse. In this regard his patients hail predominantly from popular music backgrounds where they are generally poorly trained, with poor technique that leads to vocal abuse – nodules, polyps, trauma, and bloody trauma on the vocal chords themselves. One of his patients was a girl who recently sang in \textit{Les Misérable}, a local school production, and who was required to sing way out of her range. The girl, who had to sing too high all the time, was in trouble from the first moment and stayed in trouble through the whole performance. The show proved to be a disaster for her.

\textsuperscript{20} This potentially harmful technique is not part of the classical tradition and should not be attempted by educators or learners who are not qualified to do so.
\textsuperscript{21} See Appendix D. Transcriptions of interviews: Dr. Black: Questions 7, 14 and 15.
Common signs of significant vocal abuse include: a throat that is tender to the touch after use; a voice that is hoarse at the end of singing; a very dry throat with a noticeable persistent “tickle” (check dehydration); the inability to produce the highest notes at pianissimo volume; persistent hoarseness or an inability to sing with a clear voice after 24 – 48 hours of vocal rest (Castonguay nd).


Hyperfunction (too much):
- Singing too loudly
- Using the voice too long
- Pushing with the breath
- Straining for high notes
- Squeezing for low notes
- Tension in the shoulders
- Posture too rigid
- Breathing too high
- Breathing too low
- Tension in the neck muscles
- Tension in the muscles of articulation (tongue, lips and jaw)
- Distortion of facial muscles
- Carrying low voice too high
- Too much overall use of the voice, including speech
- Faulty speaking habits (people speaking higher or lower than is efficient)
- Trying for too much sound with young voices
- Trying to sing difficult music before technically ready.

Hypofunction (too little) is characterized by a breathy quality or what might be called a lack of energy in the voice. A breathy quality is natural in young voices, but when it continues into the mid-twenties or beyond, a thorough examination is indicated.
2.7 Rest

Getting enough sleep and vocal rest after strenuous use of the voice is crucial. Because we are dealing with young singers whose voices are still in the developing stages and are thus fragile, extra care should be taken to ensure that the young voice is not given more than can be handled and that good vocal habits are being created.

3. The changing adolescent body and the influence on the voice

In moderate climates the onset of puberty is reached at about 14 years for girls and 16 for boys, although there is no set rule for this, as it varies from child to child and is also determined by factors like race, temperament, hygienic conditions, participation in competitive sports, socio-economic conditions and an adequate diet. Puberty is not attained suddenly, but develops over a period of years known as adolescence. With girls the adolescent period extends from the onset of puberty until about 17 to 20 years of age, and with boys from 18 to 21 (Du Toit, Van der Merwe, Van Rensburg & Van Rensburg 1972: 416-417). Nowadays puberty generally occurs at an earlier age than was the case fifty years ago.

At birth, there are only minor differences between the male and female larynx. During childhood male and female larynges are about the same size and the highest and lowest sounds a child can produce (the physiological range), remain more or less constant. During puberty, substantial growth of the male larynx leads to significant differences between the sexes. Whereas the vocal fold length in an infant is only 6 – 8 mm, this increases to 12 – 17 mm in the adult female and to 17 – 23 mm in the adult male. Puberty, with its associated fast growth, brings about considerable changes in the voice, which deepens and becomes more resonant. The voice changes during puberty are caused by rapid and noteworthy laryngeal changes, occurring simultaneously with the development of other secondary sexual characteristics (Davies & Jahn 2004: 13-14).
While growing up, children are able to produce more musically acceptable sounds throughout their frequency range, with improved efficiency, control and quality. Recognition of this principle is essential in training young voices. The educator should strengthen and take advantage of the natural developmental process rather than concentrate too early and too much on exercises that are designed to increase the extremes of range. Young, fragile voices may be damaged if they are frequently stretched to and beyond their limits (Davies & Jahn 2004: 12-13).

3.1 Boys

The size of the larynx of boys increases and the angle decreases at puberty, causing the vocal folds to become longer and decrease the tension of these vocal folds. The voice consequently becomes deeper. Before the typical male voice has developed, a stage may be reached which is known as the breaking of the voice. This is attributed to the inability of the boy to control the lengthening vocal folds (Du Toit, Van der Merwe, Van Rensburg & Van Rensburg 1972: 375).

The fundamental vocal pitch changes and becomes momentarily unstable, fluctuating unpredictably (and uncontrollably) between the high childlike pitch and the low pitch (often an octave lower) of adulthood. Within the singing context the breaking of the voice (“yodeling”) is called mutation or mutational falsetto. During puberty the male voice drops significantly, while the female voice drops less. In both sexes voice mutation is normally complete by the age of 15 years. At the end of puberty the lower threshold of the male voice has descended on average by an octave, while the upper limit has dropped by a sixth. The supraglottic changes, common to both sexes, influence resonance, harmonic range and vocal projection. The chest expands, increasing vocal capacity and power. There is usually a greater thoracic enlargement in the male with a resulting greater vital capacity of the lungs. No conclusions can be reached from a boy’s voice about the quality and type of voice that he will develop as an adult. A boy soprano may

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22 See Chapter 6: Section 2.3.1 The larynx (p.132-137).
become a baritone or a basso, while altos frequently develop into tenors. To encourage a boy soprano or alto to maintain his treble voice at the onset of puberty can be hazardous (Davies & Jahn 2004: 13-15).

The change from boy soprano to adult male voice can be traumatic. It can happen dramatically (overnight in some cases) or hang in a “cracking limbo” for a period of time. It is awkward and worrisome and if the boy has had a beautiful soprano voice, it could be a horrifying experience. There is no promise that his voice will return in any presentable form. It is a difficult period to live through, unless the boy has knowledgeable and patient vocal guidance from an expert voice educator. He must be monitored regularly to ensure that he is keeping his voice coordination as balanced as possible throughout the change (Riggs 2003). No strenuous vocal instruction or performances should be attempted.

3.2 Girls

During adolescence girls have to adjust to the onset of menstruation and managing their individual experience of the menstruation cycle. For some girls this may be no problem; for others it may be emotionally and physically draining.

The premenstrual phase of the menstrual cycle includes vocal symptoms such as a loss of high tones, vocal instability and fatigue, diminished vocal efficiency, uncertainty of pitch and huskiness, as well as reduced vocal power and flexibility. This is often more apparent to the singer than the listener. This vocal change is associated with the physiological change in hormone levels, resulting in a drop in oestrogen levels on or about day 21 in the menstrual cycle. As oestrogen levels drop, laryngeal tissues absorb water, causing vocal fold swelling, swollen blood vessels and increased vocal fold mass. Any change in the overall size and mass of the vocal folds is likely to produce some change in vibratory characteristics, as mentioned above. Submucosal haemorrhages in the vocal folds are not uncommon at this time of the month. Premenstrual and menstrual abdominal cramping or bloating is a general complaint in the premenstrual phase and, since girls rely to a major degree on abdominal muscle strength for support, this
symptom can be bothersome. Performers who are plagued by severe premenstrual tension and who are aware of some difficulty in producing high notes should – in order to avoid damage to the vocal folds, the development of incorrect vocal habits and even potential public embarrassment – minimize rehearsing and performing and attempt to avoid new repertoires or new techniques when the symptoms are most severe (Davies & Jahn 2004: 102-103). Further symptoms may include excess fluid retention, a tendency toward haemorrhages on the vocal folds and excess mucous leading to a slight decrease in the quality of high tones and flatness at the register changes and on high notes (Brown 1996: 230). A teenage girl going through puberty should do some voice training, as breaks in the voice could occur because of hormone changes and the sooner the problem is addressed the better (Keller 2010).

Some girls become very irritable, emotional and tired before, during and even for a few days after menstruating, especially if they suffer from heavy periods. As phonation is a physical process and dependent upon the physical wellbeing of the learner, the educator (without embarrassing the learner by directly asking), should always keep the possibility of menstrual tension in mind, particularly if a certain pattern can be perceived in the learner’s behaviour.

The effect of the contraceptive pill and other hormones has become of increasing interest to laryngologists and researchers. Some young women using oral contraceptives have experienced changes leading to masculinisation, with deepening and roughening of vocal quality. Evidence suggests that for girls in their puberty these changes are not reversed even when the drugs are withdrawn. Singers in their teens and twenties are advised to search for other means of contraception, if possible (Bunch 1995: 132). Singers should be prescribed birth control pills without progestin, since progestin has been shown to deepen the voice, decrease vocal range and cause breaks just like steroids (Keller 2010).

Therefore, if oral contraceptives have to be used the voice should be carefully monitored. Very rarely oral contraceptives can cause nasal congestion and
aggravate migraine as well. If a young woman has an extremely important performance and knows that she is normally severely affected by the side-effects of menstruation, then it is possible to alter the time of the monthly period by giving an oral contraceptive, but this decision must not be taken lightly (Davies & Jahn 2004: 102-103). This may also be considered as a fairly drastic and temporary measure (under the guidance of a physician) in the case of a learner doing an important vocal examination or performance.

4. **Vocal disorders and general health disorders affecting the voice, with some remedial programmes**

Ideally performances should only be undertaken when singers are in peak condition, although this is more the exception than the rule. Many good performances are actually given by singers that are not at their best. With experience performers learn to compensate for minor problems and to let the "show go on". It is a major step to choose to cancel a performance. In assessing the situation, the physician’s concerns will be for the health of the patient’s present and future voice and for the good reputation of the performer. Reliability and a good health record are part of a singer’s reputation. Regular cancellations will hamper a singing career, so the doctor will endeavor to keep the artist on stage. Nevertheless, there are some indications that will not permit a viable performance, which include acute laryngitis and vocal fold haemorrhage (Davies & Jahn 2004: 27-29). “Damage can be done by performing when vocal condition is less than ideal […] The experienced singer’s own understanding of the vocal instrument is the only reliable indicator of when to sing under difficulty” (Miller 1986: 225).

The learner should therefore learn to read his/her own body and individual voice from an early age and learn to prioritize. During a school career there may be many opportunities to perform or do important examinations (especially at the end of grade 12), or there may be just one lucky break, which may make it a heartbreaking experience if this chance has to be passed up because of a medical problem. My own experience in this regard has taught me a great deal of
empathy for learners in similar situations. The temptation may be very great to throw caution to the wind and press on regardless. In deciding to do this the options will have to be weighed carefully – how technically demanding will the singing be, will the performance involve a lot of singing, over how long a period will the performance (e.g. a show) run, are there other more important engagements in the immediate future for which the voice should be rested (like an examination), how serious is the medical condition, may it cause long term harm to sing (especially to the young developing voice)? Through my own encounter with vocal trauma, I learnt from a very young age to read my own body and especially my voice, to accept that no temporary immediate gratification is worth the price of my vocal instrument and to be able to say no to pressure to perform when I really should not.

4.1 Colds, flu and bronchial disorders

“A cold” is a general term that includes a variety of upper-respiratory infections. In general, after the onset of a cold, at least ten days will pass before normal, comfortable phonation will be experienced again. Any condition that takes longer to cure requires medical consultation. Any learner doing voice as subject will have examinations, tests, shows, solo performances, etc. on a regular basis, so should seek medical advice at the onset of any cold. Because of the minor change in the surfaces of the vocal-tract tissues, some singers (and learners as well) believe they sing exceptionally well at the beginning of a head cold. It is fine to sing easy songs at the start of a cold or while suffering from allergies and congestion, as long as there is no indication of laryngitis (Miller 2004: 178-179). For colds and viral infections rest is recommended. Coughing should be avoided as this irritates the vocal folds. Plenty of water should be drunk, while also taking vitamin C, zinc and Echinacea. Learners need to be careful of over-the-counter cough medicines, which numb the vocal folds and suppress coughing. Many of these cough medicines contain ingredients used to make narcotics and are increasingly being removed from the shelves. Entertainer’s Secret throat spray can be used when sick (Keller 2010: 4). It is not generally available in South
Africa, but I have ordered some from the USA over the Internet and have found it useful to keep the throat moist and soothe irritation.

A learner with a severe cold should not sing. Singing with a voice made hoarse by swollen mucous membranes may be harmful and may lead to chronic hoarseness. There are some standard rules for the voice learner with a cold:

- Get plenty of rest
- Speak as little as possible and do not sing
- Drink plenty of fluids (not alcohol)
- Keep the throat moist by sucking a lozenge or pastille
- If a decongestant is needed, one that does not dry the mucous membranes of the nose and throat should be used
- Avoid vigorous clearing of the throat and violent coughing. A better way to clear the lungs is by inhaling steam (Bunch 1995: 126).

### 4.2 Laryngitis

Laryngitis is the inflammation of the tissues of the larynx\(^{23}\). It can be brought about by an infection, allergies, yelling, talking or singing improperly over a long period of time (Bunch 1995: 130).

It is possible to continue to sing over light laryngitis, but dangerous to do so. If a performance is attempted while suffering from laryngitis, the unevenly puffy folds are pressed together to achieve cleaner sound, causing further irritation and potential damage. Lingering laryngitis must be diagnosed and treated by an otolaryngologist\(^{24}\). If the nose is tremendously congested, ears are plugged, or constant coughing persists, the singer should refrain from practising or performing. Cutting down on speaking is essential (Miller 2004: 178-179).

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\(^{23}\) See Chapter 6: Section 2.3.1 The larynx for description and various illustrations (p.132-137).

\(^{24}\) Ear, Nose and Throat specialist.
4.2.1 Acute laryngitis

Acute laryngitis may be an infection or part of an allergic response. If infection-related, it usually develops following an upper respiratory infection typically starting as nasal congestion, pharyngitis (a sore throat) and then loss of voice. Most of these cases are caused by a virus. Sometimes the pharyngitis and laryngitis may be bacterial with the loss of voice accompanied by pain on swallowing or phonating. In the case of true bacterial infection, antibiotics and analgesic medications could be taken. Although an acute bacterial infection of the larynx will result in a red and swollen larynx, the vocal folds are close to normal, perhaps with only a slight swelling. The true cause of aphonia (loss of voice) in viral laryngitis is a lifting of the larynx due to inflammation and spasm of the pharyngeal muscles. The larynx is high and the thyrohyoid space contracted. By gently massaging this space and temporarily lowering the larynx, the voice can be restored for the moment, only to disappear again as the muscle contraction resumes.

There is no specific treatment for aphonia as a result of viral laryngitis. Some physicians advocate hot beverages, massage or other methods of physical therapy aimed at relaxing the muscles of the pharynx and neck. The voice should return within 3 to 5 days. Total or absolute voice rest is usually justified for a short time in acute laryngitis (Davies & Jahn 2004: 37-39).

4.2.2 Chronic laryngitis

This is a condition with multiple causes which often operate at the same time. The voice usually manifests as rough and pitched lower than usual. In tenors the purity of high notes are spoiled – the more lyrical the tenor or light baritone voice has been, the more serious is the effect. It is extremely important to keep in mind that chronic laryngitis can be caused or aggravated by laryngo-pharyngeal reflux.

Whereas the surface of the vocal fold is normally smooth, white and gleaming by reflected light, with occasional pinkness from slightly dilated blood vessels which are not uncommon, a laryngeal examination in chronic laryngitis will reveal that
the vocal folds appear dusky red, their surface slightly roughened and dull and their edges somewhat irregular. Changes also appear in the mucous membrane of the pharynx and other parts of the larynx. There is usually an excess of rather sticky mucus. Mucus between the front and middle thirds of the vocal folds often indicates vocal abuse. The mucus forms a bridge between points of impact and frequently leads to the formation of nodules.

In treating chronic laryngitis, tobacco and – in my experience – secondary smoke, as well as alcohol, especially spirits, should be avoided. Vocal abuse should be reduced. Chronic over-singing leads to muscular fatigue. The learner needs to remain silent for as many hours as possible before a performance. Dryness of the larynx may be caused by dehydration, mouth breathing, a dry atmosphere and antihistamine treatment. Too little lubrication may trigger coughing followed by inflammation. Profuse thin secretions are more beneficial than inadequate, thick secretions or excessive dryness. The learner with laryngitis has to be kept well hydrated to maintain the desired moistness of the surface lining of the vocal folds (Davies & Jahn 2004: 37-39).

4.3 Vocal nodules, cysts and polyps

4.3.1 Vocal nodules

Vocal nodules (Figure 7.1) are distinct thick areas along the vibrating edges of the vocal folds. Since maximal vibration occurs only in the midpoint between the front and middle thirds of the vocal folds – the area where they make contact with each other – this is the area of the greatest potential trauma and the point where nodules typically develop. Nodules vary in size, shape and appearance. They may look white and small like pinheads or may be large, flat and pink. They usually involve both folds and the two sides appear similar, although not always identical. Nodules are not painful, but, in order to close the gap created by the swellings, the learner may use too much muscular tension in trying to draw the vocal folds nearer to each other. This excessive tension can create discomfort in the neck, especially after taxing or prolonged singing.
Nodules weaken the ability of the vocal folds to come close together and limit their ability to thin out, therefore causing most severe symptoms at the top of the voice. Learners with nodules have difficulty singing softly in high head voice.

Figure 7.1. Normal and pathological vocal folds

A is a drawing of normal vocal folds during speech. In this drawing there is a chink between the arytenoid cartilages so the sound is probably breathy in quality.

B shows irregular nodules on the edges of the anterior parts of each vocal fold, also the engorgement of the fine vessels.

C depicts acute inflammation of the larynx with marked swelling and engorgement of vessels on the epiglottis, ary-epiglottic folds, and on the vestibular and vocal folds.

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Loss of notes from the top and a breathy sound of escaping air as the voice is emitted are signs that the folds are unable to come together. Difficulty in the high chest register, beginning the *passaggio* into head voice, is another characteristic of vocal fold swellings. Sopranos or tenors are the most typical sufferers.

Nodules are chronic phenomena, but usually result from months or years of poor vocal habits, repeated trauma and vocal abuse. There is usually an acute and a chronic component. Voice rest cures the acute part of the swelling, but the chronic part persists. Voice rest or medical treatment may help to distinguish between these components, especially if surgery is planned. Nodules need to be treated only if they cause a problem. Treatment of nodules involves a modification of voice use. The cause of nodules may sometimes be traced back to a short period of singing on swollen folds. Pushing the voice when the folds are swollen may have produced soft swellings. Voice therapy generally forms the first step in the prevention of nodules. The benefits of voice therapy for the partially trained learner, who may not yet have developed a seamless *passaggio*, are nevertheless unpredictable. Here voice therapy needs to teach, rather than remedy. In certain cases the voice is so damaged that the therapist does not have a voice to work with. Surgery may then restore some voice. Unless the singer unlearns bad vocal habits, the swellings will remain. Further treatment includes improved hydration, clearing up of inflammation and adequate treatment of laryngopharyngeal reflux, if present. A short course of cortisone can reduce the acute component of vocal fold swellings if an unavoidable engagement has to be honoured. Continuous or frequent use of cortisone has to be avoided however. Surgery may bring dramatic benefits, but without therapy this is usually only temporary, as the nodules will recur. Surgical treatment, which should definitely only be entrusted to a proven specialist in the field, involves a brief procedure under general anaesthetic. The nodules are carefully removed using microscopic instruments. If too much tissue is cut out, it cannot be replaced – resulting in permanent or long-term vocal damage (Davies & Jahn 2004: 39-42).
Nellie Melba, the famous opera singer, had vocal nodules. These were cured by corrective exercises, which indicated that the problem was functional – she had been misusing her voice muscles (Brown 1996: 216).

4.3.2 Cysts of the vocal folds

Cysts, which typically affect one vocal fold only, are not as common as nodules, and are usually the result of trauma. A bit of membranous tissue is forced under the surface of the vocal fold, where it continues to produce keratin (horny tissue) or mucus. The symptoms resemble those caused by nodules. Differences involve their history, appearance and clinical behaviour. A cyst may be caused by just one episode of extreme vocal trauma. Unlike nodules, cysts do not react to vocal therapy. Surgical removal should be considered, but only if they drastically impair the use of the voice (Davies & Jahn 2004: 42-43).

4.3.3 Laryngeal polyps

Like vocal nodules, polyps are the result of speaking and singing habits that produce too much friction when the vocal folds vibrate, thus causing irritation of the edges of the folds (Bunch 1995: 127). Polyps are uncommon among classically trained singers and are found more often among pop singers, radio and sports commentators, preachers and other professional voice users. A polyp is a growth consisting of redundant mucous membrane, filled with gelatinous tissue. Polyps are soft and may actually flip-flop in and out of the opening of the glottis during phonation. The voice is impaired and presents at lower pitches. Characteristics include dysphonia (partial loss of voice), hoarseness and breathiness, as well as continuous throat clearing at higher pitches. Polyps are most often caused by a haemorrhage that could not be resolved completely. Like cysts, they typically occur on one side only. When a small polyp begins, any sustained vocal abuse or misuse will irritate the area, contributing to its continued growth. Scattered polyps are caused by chronic heavy smoking, which should be stopped immediately and completely. If vocal abuse is a significant contributing factor, this should be addressed.
Young polyps may curl up spontaneously, with no further treatment needed, apart from voice rest. Some physicians may try a course of low-dose steroids to decrease the inflammation and speed up healing. Voice therapy plays no role in the primary treatment of a polyp. Once a polyp has been present for some time, it may need surgical removal. To do this, the feeding vessel is identified and destroyed by laser technology (Davies & Jahn 2004: 46-48).

4.4 Vocal fold haemorrhage

The arteries which supply the surface of the vocal folds are under considerable stress. The folds vibrate at high frequency and regularly at great intensity. The surface of the vocal fold is prone to dehydration, which may be a contributing factor in the rupturing of a blood vessel. When this happens, blood will flow out and spread under the surface of the epithelium (mucous membrane), causing a vocal fold haemorrhage. The vocal fold becomes heavier and stiffer. There is a sudden, painless onset of hoarseness, which resolves after resting the voice for several days. One vocal fold will be typically red and swollen.

Causes of vocal fold haemorrhage may include:

- An acute rise in blood pressure in the head, usually with straining
- Coughing, vomiting, singing, childbirth and weight lifting
- The use of aspirin and other blood thinners
- The taking of niacin, doses of vitamin C and cortisone
- The use of “natural” herbal concoctions, like the Oriental “tree ear” mushroom and gingko biloba
- Oestrogen levels responsible for voice change during menstruation, which may increase the vibrating mass of the vocal fold as a result of an increase in its water content. This contributes towards difficult phonation during menstrual periods, putting girls at risk a few days immediately before and a few days after menstruation. During this time blood vessels are enlarged and fragile, with a slight increase in vocal fold oedema.
Complete vocal rest for 7 to 14 days is prescribed, with emphasis on hydration. Smoking and spicy foods should be avoided. Any suspected laryngo-pharyngeal reflux\(^{26}\) should be treated. Vocal lessons can usually begin after five to six weeks and performances after eight to ten weeks. The blood should reabsorb spontaneously and full vocal function will be regained if the learner keeps strictly to the voice rest routine. By avoiding vocal abuse the learner will decrease the possibility of recurrent haemorrhage, slow reabsorption of blood, scar formation or the development of a polyp.

If a blood vessel is enlarged or painful or has formed a tiny blister, it usually has weakened walls and is more fragile. These vessels can be removed using laser technology, in combination with the technique described for nodules above. Destroyed vessels usually do not recur, but new ones may form if the larynx is prone to this (Davies & Jahn 2004: 43-46).

4.5 **Vocal fold paralysis**

Injury to or viral infection of the two motor nerves of the larynx may result in paralysis of the vocal folds. There is no treatment currently available that will restore the nerve function, but the nerve may recover spontaneously. If one side is normal, it may approximate itself to the paralysed fold, improving the voice until it may be in varying degrees be as good as normal again. Aggressive voice therapy may help. Injecting the fold with collagen or fat may be attempted, but overall paralysis is a potentially disastrous condition, because even after recovery, the voice may never be as good as before (Davies & Jahn 2004: 48-50). Unilateral or bilateral chord paralysis should be treated with the assistance of a trained voice therapist (Brown 1996: 225).

4.6 **Other vocal disorders**

These include:

- Vocal fold oedema – swelling that is due to water retention. This condition may be treated by steam or steroids, which reduce vocal-fold oedema (the

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\(^{26}\) See Section 4.10 of this chapter (p.187-189).
chief cause of laryngitis) – though steam is slower and safer (Miller 2004: 181-182).

- Myasthenia Larynis – laryngeal muscles much strained through overuse.
- This is treated by rehabilitating the voice over a long period, first the speech and then the singing (Brown 1996: 223-224).

4.7 Nasal problems

4.7.1 Nasal problems

“The interesting anatomy of the nose predicts the types of problems that commonly afflict it” (Sataloff 2001: 51). These include:

- Bleeding – caused by dry air, trauma health problems and medication. If first-aid measures do not make the bleeding stop or if nosebleeds occur repeatedly, a consultation with a physician, preferably an Ear, Nose and Throat specialist, should be made.

- Taste and smell disorders – sometimes the first warning sign of a potentially serious medical problem requiring complete evaluation and treatment.

- Nasal obstruction – resulting in difficulty breathing through one or both sides of the nose. This may be caused by allergy or by a deviated septum. This means that the cartilaginous or bony septum (or both) does not form a straight partition in the middle of the nose, but may be displaced off to one side, or it may protrude into the nose passages on one or both sides. If there seems to be the slightest problem with the nasal valve, which is very important for airflow, breathing becomes very difficult. Nasal obstruction leads to mouth breathing, runny noses, ear problems, etc. (Sataloff 2001: 52). A deviated septum cause excessive dryness in the throat. Surgery for this does not affect the vocal folds. Sometimes new resonance sensations may be experienced, but there is usually no noticeable change in voice quality (Brown 1996: 228).

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27 See Chapter 6: Section 4 The nose, for discussion and illustration (p.139).
Nasal resonance and nasality – the effect when the soft palate stays open in the production of vowel sounds. Here the palatophayngeus muscle, which elevates the soft palate, needs to be strengthened (Brown 1996: 228).

Nasal fracture – the nose being an easy target during fights and often getting in the way of rugby balls, elbows on netball courts, hockey sticks, etc. Most broken noses can be set easily with local anaesthesia, if they are examined promptly. To get the best results in certain fractures, surgery may be required.

Various growths inside the nose – like benign polyps related to allergies and asthma that can form. In some cases, they shrink after medical treatment; at times they call for surgical removal.

Infections impairing breathing – usually obvious because of a foul smell or taste or nasal discharge that is green, yellow or brown in colour. They have to be treated by a doctor and often a laboratory test for diagnosis and antibiotics (Sataloff 2001: 52).

Post nasal catarrh – or post nasal drip may accumulate because of allergy, infections, nasal obstruction, etc. It may result in pharyngitis, tonsillitis and laryngeal problems (Davies & Jahn 2004: 83).

Sinus infection – usually is associated with persistent, infected discharge from the nose, facial pain, and headache over the eyebrows. The nose is intimately related to the paranasal sinuses.

The patient should see an Ear, Nose and Throat specialist or otolaryngologist for treatment of problems involving the nose and sinuses. When an ENT is consulted, the physician will look into the nose using a nasal speculum and a small mirror with a bright, reflected light. A magnified endoscope with a built-in light may also be pushed down the nasal passage and throat. This is not painful and is made even more comfortable if the inside of the nose is anesthetized with a medication sprayed or painted over the nasal membranes. The medication also opens up the nasal passages, making it easier to see the inside structures (Sataloff 2001: 53).
4.7.2 Sinus infection

The sinuses are air spaces in the bones of and around the face. Most so-called sinus problems are actually allergies (or inhalant sensitivities) and should be diagnosed as such in order to be treated correctly. True sinus problems can lead to more serious medical conditions by spreading to surrounding areas, including the eyes, the brain and major blood vessels. Sinus problems that do not respond to initial treatment should therefore be treated by a physician with experience and specialised training. The doctor will use the nasal speculum and small lighted mirror, or the magnified endoscope with a built-in light (as mentioned above) to do the examination. Some of the sinuses can also be examined directly using a small lighted instrument. Thorough evaluation of sinus problems generally involves imaging study, such as a CT scan.

Acute sinusitis is treated with antibiotics and oral and topical decongestants. I have been prescribed Flixonase Nasules and Iliadin before, both of which have been effective. Over-the-counter decongestant nasal sprays must not be used for more than three days as they may cause “rebound” swelling and long-term consequences of constriction of nasal blood vessels.

Chronic sinusitis is treated with longer courses of antibiotics, decongestants and sometimes steroids. Chronic problems may ultimately require surgical treatment (Sataloff 2001: 53).

4.7.3 Treatments for nasal congestion, phlegm and related conditions

As there are many reasons for nasal congestion, a learner should be advised to consult a doctor before following all kinds of non-prescription remedies or procedures. There is very often no agreement as to their efficiency. Some doctors suggest that with the head held up and back, a warm, mild saline solution can be administered to the nose by means of an eyedropper. The solution may

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28 See Chapter 6: Section 2.3 (Figure 6.4) (p. 131) and Section 4 The nose, for illustrations of the sinus cavities (p. 139).

29 These are discussed in Section 2.5 of this chapter: Environment (p.157-159).
also be administered while lying on the bed with the head hanging at a lower level than the body (Miller 2004: 181). Most of these remedies may be used in addition to prescription medication (this should be approved by the doctor if the use of the remedy may in any way be contentious or interfering with the medication), or as an interim measure if a doctor cannot be seen immediately.

Tea is a desiccant (i.e. producing dryness) that contains tannin, which reduces hydration levels. Most herbal teas are not desiccants, but their medical properties seldom have undergone rigid laboratory testing. Honey may have some ability to loosen superficial mucus, giving temporary soothing relief, but there is no evidence that a combination of tea and honey is actually beneficial to the throat. Warmth from the liquid may provide some comfort. Inhaling the steam of a hot liquid may modestly benefit the nasal cavity and the swallowing process assists in clearing away phlegm (Miller 2004: 182). I have found inhaling the steam of a Vicks or Ölbas solution helpful. Apart from its soothing abilities, honey can be more beneficial if honey that is local to the user’s area is used, as it may boost the immune system and help prevent seasonal environmental allergies. Bees use pollen from local plants and eventually this ends up in the honey. Honey also has natural anti-inflammatory qualities, which may help soothe and heal a sore throat (“Being nourished” 2010: 13). Another remedy frequently used is a tea-and-lemon combination. Lemon, like honey, may loosen superficial phlegm. The chief value of these remedies lies more in psychological consolation than in physiological result. Diuretics do not assist in making a difficult performance easier and may cause dehydration. It is far better to drink some other form of warm liquid than one with a tea component (Miller 2004: 182-183). South African rooibos tea on the other hand has proven health benefits, does not contain caffeine or tannin and is rich in anti-oxidants. There is usually no harm in drinking copious amounts of this tea, but sufferers from reflux may find it somewhat acidic and contributing towards heart burn. Grapefruit juice helps as well, but this may also cause heart burn. The famous tenor, Jussi Björling’s answer to ‘clearing the throat’ is to chew a bit of apple thoroughly and swallow it gently (Miller 2004: 182-183).
The effectiveness of gargling is questionable as gargling does not reach the vocal folds. The epiglottis normally functions as a lid, protecting the larynx, trachea, and lungs from ingested material. Over-the-counter gargles often contain harmful astringents. Otolaryngologists generally prefer a mild saline solution as a useful gargling agent. If soreness continues, medical advice should be sought immediately (Miller 2004: 180-181). Andolex spray or Locabiotal nose and throat spray may prove to be very effective. These may also be obtained without prescription.

4.7.4 Asthma

Exercise-induced asthma may not be easy to diagnose. It may sometimes occur when a learner who is late for class has to rush and then becomes wheezy. The learner with subclinical asthma may also have this triggered by anxiety brought on by examination stress or stage fright. A chronic cough may be the only symptom of asthma. There may also be a causal link between laryngopharyngeal reflux and asthma, because of the leaking of gastric juice through the larynx into the bronchial tree. Obstructive lung disease can weaken the performer's support and result in increased muscle tension in the neck and tongue. The resulting abusive voice technique may produce vocal nodules.

The learner with asthmatic tendencies should undergo pulmonary function tests with a sympathetic chest physician, who is aware that certain inhalers can be irritating to the larynx, while vasodilator drugs may cause a slight tremor which is audible during soft singing. If asthma has been diagnosed following the testing, treatment should be tailored to the severity of the condition. For voice learners, oral medications or non-steroid bronchodilator inhalers are preferred to sprays containing cortisone. Although the effects of inhaled corticosteroids on the smooth muscle of the vocal folds are unclear, vocal dysfunction due to fungal deposits can occur with long-term exposure. Excessive use of topical steroids cause muscle weakening and may cause significant hoarseness (Davies & Jahn 2004: 94-96).
4.8 Tonsils

The tonsils\textsuperscript{30} are situated in the space between the anterior and posterior pillars of the fauces. When they are infected and swollen they take up a large space in the oral pharynx. For the treatment of tonsillitis, gargling may benefit the mouth and upper regions of the pharynx and bring some temporary comfort (Miller 2004: 180-181).

Constant infection and abscesses are indications for a tonsillectomy. As there is no anatomical connection between the tonsils and the larynx, learners need not worry that the removal of the tonsils will negatively affect vocal production. The removal of these infected sound absorbing lumps in the throat may rather enhance vocal quality by making more space available and removing a source of recurrent infection.

Post-operatively the learner will be aware of two new sensations:

1. The scar tissue will be stiff for some time, making it more difficult to elevate the soft palate.
2. There will be additional space in the throat and the learner will have to adapt to this (Bunch 1995: 133).

A tonsillectomy is not dangerous to the voice if it is done by an experienced operating team. There will be initial soreness from trauma in the surrounding muscle areas, but with rest, it goes away. The voice may feel different afterwards, but it will sound the same to others (Brown 1996: 228). Usually the promise of lots of jelly and ice-cream after the operation offers some compensation! \textsuperscript{31}

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\textsuperscript{30} Illustrated in Chapter 6: Figure 6.2 (p.129).

\textsuperscript{31} I had to have a tonsillectomy during the June holidays of my final year as undergraduate student, about four months before my final practical examination. It took six weeks before I could sing again – the three weeks of the holidays plus another three weeks into the term. This put me under a lot of pressure and my voice had not regained its full strength by the time I had to do the examination, but I just had to come to terms with the fact and try my best.
4.9 Wisdom teeth, toothache and braces

Toothache is bothersome and may hinder phonation. An old remedy involves biting on an aspirin (*Disprin*) or a whole clove. Loss of teeth as a result of sports injuries or some accident may be traumatic for any self-conscious teenager. For the learner doing voice as instrument there may be an added worry as this trauma may change the mouth, demanding adjustment of vocal technique, possible surgical intervention and even facial reconstruction. As the teeth should as far as possible remain a constant part of the oral cavity, oral hygiene is extremely important and regular visits to the dentist are compulsory. Problematic wisdom teeth may become evident during routine X-ray examinations or if they become painful. They may be removed under a local or full anaesthetic.

When only one of the maxillary sinuses in the front of the face becomes infected, a dental cause such as a tooth abscess should be considered (Sataloff 2001: 53). Tooth decay, with poor gum hygiene may be caused by regular vomiting, which may be a sign of bulimia (Davies & Jahn 2004: 88-89).

Braces will generally not affect the singing voice, but it usually takes time to adjust to the pressure of the braces. There is pain and discomfort, but the learner should get used to it after a few days. A tension wire is run along all the braces and is held in place by rubber bands. The constant tension slowly shifts the teeth in line with the wire. The teeth and gums will be sore and the insides of the lips will be raw from rubbing against the metal/plastic braces. Wax may be used on the braces themselves to keep them from scratching the inside of the lips. After the voice learner has become used to the braces, singing should not be difficult, apart maybe from trouble with pronunciation, especially with the consonants F and S. An option if a performance is still scheduled soon after the braces have been put on is to have the braces glued on and to ask the orthodontist to omit the wire until after the performance. Gluing the braces to the teeth is the hard part – once in place the wire can be put on easily. If the performance is for an
examination or something equally important, fixing the braces should be postponed (“Will braces affect how I sing?” \textit{nd}).

Many learners find it extremely embarrassing to perform while they have to wear braces. Once the braces have eventually been removed, the learner will have to get used to the change in the mouth again.

I have a student whose braces were recently removed. She had to wear retainers on her teeth for a week or so. Wearing these retainers affected pronunciation a great deal, so I suggested that she take the retainers off and keep them in a safe place just for the duration of the lesson.

\textbf{4.10 Laryngopharyngeal reflux}\textsuperscript{33}

Laryngopharyngeal reflux occurs when the ascent of gastric juice back into the upper oesophagus and pharynx causes irritation and inflammation of the larynx (laryngitis), with possible aphonia or dysphonia resembling primary laryngitis. Acidic stomach contents may reflux up as high as the naso-pharynx, causing not only laryngo-pharyngeal symptoms, but also ear pain and Eustachian tube dysfunction.

Symptoms of the laryngo-pharyngeal manifestations of gastro-oesophageal reflux include a sensation of a lump in the throat, episodes of laryngeal spasm, a foul taste in the mouth in the early mornings or constant halitosis, heartburn, a need for prolonged warm-up time, vocal fatigue, an unexplained non-productive cough, wheezing, asthmatic tendencies and non-cardiac chest pain. There may be complaints of a post-nasal drip, although examination of the nose and X-rays of the sinuses may not reveal any signs of this and topical sprays, antihistamines, antibiotics and even surgery for the so-called post-nasal drip have no effect.

\textsuperscript{32} I had braces from grade 9 to grade 11 and, except for the pain I experienced from time to time, especially after the regular adjustments of the tension wire, I didn’t experience a change in my singing voice while I was wearing them, although there was of course the additional problem of self-consciousness.

\textsuperscript{33} According to Dr. Black, \textit{Laryngopharyngeal reflux} is the preferred term when referring to \textit{Reflux laryngitis} and this is therefore the term that will be used.
Many reasons have been cited, like obesity, changing dietary habits and stress. As a full stomach interferes with abdominal support (and even because they do not have the time due to a heavy schedule), many singers and voice learners perform without eating and then tend to consume large meals late in the evening before going to bed. This increases the tendency towards nocturnal acid reflux.

Patients with laryngopharyngeal reflux usually deny symptoms of heartburn or regurgitation, as symptoms may be “silent”. Fewer than half of those patients with reflux confirmed by pH monitoring, complained of heartburn or regurgitation, which traditionally have been required for the diagnosis of gastro-oesophageal reflux disease. Indications of reflux include swelling in the inter-artenoid area, markedly reddened arytenoids, with the redness extending along the posterior third of the vocal folds. In more chronic and severe cases, marked swelling and contact ulceration may be present.

Losing weight is usually recommended if obesity is a factor. Smoking and alcohol must be avoided, as well as fatty meals. The head of the bed should be propped up by 15 to 30 cm, either by placing telephone books or bricks on the floor so as to raise the head of the bed, or by using a wedge between the bed frame and the mattress. Larger meals should be eaten at breakfast and lunchtime, with a very light evening meal, at least three hours before bedtime. Juices, pineapples, tomatoes and tomato-based products, coffee, onions, chocolates, cola drinks, beer, milk, chewing gum, breath fresheners, cough drops and peppermints increase acid production and have to be avoided, along with excessive quantities of vitamin C, antihistamines, non-steroidal anti-inflammatory drugs (NSAIDs), stooping, jogging and press-ups. Prescribed antacids or an antacid alginate compound may be taken when symptomatic reflux is most likely to occur, i.e. after meals and at bedtime. Ranitidine, Omeprazole and Esomeprazole heal any erosive oesophagitis within four weeks. Diagnostic tests for gastro-intestinal reflux lack both sensitivity and specificity for laryngopharyngeal reflux. Double-probe pH monitoring has a tremendous advantage over these diagnostic methods. Treatment with another class of agents (prokinetic drugs like Motilium),
which increase lower oesophageal pressure, reducing the number of reflux episodes, may be added. Laparoscopic surgery may prove to be very successful, but like all surgery, also carry complications, so other alternatives should be kept in mind and a second opinion obtained. Benefit may be derived from voice therapy in addition to the anti-reflux measures. Laryngopharyngeal reflux occurs more frequently in tense, hard-driven people who abuse their voices. A common mechanism in all cases of contact ulcers and granulomas of the larynx is trauma related to coughing, throat-clearing and misuse of the voice. Treatment by a voice therapist is aimed to raise the pitch and stop throat clearing (Davies & Jahn 2004: 88-89).

4.11 Acne
Apart from possible influences of hormonal imbalances, this typical teenage problem has no obvious link to the voice. In many instances though, the medication taken to control acne may vastly influence the voice in some learners. These include the taking of oral contraceptives (already discussed) and antibiotics like tetracycline or erythromicine given orally or topically.\(^\text{34}\)

A young local solo soprano, whom I had known years back when we sang together in the Eastern Cape Children's Choir, developed a vocal fold haemorrhage as a result of contracting lupus erythematosus while using Minotabs (a tetracycline based antibiotic) for the treatment of acne. This happened during her first year at university. Fortunately it was diagnosed in time and after she had stopped using the drug, her voice fully recovered.\(^\text{35}\)

\(^{34}\) Whilst at school I was on Roacutane in grade 7, as well as in my fourth year at university. In between these courses I took Diane and Minerva, but I stopped using these when I realised that they had a detrimental effect on my voice, with reflux symptoms being listed amongst their contra-indications. I now try to manage the condition of my skin with topical treatments.

\(^{35}\) Information supplied by her father, who is a local general physician.
5. General treatments and remedial procedures

5.1 The Internet

With learners being very skilled at using the Internet and related technologies, and spending a lot of time doing just that, it is necessary to mention the role of the “cyberdoctor”. At the first signs of any possible ailment, voice learners may consult the Internet first in order to confirm their suspicions, allay their fears or to make up their minds to consult a physician; or, having done that, to get a “second opinion”. The Internet may also be useful in supplying advice on remedial actions, preventative care and treatments, but all the information should be assessed and used with care. The reliability of sources should be taken into consideration. “Performers are adept at researching their condition using the internet. While the performer should try to gather as much information as possible, the potential bias of the source should be considered when downloading information” (Davies & Jahn 2004: 116).

Dr. Black36 warns against the indiscriminate use of Internet sites to gain medical information and recommends academic or university sites.

5.2 The laryngologist and the medical team

Optimal voice care is delivered by an interdisciplinary team consisting of physicians and non-physicians. The physician may be an otolaryngologist37, a specialist who practices all aspects of ear, nose, and throat medicine, or a laryngologist, an otolaryngologist who specializes in voice disorders. Most otolaryngologists usually treat voice patients. There are, however, those who have taken a special interest in the voice and the performer. A sympathetic and caring physician understands the physical and mental problems a learner doing voice may encounter. From this a comfortable relationship should develop, which will allow the learner or educator to telephone the doctor or make an appointment at short notice, should this be necessary (Davies & Jahn 2004: 106-107). Physicians who see many singers in their practice know that they are sensitive

36 See Appendix D. Transcriptions of interviews: Dr. Black: Questions 10 and 11.
37 Synonym for Ear, Nose and Throat specialist.
and that their vocal folds are like the muscles of a trained athlete. The doctor will realize that even the slightest change noticed by the voice learner may be serious enough to destroy a possible career (Bunch 1995: 134).

When visiting the doctor, a history of the learner will be taken, after which the doctor will look at the vocal folds by holding an angled laryngeal mirror on the soft palate. Fibre optic and stroboscopic tools may also be used. Davies & Jahn (2004: 110) provides detail of the examination involving the flexible fibreoptic laryngoscope, which is used by Dr. Black as well:

Flexible fibreoptic laryngoscopy involves passing a thin instrument through the nose. The instrument is a flexible cable containing numerous optic bundles. The tip of the endoscope can be bent, and the instrument is easily directed to the back of the throat, and then down to the oro- and hypopharynx. By turning the instrument and adjusting its tip, the entire hypopharynx and larynx may be seen.

One advantage of the flexible endoscope is the minimal discomfort to the patient. The gag reflex is entirely bypassed. The nasal cavity is usually sprayed with an anaesthetic/decongestant, and the instrument passes through smoothly. Another advantage is the ability to look below an obstructing epiglottis and observe the full length of the vocal folds. A skillful examiner can advance the endoscope to within millimeters of the surface of the vocal folds. The scope is built so that it produces a panoramic image, pulling in the visual field at its periphery. This compensates for some decrease in maneuverability as compared to the mirror.

The examination is uncomfortable rather than painful, requiring the learner to relax the lower jaw and tongue. While using a piece of gauze or other material to hold the tongue out, the doctor will ask his patient to sing or say /i/ (as in meet), an almost impossible task with the tongue in that position. By this method the physician obtains the best view of the movements of the vocal folds. A good physician never prescribes medication for symptoms like hoarseness without first determining the underlying cause (Bunch 1995: 134-135).

Remarkable advances have been made in all aspects of voice disorders. The physician’s medical intervention procedures have developed, with major advances in voice surgery, including the development of newer and more delicate instruments and less traumatic surgical techniques. Recent
developments include the ability to treat problems previously considered untreatable, such as vocal fold scar.

For physicians, arts medicine poses special interests, challenges and problems. Traditional medical training is not comprehensive or specialized enough to address them well. Therefore development of this field has required understanding and interaction among physicians, performers and members of other disciplines (Sataloff 2001: 153). Otolaryngologists often refer voice patients for consultation with other medical professionals. These specialists usually include neurologists, pulmonologists, gastroenterologists, psychologists, psychiatrists and general surgeons.

5.2.1 The voice care team

Voice educators are guardians of their learners’ voices; as such they are often the first to detect a vocal problem, whilst also being regarded by learners as specialists in their field. This great responsibility brings with it an obligation to know as much as possible about vocal health and care. Being the first in the line of defense, the educator forms part of the voice care team. The educator is often also the one who has to do the rehabilitation and therapy, especially when the learner is not privileged to be near other professional vocal specialists. The physician commonly collaborates with other professionals such as speech-language pathologists, singing voice specialists, acting voice specialists, voice scientists, nurses, psychologists, and others (Heman-Ackah, Sataloff, Hawkshaw & Divi 2008: 583). Dr. Black also emphasizes working together with the rest of the voice care team.

Many vocal fold problems require surgery and post-operative voice therapy. Compensatory habits acquired before these conditions are treated cannot be corrected by surgery or voice rest. A follow-up of voice therapy is essential (Brown 1996: 228). This is true in the case of oedema, polyps and nodules – once the learner reverts to the old habits the swelling returns. This is why

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38 See Appendix D. Transcriptions of interviews: Dr. Black: Question 13.
exercises to change the functional habits help. The voice has to be rested and retrained (Brown 1996: 221).

Voice care has evolved into a sophisticated, well organized medical science. Patients with voice disorders are served best by a comprehensive voice team that coordinates the skills of professionals trained in various disciplines. It is also important for singing teachers and their students to be educated about the kind of health care that is now available for voice disorders and how to evaluate and select health care providers (Heman-Ackah, Sataloff, Hawkshaw & Divi 2008: 591).

5.3 Surgery

In *Care of the professional voice*, Davies & Jahn (2004: 116) writes:

Surgery, no matter how minor, is a form of trauma. Along with the physical aspects of the procedure, there is also the stress of anaesthesia, and the psychological stress associated with anticipation and passive submission, and the stress of recovery which may be accompanied by pain or discomfort.

The decision about the desirability or inevitability of surgery should therefore never be taken lightly. Problems associated with surgery are:

- The overall stress response weakens the immune system temporarily. It is not uncommon for a cold or some other infection to follow upon surgery.
- A second general issue related to surgery which is important for the singer, is dehydration. After the procedure, the patient may not be allowed or ready to drink for some time even though premedication, gasses and drugs have made the throat painfully dry.
- A third common problem after surgery is recovery of good pulmonary function. Following surgery, it may be uncomfortable to breathe deeply or to cough and fluid may collect in the lungs.
- If an endotracheal tube that is passed through the glottis into the trachea is used to administer general anaesthetic, this may cause additional trauma to the vocal folds. The tube used should be the smallest one that can adequately deliver anaesthesia and protect the airway. During extubation there may be some retching, with reflux of stomach acid. The stomach could be suctioned before awakening the patient, in order to
prevent this (Davies & Jahn 2004: 116-119). Prolonged surgery using intubation can irritate and damage the edges of the vocal folds. For that reason physicians sensitive to the needs of singers are researching more suitable techniques.

A bronchoscopy is used to look directly at a patient’s vocal folds, trachea and air passages while he is sedated and probably under general anaesthesia. Micro and laser surgery have made removal of benign growths of the vocal folds a relatively simple task, but even after such surgery, the patient must adhere to total vocal rest throughout the healing process (Bunch 1995: 132-133). Surgical procedures that are most likely to directly affect the voice are bronchoscopy, removal of benign or malignant growths, tonsillectomy and thyroidectomy. Any surgery in the neck area and in the face where the facial nerve (seventh cranial nerve) is located can be a potentially serious problem as this nerve is responsible for the motor supply of muscles of facial expression. Thyroid surgery may pose a remote element of risk, for the branching of the recurrent laryngeal nerve and the inferior thyroid artery varies considerably. This nerve is the motor nerve to the intrinsic muscles of the larynx and when the nerve is irritated, the symptoms of hoarseness or vocal fold paralysis results and singing professionally will be out of the question. This operation should be done by an acknowledged expert (Bunch 1995: 133-134). With abdominal surgery minimum invasive procedures, like the endoscope or laparoscope, should be used where possible as these are less disruptive to the internal organs and less painful. There is minimum cutting through the abdominal wall, which aids in swift recovery (Davies & Jahn 2004: 117).

According to Dr. Black new surgical procedures of interest to the singer include much less invasive surgery, with hardly any excisions. It is more a case of incisional surgery, where something is incised and removed with the mucosa intact. In reply to a question on what has happened to the singer Julie Andrews he had the following to say about the success rate of surgery involving the vocal folds: “Well, surgery is limited, very limited. You only do that in a very few select
cases after you’ve tried your medical treatment for long periods of time. But there are some absolute indications for surgery. The sulcas is something you have to operate on, but with things like nodules and all that you try to stay away from surgery” (Black 2010).

5.4 Vocal rest
The voice should not lie idle for too long. Muscle tone must be maintained. Following a week or two of not singing, the vocal instrument requires gradual reconditioning. Longer periods of rest diminish tonicity and should be avoided (Miller 2004: 178,179). Total or absolute voice rest is usually justified for a short time in acute laryngitis, in vocal chord haemorrhage, in mucosal tears and after laryngeal surgery. Absolute or total vocal rest, with the use of a writing pad to communicate is not usually justified for longer than four to five days. Expecting a learner to be silent for 4 to 6 weeks is foolish and totally impractical. Complete rest of the vocal folds is in any case not possible as the vocal folds come together during the swallowing of food or saliva and they move with inhalation. Most performers would not comply with prolonged enforced vocal rest and would compromise by developing a force whisper which is almost as abusive to the voice as shouting.

Partial vocal rest means being economical with the voice, using it only when absolutely necessary and keeping the following in mind:

- The method of voice production has to be technically sound
- Throat clearing and gargling should be avoided
- Telephone calls should be monitored by an answering machine and only essential conversations should take place
- Conversations have to be short and must take place in a quiet, non-smoky environment
- The throat needs to be kept moist during any conversation by sipping water and avoiding abusive throat clearing manoeuvres
A badge or sticker stating “Laryngitis – I have to remain silent” may help to convince friends that taking part in prolonged and loud conversations is out of the question.

Whistling has to be avoided as it is associated with the opening and closing of the vocal folds, like actual singing. The movement is jerky and associated with poor breathing and abdominal support and may introduce technical errors as potentially damaging as poorly supported phonation.

Whispering should be avoided

“Marking” \(^{39}\) to save the voice at rehearsals is an accomplishment frequently neglected in routine voice teaching.

Vocalizing when silently scanning lines is especially common when reading vocal scores and should be avoided. If the muscles tighten and the throat becomes tired at the end of the silent reading or listening, subvocalization should be suspected.

Slow and gradual rehabilitation of the injured larynx is important and the workload should be increased gradually. Even after a long holiday or examination period the voice learner must undertake several days of gradual warming up. As voice learners are usually better trained for the singing voice than the speaking voice, rehabilitation should begin by performing some scales, avoiding the extreme upper and lower ends of their range. This will allow pacing, controlling and even analyzing the voice before speaking. The same principles of control and awareness that are used with the singing voice have to be used with the speaking voice (Davies & Jahn 2004: 117).

6. **Conclusion**

There exists a definite interrelationship between music and health. Music in general affects health, and health – specifically vocal health – affects music production, especially in the case of singing. Where music production affects health negatively a vicious circle may start whereby the body (as in the case of

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\(^{39}\) See Chapter 8 (p. 199).
other instruments) is hurt by the way in which the musician plays (or has to play) the instrument. In the case of vocal production the voice is hurt by vocal abuse, medical conditions or a generally unfavourable lifestyle. Aphonation or disphonation then in turn hurts the singer physically and emotionally:

Historically, from the earliest of times, singing has been considered therapeutic. Mothers have sung to their children, David to Saul, and great singers to their public and private audiences. Vocal sounds has been used to heighten the senses and restore the health and sanity by use of ancient rituals, mantra, overtone and other chanting., church music. Today there are groups (other than choral organisations) forming specifically to use sound and/ or singing as a tool for healing the self and others. Therefore, the life energy and health of the singer who is transmitting vibrations, are critical ingredients in communicating health and in sending positive well-being to an audience (Bunch 1995: 153).

I personally experienced the trauma of several of the conditions discussed in this chapter: stress, hysterical hoarseness, allergies, irritated bowel syndrome (IBS), negative reactions to medication (especially those used to treat acne and inflammation), having to wear braces, sinusitis, laryngitis, tonsillitis, a deviated septum, a ganglion cyst, laryngopharyngeal reflux and last, but not least, vocal nodules. Associated with this I had to undergo several surgical procedures: a gastroscopy, a laparoscopy, a colonoscopy and a tonsillectomy, as well as operations to straighten a deviated septum and to remove a ganglion cyst. The vast majority of these conditions or incidents occurred within a time span of about five years.

What I have learnt through all these were:

- Never to take my vocal instrument for granted
- To have empathy with learners and singers in similar situations
- The physiological workings of the voice and factors and disorders that may affect it
- That there is a great lack of knowledge amongst voice learners, choir singers, singers in general, the lay public and even choral conductors and
music teachers regarding vocal disorders and the general fragility of the voice – at the time of my misfortune most people I had talked to about what had happened to me, were amazed that those things were at all possible

❖ To treat the vocal instruments of my learners and choristers with care and respect
❖ That to have the support of understanding parents, friends and family is a source of encouragement
❖ To be able to have a wonderful, patient, knowledgeable teacher is a blessing – someone to whom I could go for “lessons” during the time when I could not sing, just to watch opera DVD’s and for the moral support and motivation I needed
❖ To have a doctor on whom I can rely for expert advice and treatment and who is never too busy to attend in some way or the other to my urgent, sometimes desperate, calls is a great privilege
❖ That I have a God given talent that I should appreciate, develop and utilize.

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CHAPTER 8

CHORAL SINGING AND SOLO SINGING – PHYSIOLOGICAL, PSYCHOLOGICAL AND PEDAGOGICAL CONSIDERATIONS

1. Introduction

The first priority of voice educators/teachers\(^1\) is to develop the solo voices of learners. They should, however, support their learners’ choral participation, stressing the musical and personal benefits of being a member of a fine choir and learning additional skills from capable conductors. Voice educators must be conversant with the vocal styles, performance routine, method and technique of choral singing and should be so familiar with this genre that they would be able to help their students solve vocal problems they may encounter in their choral repertoire. They should teach the learners strategies for getting through musically or vocally challenging rehearsal situations (Sjoerdsma 2005: 8). In any case, even if they are not personally responsible for conducting the school choir or any other choir, educators teaching voice are responsible for duos or bigger groups that have to be prepared for examinations or performances and as such have to be skilled at training ensembles.

Voice educators should accept and respect the musical and tonal requests\(^2\) of choral conductors and if any significant problems should arise, these need to be discussed with the conductor. Therefore choral conductors, voice educators and learners have to communicate with each other and consider their respective responsibilities for the accomplishment of individual singers and the choirs in which they sing (Sjoerdsma 2005: 8).

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\(^1\) Voice teachers or educators may be involved here, but as this study focuses on the school situation, the term educators will be used throughout this chapter.

\(^2\) Conductors usually have very specific ideas about the sound or tone they would like to obtain from the choir. They may request members to produce a certain tone to suit the general “sound” of the choir, e.g. vibrato or no vibrato, a free tone (with individual singers singing “out”) or a blended sound.
2. **Choosing a choir and conductor**

Voice educators should be aware of the choral conductors and choirs (apart from the school choir) in their own area that their learners may choose to join. Choral conductors with a practical knowledge of vocal techniques and vocal training should be preferred and recommended.

Guidelines on the selection of a choral conductor should include any number of the following considerations. Choral conductors are primarily concerned about the musical and vocal achievements of their choirs, but need to be aware of their influence and significance in the musical and vocal development of each individual singer (Sjoerdsma 2005: 8). They should therefore adhere or conform to good basic principles of vocal technique, especially when working with adolescent voices. Not all ensemble groups and choirs are at the same technical level. A choir with trained solo voices should not be managed like one composed of amateur singers, who will need more guidance. Every choir has to be treated as an individual group, made up of a unique combination of singers of specific ages, cultural backgrounds, musical abilities, etc. Choral conductors ought to look carefully at the singers and discover ways to balance their diverse tonal potentials, raising the less skillful to a higher level (Miller 2004: 237).

Choral conductors should preferably have studied voice themselves. They must have a thorough understanding of vocal production and of the structure, development and maturation of the vocal mechanism, especially with reference to the age of their choristers (Sjoerdsma 2005: 8), in this case high school learners. They should apply vocal technique coupled with systematic and goal oriented training of the voice. Basic skills must be taught before refinements can be worked on. If fundamentals are taught thoroughly, each choir member will attempt to sing in the same manner and the choir will achieve a good and homogenous choir sound. Choir members have to be motivated to produce a good tone by maintaining the critical principles of proper posture, singing with the jaw relaxed, breathing and phrasing correctly, etc. (Roe 1983: 61-66). Experience has taught me that the best way to motivate a choir is by achieving a good end product. If they feel that what they have learnt leads to a good sound, that their
performance is appreciated by audiences, that they achieve success at choir festivals and eisteddfods, they will learn to trust the judgment, knowledge and guidance of the conductor. “The more choral directors know about the voice, about their own voices, and about the voices of those they conduct, the more effective they will be in achieving a quality choral sound with their ensembles” (Edward Byrom cited in Titze 2001: 57).

Conductors have to understand the importance and skills required for preparing or “warming up” a choir to sing. The pacing and duration of rehearsals and the gestures and words of the choral conductor should promote good vocal hygiene and concentration skills (Sjoerdsma 2005: 8). Consequently, choral conductors have a great responsibility and liability to treat voices appropriately. They also have an exciting opportunity to educate choral singers about vocal health and to strengthen and enhance the vocal abilities of the choir members. Therefore they should be aware of these responsibilities and opportunities and learn enough about vocal and choral tuition to improve choral voices and not to injure them (Smith & Sataloff 2006: 57-58).

Choral conductors have to consider range, timbre, musicianship and personal stability when classifying voices for choral singing. The basic range of a voice should be the first concern\(^3\). This should allow the singer to perform in the most accessible registers of the voice. Even though a soprano and alto may have nearly the same range within the highest and lowest notes, the alto will probably not be able to maintain the higher notes of the soprano line with equal ease (Smith & Sataloff 2006: 129-130). The musicianship of the singer is also considered in classification. Singers who sing fluently at sight and are skilled in vocal technique may be expected to sing at the extremes of range and pitch. The range of voices is sometimes misleading and the conductor should be able to ascertain where the natural resonance and range of a particular voice is and not try to force a competent singer in difficult tessituras. A trained soprano will know how notes in the chest register for an alto part should be sung. An alto with sufficient vocal technique can sing some soprano choral sections. Although this is not desirable, conductors may sometimes be forced to use singers in this way, especially in smaller choirs where there

\(^3\) See Chapter 2: Section 3 Range for voice classification (p. 29-31).
may be a lack of singers in specific voice groups. If the singer is less skilled the voice should be protected from extreme demands. The capable conductor will be able to decide on these matters (Smith & Sataloff 2006: 178-180).

Conductors have to select repertoire carefully. Choral pieces should be of a high standard and fine quality, and should also compliment the age and ability of the singers. Music with extremes of range, dynamics and unusual vocal timbre must be dealt with cautiously. Conductors should be open to voice teachers’ suggestions for their students’ voice placements (Sjoerdsma 2005: 8). If any difficult and demanding repertoire is chosen, careful attention should be paid to the planning of rehearsals in order not to exert the voices. Practising these pieces should not be prolonged and strenuous, even though it may be felt that they need more time and effort to master.

Singers should not be expected to sing when they are ill, nor must any singer be made to feel indispensable. Conductors have to consult the students’ voice teacher about technical problems (Sjoerdsma 2005: 8). Medical advice should be adhered to and doctors’ certificates honoured. If choristers do not have the reassurance that they can be excused from practice or a performance in critical cases, they may be forced to put themselves in dangerous situations or resort to devious conduct and lying to get out of the situation without causing too much agitation.

Under no circumstances should a conductor single out a singer for criticism or ridicule (Sjoerdsma 2005: 8). The conductor should have a healthy sense of humour. High school learners usually enjoy “tongue in cheek” sarcasm, but sarcasm that belittles choristers is bad (Smith & Sataloff 2006: 240). Derogatory personal remarks or jokes should not be tolerated – these include racist remarks, remarks about appearance, musical or intellectual ability, cultural or socio-economical background, in short any comments that would infringe upon the human rights of any chorister. Shouting, swearing, unprofessional conduct, emotional outbursts associated with an artistic temperament, throwing of scores and objects and storming out during rehearsals are totally unacceptable, especially in situations where the conductor is working with learners. Potential choristers will in any case be wary of conductors who have a reputation for displaying this kind of behaviour and will avoid their choirs.
The conductor should uphold discipline and gain respect by getting to know the names of choir members, by respecting their human rights and dignity, by commending and complimenting them, by having a positive sense of humour, by being fair and treating everyone the same and by being loyal to the choir (Roe 1983: 240).

Smith & Sataloff (2006: 125) describes the disciplinary role of the conductor as follows:

The personal charisma of a choral conductor attracts and nurtures the choristers in an ensemble. The conductor determines the nature of the organization, its aims, and its methods. A choir is not a democratic society, but a group of people governed by its leader [. . .] A gentle balance must be struck between method and delivery. If the discipline within the ensemble is firm enough to produce effective results but flexible enough to allow moments of relaxation, an atmosphere for good vocal instruction evolves.

2.1 The school choir

The choral conductor of the school choir is often the first musical model encountered by a young learner (Sjoerdsma 2005: 7). In schools where there is no educator teaching voice, the choral conductor may be the only vocal instructor. In such a case the conductor has the responsibility to teach the learners basic vocal technique and vocal hygiene. The conductor may also encourage individual choristers with solo potential to take private voice lessons.

At some schools the voice educator is also the choir director – this is usually the case at smaller schools, like the school where I teach. The benefit of this is that the conductor /voice educator may insist that all voice learners be members of the school choir. A further benefit is that their vocal training could impact upon and influence the other choristers positively. The conductor can prepare soloists during their individual lesson times and instill a proper vocal technique. The conductor has the specialized training of a voice educator in store, which instantly becomes available for all choir members.

Some schools have choral conductors (even more than one, if there is more than one choir or ensemble) as well as voice educators. At these schools the conductors and voice educators have the opportunity to work together and “learn from each other as

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4 Vocal hygiene refers to way in which the voice should be cared for and used in order to keep it healthy.
they work for the musical and vocal growth of their students” (Sjoerdsma 2005: 8). There should be a good working relationship between the two groups, with open communication regarding vocal problems of choristers, especially soloists, choice of repertoire, vocal health matters, etc., involving the highest level of professional behaviour and mutual respect (Sjoerdsma 2005: 8).

Choirs and ensembles of different sizes, compositions and genres are found within the high school context. These include girls, boys or combined choirs, junior (grade 8 and 9) and senior choirs, gospel choirs, African traditional choirs, Western traditional choirs, rock singers, groups doing popular music, jazz groups, or choirs doing a variety of some or all of these genres. The sizes of ensembles and choirs may range from small groups of about five to large choirs with more than fifty members, with any combination of (available) voice ranges⁵.

School choirs represent the specific character, culture, ethos, composition and socio-economic environment of the school. Specific strengths and weaknesses will usually be associated with these. Most of these will be discussed in section 3 and 4 of this chapter, with some aspects explained here.

One of the most common problems encountered by the high school choir leader is the lack of enough boys, and especially boy tenors. Altos (singing an octave lower) are often used to sing with the tenors. Not only could it be detrimental to the girl’s voices in the long run, but the difference in timbre between the two voice groups destroys the possibility of a homogenous sound. It is usually preferable to use boys singing falsetto. Boys find it very difficult to produce the high notes softly and lightly in an ordinary male voice and singing falsetto needs less effort, with an associated reduction of sound intensity and tone colour. By using this technique regularly, with the necessary support, the timbre and resonance of the boys’ voices will improve (imitating the whistling sound of a steam boat or bugle through relaxed lips facilitates the mastering of falsetto singing) (Smit 1991: 185-186). In a choir tenors sometimes go into falsetto too quickly, because it is easier to use the high register. They should be encouraged to keep the placement

⁵ See Chapter 2: Section 3 Range for voice classification (p. 29-31).
forward and keep the blended sound. By going into falsetto unnecessarily they also lose strength in the sound.\(^6\)

Some conductors of school choirs tend to want to place their less gifted sopranos in the second soprano group, while this group actually needs very good aural skills. Other choir directors actually put a few first sopranos with the mezzo sopranos in order to improve the tone colour, which may prove harmful to their developing voices. It is imperative that choral conductors should classify voices correctly and have them sing in suitable voice groups (Smit 1991: 183).

To find enough suitable voices for a choir in a school with a small number of learners\(^7\) may be problematic as there are many competing school activities. In that case the choir leader cannot afford to be too particular about the quality of voices. Only completely inadequate voices which may cause intonation problems are rejected. Conductors must keep in mind that the fear of a formal audition may put off even talented candidates from becoming choir members. The aim should be to involve everybody who shows an interest and loves to sing (Smit 1991: 189).

My voice learners know that if they take voice lessons I expect them to sing in the choir in order to develop their own voices and to contribute and apply their gained techniques to the benefit of the entire choir. The same applies to a learner who sings in a provincial or regional choir. If the voice learner has a real problem with singing in a choir the parents are asked to provide valid reasons for this in writing. Although I will obviously not force anybody to sing in the choir, but I will try and persuade them, even if they only come for a few practices to see if they like it and then make their decision. I do not encounter many problems in this regard though; in my experience voice learners enjoy singing in a group and give their full cooperation where the school choir is concerned. I have learnt my lesson with having learners in the choir who have good voices but bad attitudes; I much prefer an average voice with a good attitude to a good voice with a bad attitude towards the choir, as the latter has a negative effect on the entire choir.

\(^6\) Jill Nock Studio.
\(^7\) This is the case with my choir at Harvest Christian School.
A serious dilemma that many school choirs experience is the lack of effective public transport, especially for singers from disadvantaged backgrounds. This keeps many really fine voices from becoming choir members or from regularly attending practices or performances, especially in the evenings. Sometimes buses or minibus taxis have to be hired by the schools, if they can afford it, or transport has to be arranged for individual choristers – who often have to be picked up by educators or more privileged friends. As a result of this they and many other choirs hardly ever have the opportunity to participate at events that are organized outside of school hours. Even at more advantaged schools choir participation for some learners, including voice learners and potential soloists, is jeopardized by this. I have found this to be a problem even at the private (and relatively affluent) school where I currently teach. When we have to perform at night there are always a few members absent. Even though the school offers to arrange transport for them, they seem to be either too embarrassed or find it too much trouble and prefer to just stay away. Apart from being problematic for these individual choir members, the performance of the whole choir is affected by the absence of these often very good choristers. It also has the consequence that many school choirs cannot participate and perform as often as they would wish to, which in turn affects every choir member and soloist deprived of these opportunities.

2.2 Other choirs

Learners doing voice as subject are often members of provincial or regional choirs. Unfortunately their chances of becoming members are often also here foiled by socio-economic factors, which include lack of transport and finances. Some of the learners are also over-involved in other musical or extra-mural activities and simply do not have the time for the prolonged practising involved with singing in these choirs.

Some of the benefits of singing in a provincial choir may include the fact that voice learners usually find themselves amongst peers and the interaction with other fine singers is mutually beneficial. For many of the choir members this may be the only opportunity they have of singing in a well balanced, large choir. They may also have the

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8 My father, who is a school principal with a PDP license for driving a school bus, once had to collect every member of his school’s choir at their houses in the township where they were staying to take them to a concert where they had to participate. Afterwards all of these primary school learners had to be taken home again.
benefit of learning first class repertoire from an accomplished and experienced conductor. Provincial choirs regularly go on tour, often even overseas, which may be an added incentive for becoming members.

Church choirs are normally rather different from school or provincial choirs. They generally comprise quite a variety of members, nowadays including more older congregation members than younger ones. These choirs are usually very grateful for every young voice joining the choir and young accomplished singers may be used as soloists. The music is as a rule not very demanding and choir practices not too long, except at special times on the Christian calendar, like Easter or Christmas, when extra rehearsals may be necessary. Here the voice learner is exposed to the culture of church music. It may also be an enriching experience to associate with such a diverse group of people, coming from various backgrounds, representing different age groups and possessing wide-ranging degrees of vocal and musical skills and talents.

Gospel groups typically sing more modern or popular church music, which may even include rock music. Their members are generally younger than the members of the church choir, although several gospel singers are middle aged or older. Many gospel groups comprise young people or high school learners. Singing in a gospel group may be spiritually uplifting and socially enjoyable for the young singer, but the voice learner should always take care not to sing too loudly or even shout.

3. Benefits of singing in/with a choir, and adaptation of the learner doing voice as instrument

Choral groups offer ample performance opportunities for voice learners. Participating in school choirs, church choirs, provincial choirs or in the companies of musical theatre productions, have definite benefits for these learners and, while keeping certain guidelines in mind, educators should encourage learners doing voice as subject to become involved in choral singing. A voice educator who understands and appreciates choral singing as well as solo singing should be able to guide learners to get the most out of the experience while maintaining their vocal health.
3.1 Soloist

I tend to agree with Tom Carter (2008) who states the following on the ChoralNet website\(^9\): “As a soloist AND a choral singer, it seems to me that an excellent soloist can usually be an excellent choral singer, but it doesn’t work the other way around – an excellent choral singer will not necessarily be an excellent soloist.” This is my experience as well. As a trained solo singer with extensive experience of choral singing, I can switch from one to the other with ease although there are somewhat divergent approaches involved in each of these modes. Voice learners and choristers should be taught vocal techniques that will help them in solo singing as well as in choral singing. The focus in this section is on the vocal learner acting as solo singer with a choir.

In my singing career I have often performed as soloist with choral groups. These include school choirs, mass choirs, ensemble groups, church choirs, musical theatre groups and the university choir. Some of the benefits of performing as soloist with several choirs include the exposure to different musical styles, the interaction with various conductors and the meeting of and socializing with numerous choir members. It can also be considered as a form of recognition to be invited to perform as soloist. For accomplished learners who are not scared to perform, the opportunity to do solo work is perceived as a huge opportunity. To do so with a choir is an added pleasure and to be selected from within a choir may be experienced as an even greater honour.

If you feel comfortable within a group, you may be able to transfer that comfort level into your solo singing. If you suffer from anxiety about singing in public, slowly work your way from singing in the choir to auditioning for one of the solos with the choir. Many choral pieces have small sections for soloists. By auditioning for the small solo part, you may be able to take a step forward toward realizing that anxiety. Furthermore, you have the support system of the entire choir (Phillips 2003: 193-194).

While doing solo parts or solos with a choir the voice learner gains experience in solo performance which includes utilization of the full potential of the voice, optimal application of the vocal technique learnt in class, opening up of vowels, utilization of vibrato if so desired, the freedom to function more independently and creatively than a

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\(^9\) Cited in Choral singing vs. solo vocal singing 2008.
chorister by taking the lead and embellishing, drawing out or speeding up phrases should the music require such freedom.

Voice learners participating in choral singing or as soloists with choirs should share their technical vocal skills and accomplishments in order to contribute to the rehearsals and enhance the performances of the choir. They should attend rehearsals vocally and musically prepared. They need to also take back vocal and musical problems experienced in their choral singing or solo performance to their voice lessons. They have to be at liberty to discuss vocal problems with their conductor after rehearsals. Voice learners are responsible for maintaining their own vocal health and should monitor their vocal endurance. Then again they should take their responsibilities as choir members seriously and not hold back unnecessarily (Sjoerdsma 2005: 8).

Being part of a choir has many benefits for the voice learner who

- Is exposed to choral compositions of major composers, their historical background and musical styles
- Finds out about future solo opportunities
- Learns how to work with a conductor and can use this knowledge in relation to opera, oratorio, further choral singing or popular genres
- By learning skills required for ensemble work, can prepare for possible work opportunities in the choral and musical or vocal ensemble environment
- Gains socially and emotionally from participating in a group activity which may foster camaraderie and friendship (Olson 2008: 561).

3.2 Choir member

Singing in a fine choir can be of great benefit to a voice learner. It is often in a choir that young singers first learn of their love of singing and their vocal talents. Choral music may supply the voice learner with a historical context for the solo repertoire being studied in class (Smith & Sataloff 2006: 129).

As an individual singer, you want to stand out and be unique. You want your voice to carry the hall or resound so that every person in the audience hears you. Because having a loud voice is desirable in solo singing, you may want to focus your attention on projecting your voice.
However, when singing with a choir, you may find the director holding his hand in front of your face to get you to sing quieter and blend in with others (Phills 2003: 192).¹⁰

The voice learner should be made aware that the goals of choral singing are different from those of solo singing. Cooperation in choral singing requires that singers add to the choral sound but never dominate it. As ensemble members, choral singers are led by the artistic requirements set by the conductor. With solo singing¹¹ the individual vocal, acoustic and interpretive qualities of the singer are the overriding factors. The voice educator should be able to prepare the learner to make adjustments in technique, attitude and expectation that would suit either setting. The ability to sing well in solo as well as in ensemble settings is a sign of healthy technique and artistic vocal proficiency. Singing in choirs is good for voice learners/solo singers as long as they have been properly trained (Smith & Sataloff 2006: 130).

Good ensemble singing requires the ability to balance and blend, to control vibrato and even suppress it (as required by the choral conductor or the style of the music), to match the vowel sound of the group, to follow the directions of the conductor and to blend in. Choral singing is a unique skill whereby a strong solid tone is produced while eliminating individual timbres and qualities that could make a voice stand out and destroy the balance and blend of the ensemble. The chorister has to add depth and power to the sound without attracting any attention. This is completely the opposite of the training for singing solo (Choral singing vs. solo vocal singing 2008). The approach to consonants in choral singing may be different as well. The length of certain consonants have to be altered for ensemble accuracy and at times a more rhythmic approach in attacked and released consonants is unique to ensemble singing (Timothy Lane Peter cited in Gloss 2009: 11). For example, it is usually stressed that endings should be tidy and taken together, for example on “t” and “k”.¹²

According to Miller (2004: 240), “[I]imaginative choral conductors ought to be able to solve the problem of the solo singer in the choral ensemble by understanding how to obtain a balanced choral sound that results from healthy vocalism.” The most effective

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¹⁰ See also Appendix D. Transcriptions of interviews: Nock: Question 19.
¹¹ As discussed in 3.1 above.
¹² Especially in Baroque singing.
way of having a choir thinking and singing together as a group and not as individuals is 
by starting a practice session with a choral warm-up that would foster unity by 
concentrating on blend, balance, colour matching, timbre control, vibrato control, 
matched diction, as well as group rhythmic articulation and dynamics (Byrom cited in 
Titze 2001: 57).

As smaller voices in the choir have the opportunity to perform as equals with stronger 
ones, choral singing teaches acceptance and offers an increased sense of 
accomplishment (Smith & Sataloff 2006: 129-130). Voice learners have the opportunity 
to mentor less-trained singers, while they themselves may learn from more experienced 
choristers. A choral rehearsal may afford an ideal opportunity for strengthening 
musicianship skills, vocal technique and self-esteem. The voice learner as “choral 
singer has the opportunity to relax within the choral tone, participating in arching 
phrases of greater length than any single voice can manage” (Smith & Sataloff 2006: 
129-130). Ear training, sight singing and listening skills can be taught effectively in a 
choral situation. A competent choral conductor can give voice learners a life-long 
foundation in musical style and performance practice, phrasing, tone colour, articulation 
and foreign language diction. Young voice learners may have the opportunity to perform 
much more sophisticated music in a choral group than they could as soloists, thereby 
experiencing styles and repertoire with which they would otherwise not have been 
confronted (Sjoerdsma 2005: 7).

Phillips (2003: 193) has some useful guidelines that the voice learner may employ while 
taking part in choral singing:

**You discover how to listen carefully.** When singing in a choir, you have to listen so that 
your voice blends with the voice of the person next to you, as well as with the sounds of the 
particular type of song you’re singing. If the music requires a specific style of singing, you have 
to work to make sure that you’re making the appropriate sound with healthy technique.

**You discover how to monitor your sound based on how it feels.** If you can’t hear your 
voice standing out, you have to rely on the feeling to determine whether your technique is still 
in good shape. Monitoring how your sound feels is a good idea, because each room is 
different, and you can’t rely on the sound bouncing back to you. Sometimes choral singers put 
their hand to their ear to hear their voice. You can try this using this technique to help direct
the sound of your voice back to your ears. Just make sure that the person next to you doesn't think that you're trying to block out the sound of their voice.

**You get an opportunity to work on your ear.** Picking out your part when the other voices of the choir are surrounding you is a good workout for your ear. Simply hearing and being able to hear your note in the middle of many other notes are two different skills. Solo singers may not have someone else singing different notes in their ear. The choral singer may be mixed up with other voices singing other parts and have to rely on her ability to read music or really listen for her note in a chord. Picking out your part while other choir members are singing around you may take a while to develop.

The voice learner should come to the choir practice prepared and, whenever possible, parts should be learnt before coming to a rehearsal ("Survival tips for choral singers" *nd*). Voice learners should try to set an example to the other choir members and should not think that because they “know” how to sing they need not work on the music.

While I was at university, there was a time when I was experiencing vocal problems. Because of this, I went down from being a first soprano in the choir to singing second soprano for a year. During this time I did not have to sing all the high notes, which relieved me of a lot of pressure – while being a second soprano proved good for my ear training and challenged me, as I was accustomed as first soprano to singing the melody line only.

In general high school learners who are active participants in a choir progress faster towards musical maturation than those who only do solo work. This is partly due to the amount of time spent singing in the choir. Voice learners are also among other capable singers, including the director, and can learn healthy habits through listening and imitating (Kristen Eby cited in Gloss 2009: 12).

There are also considerable personal benefits associated with singing with other choristers. It fosters a spirit of cooperation and helps diminish the unhealthy competition sometimes associated with solo study, especially in the school environment. “The so-called ‘peak experiences’ that may be possible in an outstanding choral performance are a source of motivation as well as joy for young choristers” (Sjoerdsm 2005: 8), with “great emotional and spiritual benefit” resulting from “joining forces with one’s fellow
singers and working together to create a beautiful work of vocal art” (Kristen Eby cited in Gloss 2009: 12).

Choral singers could have the prospect of traveling with the choir. For some choirs just traveling to the next town may be very exciting, while other choirs may be able to tour nationally or even internationally. Fundraising to make these tours possible could prove to be worthy exercises in team building. High school learners may experience going on tour as having achieved some special status, comparable to that of sports teams that represent the school. This should promote a sense of pride and loyalty towards the school (or any other institution represented by the choir) and the choir. The school choir usually gets the opportunity to perform in front of their school friends. For many voice learners this might be the only opportunities to do so. School choirs may also go on social excursions and choir camps. An impressive (or “cool”) choir uniform may be an added incentive to join the choir. Many schools give recognition to members of the school choir (and sometimes a regional or provincial choir) in the form of merit certificates, trophies or even colours awards.

In addition to all these benefits that choral participation has for the voice learner/soloist, Phillips (2003: 193-194) identifies the following advantages of choral participation:

You get a chance to work on your social skills. In choirs, you often find people that like similar music or are inspired by beautiful music. You may feel right at home and normal by being around people with similar interests, which can give your sense of belonging a big boost. You also get opportunities to discuss which song you like the best and defend your answer by talking “shop” or singer talk.

You get to work on reducing your performance anxiety by singing with a group. Onstage with your peers, you may find that your anxieties about performing dissolve . . . Just talking about your performance anxiety can help alleviate your own anxieties.

The challenge and joy of singing in a group may just be the lift you need at the end of a long week. Singing is a wonderful release and opportunity to express your thoughts and feelings through music and singing. Joining a choir may give you that regular opportunity to enjoy singing if you just don’t have the time to practice (sic) on your own.
Chorus America’s 2009 Chorus Impact Study, reprinted from an article in *The Voice* (2009), highlights the far reaching impact of choral singing on children. These benefits include higher grades at school, better memory, good practice and homework habits and high levels of creativity. Educators from all disciplines believe that choirs add to a school’s overall sense of community, that they provide an opportunity for learners to be engaged in school who might otherwise be lost and that they help make learners more active participants in school. According to the parents included in this impact study, the “unique’ chorus effect” is not “simply replicated by participation in other extra-curriculars.” This “effect” includes choristers having more advanced social skills and being better team players, being self-disciplined and punctual, being able to express and manage themselves emotionally and being more likely to participate in sports and other extra-curricular activities than non-choral singers.

4. **Negative aspects regarding singing in/with a choir**

4.1 **Soloist**

It is inexcusable for a soloist to hold up a rehearsal due to lack of adequate preparation. Since solo singers stand out as individual performers, their lack of preparation will result in their being disgraced in front of the whole group. Voice learners should be at liberty to ask their voice educators for assistance in preparing choral repertoire if necessary, should the voice educator not be the choir’s conductor as well. Otherwise, the conductor should be responsible for training the soloist or finding a suitable voice teacher to assist in this task. Voice learners may also be helped by their private voice teachers. If the soloist is insecure about pitch, it is unlikely that the song will be well executed. Hesitation hampers good vocal technique (“Survival tips for choral singers” *nd*).

Voice learners should use the breathing techniques they have been taught for solo singing and apply them in choral singing. In choirs, staggered breathing is sometimes used to create the illusion of seemless sound, e.g. when singing long notes, but voice learners should not do this unnecessarily in choral singing and it should not be done at all when doing solo performances. They need to apply correct breathing as they have been taught and should work out the breathing according to the requirements of the text and music.
When performing in shows, the soloist may have a problem with choreography when changing from chorister to soloist. Show choirs provide opportunities for groups to sing together while doing choreographed movements. Soloists, on the other hand, need to do the acting and let the story dictate how their bodies move rather than plan the moves ahead of time. By implication the soloist should be able and willing to act. Some voice learners with fine voices are reluctant or unable to do so and are thus excluded from this kind of performance.

The soloist has to be aware of facial expressions when moving back and forth from choir to soloist. Sometimes, choir directors want soloists to raise their eyebrows or smile to keep the pitch steady. The voice learner is taught to keep the eyebrows down. Pitch may be maintained by keeping the breath consistent and by making sure that vowels are precise. Keeping the breath moving steadily and singing good vowel sounds will be easier than trying to change pitches up or down. The smile is counterproductive for a soloist – smiles do not suit sad songs and may also cause tension inside the mouth when trying to open the back space. Sound production must be forward and forward sound placement is contradicted by a smiling position. Lifting the cheeks while keeping the sound forward should be the aim. The joy of singing coming from inside the body should be reflected on the face without the tension of a frozen smile (Phillips 2003: 195).

The choral conductor may expect the soloist to sing repertoire that is unsuitable or that uses vocal techniques contradictory to that which is taught by the voice educator. This may lead to friction between the adults and tension on the part of the learner, and should be managed with care by the educators involved.

4.2 Choir member

When no other rehearsal time can be fitted into the busy school schedule, sometimes a choir must rehearse in the mornings before school – not at all an ideal time for singing, as the learners and their voices are not yet fully awake. Warm up exercises are absolutely essential before there can be any question of rehearsing. Being at school so early is also a sacrifice for the choir members and the parents who have to bring them.
Participating in a group activity provides a great temptation to talk unnecessarily. This should be avoided as not only is it disruptive to others (especially the conductor), but it also tires the voice ("Survival tips for choral singers" nd). Talking also wastes time and energy. The conductor has to inform the singers at the beginning of the rehearsal when there will be a break, especially during a long rehearsal so that they may know when they will be allowed to talk. As it is practically impossible to keep teenagers quiet all through a long rehearsal, as well as break time, they may be allowed to talk during the break, but they should learn to do so responsibly – softly, with no shouting – and rest their voices as far as possible.

Placing an inaccurate chorister in the midst of good singers may become extremely frustrating to them if they have to “fight” inaccurate pitches all the time. The conductor should occasionally move either the vocalist with the bad intonation or the good singers. The humming tone is one of the best ways to check pitch (Roe 1983: 114).

It can also be annoying to be part of a choir with many divas. Mark Gourley (2008) quotes a contribution by “Cairril” on the ChoralNet website who writes as follows about her choral experience: “While they were competent soloists, they were competitive choral members. Some would even ignore the director’s cut-offs, for instance, in order to hear their own voice better.” My own experience includes several encounters with such divas. During a school production in my grade 12 school year, for example, there was an ensemble member who actually pulled the microphone away from the other singers and towards her own mouth!

Nan Beth Walton (2008) on the ChoralNet website is of the opinion that “solo singers can be wonderful choral singers, if they are willing to approach the task of becoming a part of an ensemble in a supportive way and not necessarily in a leadership way.” Voice learners must learn to blend their sound in the choir, but must also be aware that those around might be leaning on their voices for support. The voice learner has to hold

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13 Jill Nock Studio.
14 Cited in Choral singing vs. solo vocal singing 2008.
15 Cited in Choral singing vs. solo vocal singing 2008.
16 Jill Nock Studio.
back and listen to the singers around him/her, for the choir conductor is looking for a homogenous sound and not individual voices. The choir as a group is the instrument. While voice learners may learn from their choral experience, they may also pick up bad habits if they are surrounded by choristers with bad singing habits.\textsuperscript{17} This is especially true if these bad habits go undetected by the conductor.\textsuperscript{18} In addition learners must not get so dependent on the voices next to them that when they come to a voice lesson they struggle to sing without that support.

It may be expected of choristers to stand for long periods of time when singing in a choir. Having to stand for a rehearsal can provide an opportunity to practise standing with the weight evenly distributed on both legs. If this is found tiring, the learner should discuss possible options with the director.

5. \textit{Vocal and general health of the learner doing voice as instrument when participating in choral singing}

This section will focus specifically on choir singing, general physical and psychological well-being, and the influence these have on vocal health. To introduce this topic, I again relate some of my own experiences.

In the previous chapter I provided an outline of my negative experiences in the school choir while preparing for a music production. These started off with marathon practice sessions during which I often had to overcompensate, especially on the high notes. Having had to repeat the first soprano part of Lloyd Webber’s \textit{Pié Jesu} several times with an already exhausted voice caused the formation of vocal nodules.

During the mid-year school holidays we had to do another week of rehearsing as the show was due to be staged at the beginning of the next term. The rehearsals went on for hours at a time. I was still in a rehabilitation phase and to spare my voice for the final examination (which I had still been hoping to do), I acted as part of the ensemble, where I mostly mimed the singing. Then the \textit{Pié Jesu} had to be practised again, even though the conductor had not yet found a suitable replacement for me. I was first asked to do

\textsuperscript{17} Jill Nock Studio.
\textsuperscript{18} See Appendix A. Learner cases: Learner E (p. 256).
the second soprano part, while the search for a first soprano continued. I was hesitant, but in the end I agreed to give it a try. Then I was coaxed into doing the first soprano part again. The first few times went off reasonably well, but then the ensemble had to join in. They could not get the entry right – the music was too difficult and they had to do it with choreography as well. Everybody was still singing without microphones and the conductor felt that there was not enough sound. Acoustics in the hall were very poor too. Again I had to repeat my part over and over again in order to help them. Before the end of that session I had no voice left. That proved to be my final attempt at singing the \textit{Pié Jesu} and it cost me my examination as well. I eventually ended up in the chorus where I mimed my way through the songs, just to be part of the production after all the hours of practising.

Many of the other cast members also picked up vocal problems as a result of these strenuous rehearsals. They had to sing the accompanying songs all the time while learning the choreography. On top of that they had to be heard over the back tracks. Many choristers had to sing over colds which they had caught in the extreme weather conditions. The dressing rooms next to the stage could not be used, because they were too small for the large cast, so everybody had to use the area underneath the stage which could only be reached through outside entrances. This meant that everybody had to go out into the cold every time they left the stage.

Fortunately microphones could be used for the show, as there really was not much choral sound left. My second soprano partner in the \textit{Pié Jesu} had to do the first soprano part, while the conductor had to sing the second soprano part.

As this was a first attempt for many of those involved, a lot of mistakes were made, which was further exacerbated by an atmosphere of strife between educators responsible for different components of the show, with tensions between individual singers, as well as between the conductor and the choir. All this put strain on the learners as well, which had a further negative effect on the singing. Most of these mistakes made in the choir proved to be examples of aspects covered in this chapter on how things should not have been done.
Afterwards it was decided that a backup CD of the choir, made as soon as they knew the songs, would be used for future show rehearsals in order to save their voices while learning the choreography. Backup recordings would be made of solo performances, so that these could be played in the event of loss of voice for whatever reason.

My own mistake was to continue singing when I should not have. I should have been more assertive, but having been a learner who generally did what I was told, I did not have the nerve to refuse doing the part. This experience prompted me to make a thorough study of the voice and vocal health and of how to manage my own voice.

5.1 **Benefits of choir participation (regarding general and vocal health)**

In a recent survey by Clift, Hancox, Morrison, Hess, Kreutz & Stewart (2009), evidence is presented on choral singers’ perceptions of the physical health benefits of choral singing. This evidence is based on a thematic analysis of answers given to an open question included in a questionnaire survey of over 1,000 choral singers in Australia, England and Germany: “What effects, if any, does singing in a choir have on your physical health?” Responses received in this survey relate to the physical, emotional and mental health of the chorister. The previous chapter of this dissertation discussed the extent to which general health influences the voice – implying that these factors will also be beneficial for the vocal health of the chorister.

In this particular survey, many respondents with health problems attested to their experiences of the beneficial effects of active engagement with singing. This was particularly true in relation to problems with breathing. Four areas received special attention: effects on breathing and lung function, posture and body control, relaxation and stress relief, as well as physical activity and energy. Singing promotes deep and controlled breathing – which is a benefit in itself – while deep breathing is also one of the mechanisms that promotes relaxation and stress relief. The experience of positive emotions and happiness produced by singing and also high levels of concentration and attention needed to sing in a group, are important mechanisms implicated in the health promoting effects of singing.
Another study which has been undertaken at inter-university level in Sweden and reported on the *IceNews – News from the Nordics* (June 2010) website, set out to discover whether choir singing would produce stress-relief benefits different to those encountered in kinds of other group activities. Apart from earlier findings that choral singing generally boosts energy levels and feelings of joy and relaxation, a further positive psychological and biological advantage that has been measured is elevated oxytocin concentration:

The latest study hopes to prove that being in a choir can boost testosterone levels and aid anabolic regeneration, notably in sufferers of IBS who typically suffer from low levels of oxytocin. The research team, which published its findings in the latest *Psychotherapy and Psychosomatics* medical journal, confirmed that choir singing can increase saliva testosterone which is both regenerative and stress-reducing, reports *The Local*.

“It is documented that starting activities can help to accelerate the body’s process to regenerate cells, which is fundamental to health. What we have found is that choir groups show a clearly heightened regeneration in comparison to other activities,” said Professor Tores Theorell of the Stress Research Institute at Stockholm University.

As previously discussed, further benefits of choral singing involving vocal health include learning healthy vocal technique (if the conductor is capable enough), vocal fitness and vocal stamina.

Dr. Black\(^\text{19}\) reports that he has had to treat very few teenage choral singers specifically because of problems related to choir singing (I have been one of the few). His experience is that vocal abuse and trauma amongst young singers are generally more related to participation in musicals.

### 5.2 Dangers of choir participation

Choral singing provides special pleasure and poses vocal risks. More amateur music lovers sing in choruses than in any other setting. Choral music provides joy for its enthusiastic participants and its audiences, but voice abuse during choral rehearsal and performance can damage the larynx. Such damage affects not only an individual’s ability to sing, but also the ability to speak and use the voice effectively in social and business settings (Smith & Sataloff 2006: 57).

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\(^{19}\) See Appendix D. Transcriptions of interviews: Black: Question 9.
Being incorrectly classified vocally in order to accommodate the needs of the choral group may be harmful to the voice. With tenors often being scarce, baritones may be persuaded to sing the tenor part, which can strain the voice. As discussed previously, it is possible to use certain vocal techniques – such as singing falsetto in the upper register – in order to make the voice more versatile (“Survival tips for choral singers” nd). In the long run it is also detrimental for altos to sing tenor parts or for sopranos to do alto parts.

If there are not enough other singers in a particular voice group, the voice learner as trained singer may be asked to sing more loudly in the choir to make up for a lack of volume. In such cases the learner should rely on his/her knowledge of resonance to avoid pushing too hard. If the voice is tired after singing loudly, the learner needs to rest for a while during the rehearsal. If there is a problem, the choir director should be informed about how the voice feels after a rehearsal (Phillips 2003: 192).

When voice learners are not required to sing more loudly, they should not do so – over-singing or singing loudly in order to be heard over other singers stresses the voice. “Showing off” the voice is inappropriate in group singing – it does not contribute well to a choral blend and it is usually resented by fellow singers (“Survival tips for choral singers” nd). Another consideration in forcing the voice is the maturation level of the other singers in the choir. If a young learner is surrounded by more developed voices, there may be a temptation to oversing (Kristen Eby cited in Gloss 2009: 11).

Choristers are sometimes forced to attend rehearsals or perform when they are sick. Singing over a cold can be very harmful. Furthermore germs may be spread amongst choir members (“Survival tips for choral singers” nd).

Sjoerdsma (2005: 7) points to another danger of choral singing in this statement by the American Academy of Teachers of Singing: “There are, of course, issues that can have a negative impact on a singer in a choral situation. Singers have a limited number of hours in the day in which they may healthily sing. It is important that choral singing not take a proportionally large amount of those hours.” Sometimes conductors expect from choir members to rehearse for long tiring hours. “Even worse, are the choral conductors
whose all day workshops or long rehearsals constitute the most flagrant violations of proper usage of voice. Under such marathon conditions, the singer can never perform at his best and is usually unable to sing for days afterwards” (Bunch 1995: 137).

Conductors may also expect especially the voice learners in the choir to sing in a tessitura, dynamic range or vocal color that is too difficult and may cause damage to the voice of the inexperienced singer. This also goes for singing repertoire that is too difficult or for which the learner is not sufficiently prepared (Sjoerdsma 2005: 7-8).

Voice educators (if they are not the conductors themselves) should be aware of the level of discipline in choirs of which their voice learners are members, as vocal fatigue may be caused by a lack of discipline in a choir. This may negatively impact the voices of voice learners in various ways. The vocal folds may be strained through needless repetitions, because choristers did not pay attention the first time. It may lead to oversinging and strain as choir members try to make themselves heard in unruly conditions. Proper posture may be ignored, limiting breathing capacity and putting stress on the muscles of the larynx. On the other hand, a most detrimental effect can result when, in reaction to badly disciplined choristers, “the choir conductor has a tyrannical nature [and] a spirit of fear pervades the rehearsal, creating unwanted tensions detrimental to vocal health” (Smith & Sataloff 2006: 125-126).

Some basic causes of bad discipline may be poor discipline at home, dislike of music, showing off and trying to impress a girlfriend, a general lack of discipline in the school, poor teaching or class organization (Roe 1983: 239), no self-discipline or a lack of self-esteem because of poor academic or musical abilities, leading to a desire to attract negative attention.

5.3 Guidelines for “safer” choir participation

5.3.1 Warming up and warming down

The most fundamentally important way of safeguarding the voice is through the vocal warm-up, which may be preceded by an overall physical warm-up. Stretching, loosening and aerobic exercises wake up the body, while ‘yawning’ and relaxed humming will get the voice going before more extensive singing (“Survival tips for choral singers” nd).
With my own school choir rehearsing in the mornings before school, these exercises are essential. Vocal production is a physical experience, requiring athletic discipline as well as artistry. As with any sports, an effective warm-up is essential for optimal performance.

Warming up allows choristers to “get-in-touch” with themselves, both physically and psychologically and to experience kinesthetic self-awareness which is fundamental to secure vocal technique. Ideally, the warm-up procedure should be relaxed, allowing adequate time for gradual looseness and coordination of the muscles which contribute towards vocal production. Warming up should be an enjoyable experience, almost like a luxurious massage. Gentle physical exercise alleviates the muscular tension that hinders vocal production and stimulates deep breathing necessary for vocal support. The muscles of articulation comprising the jaw, tongue, lips and soft palate can be loosened with suitable exercises. Vocalizing should start in the most comfortable range of the voice, gradually working towards the higher and lower extremes of pitch. Most of a singer’s warm-ups aim at obtaining a beautiful vocal timbre through the use of a variety of vocal calisthenics. Singers may test the vocal register transitions during the warm-up. Exercises that blend the chest and head register eventually produce a smooth passaggio, with an even scale from the bottom to the top of the vocal range (“Survival tips for choral singers” nd).

Warming down is useful for the singer after an extensive singing session, with exercises that soothe the vocal folds (for example vocalizing on U (ʊ) as in tool). Loosening the articulatory muscles, even without phonation, is therapeutic. Massaging the jaw, the jaw muscles and other muscles of the neck and shoulders, particularly the trapezius (arising from the back of the head and vertebrae in the neck and the chest, extending to the collarbones and the shoulder blades) is beneficial for the singer and vocal health (“Survival tips for choral singers” nd).

5.3.2 Posture
The rules for posture which apply to solo singing apply equally to choral singing. A weak posture limits breathing capacity and puts stress on laryngeal muscles. Choral singers often rehearse sitting down, holding their music in one hand. They soon begin slumping
back in the chair, crossing the legs, etc. Sitting up may seem to require effort, but an erect, well balanced sitting posture is less tiring. The music should be raised to eye level, however the shoulders should remain relaxed. Both feet should be flat on the floor. When standing during a performance the legs should not be locked. Wearing comfortable shoes is important. Standing rigidly combined with a feeling of tension may cause fainting (“Survival tips for choral singers” nd).

To this Roe (1983: 66-68) adds that a choir director should take care to teach choristers the correct way of holding their music. A good way to hold music is to place a hand under the open music with the other hand on top of the music sheet to facilitate turning pages and control the angle and height of the music. Choristers need to see the conductor by shifting the eyes only, not the whole head. To avoid slumping when singing while being seated singers should sit as far back on the chair seats as possible – sitting into the angle between the chair seats and the chair backs or on the front edges of the seats – with straight backs and the feet in a position that will require no shifting when standing up.

5.3.3 Breath management
Breath management is very important for vocal health but may be difficult to manage in group singing. Many choral singers do not allow themselves an adequate breath in between phrases and instead stand gasping for air to stay with the conductor’s beat. Choral directors have to indicate breathing with their conduction signals (“Survival tips for choral singers” nd). Choral conductors refer to the conduction gesture which prepares choristers to take a breath before starting to sing as the preparation beat. Indicating this beat is essential for choral singers, not only to know when to join in, but also to take sufficient breath for singing a phrase. The breath must be taken and held while contracting the stomach muscles (“breathe, hold, contract”). Ultimately it remains the singer’s responsibility to maintain efficient breath support. All choir members should know how to breathe correctly. The solo singers/voice learners should use the breathing techniques they have learnt in solo singing and in the voice studio and apply them in choral singing.
5.3.4 **Articulation**
Articulation should be done correctly. Discomfort in singing is often brought about by tension in the articulation of consonants and vowels. Choral singers are usually encouraged to enunciate clearly, but the jaw, tongue and lips have to remain as relaxed as possible. It is necessary to modify pronunciation for effective and effortless vocal production – for example, sopranos need to open their vowels on high notes (“Survival tips for choral singers” nd).  

5.3.5 **Range**
If a chorister is uncomfortable singing in a required range and suspects that he/she is misplaced, a change of part or help with vocal technique should be requested. Choral conductors have to guide singers in the best possible use of their voices (“Survival tips for choral singers” nd). Sopranos who have to sing in the alto section need to vocalize and maintain their upper registers during their voice lessons, while avoiding pushing in the lower register during choral singing if they wish to keep their solo voices in good form (Kristen Eby cited in Gloss 2009: 11).

5.3.6 **Discipline**
Choir discipline and self discipline are crucial for the maintenance of vocal health. “The level of discipline within the ensemble is of significance to the health and well-being of the individual choral singers” (Smith & Sataloff 2006: 125). Without being so strict that choristers become too stressed to enjoy their singing, the choir director should set rules that will help maintain discipline. It is a good idea to involve choir members in the setting up of rules. There should be just enough rules to ensure vocal productivity and avoid vocal injury. Too many rules become confusing and discouraging. The rules that are eventually decided upon should be adhered to strictly and should be applied consistently. The singers should know exactly where they stand with the conductor and what is expected of them as choristers.

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20 It can be a difficult task for the choir conductor with a big choir to ensure that everybody is singing in the correct way. The conductor can work with one voice group at a time, especially at the beginning of the year while notes are being learnt. The basic principles of correct vocal technique can then be explained to the choir members, because if the basics have already been applied correctly, it is easier to build the choir from there.
5.3.7 Mouthing

If voice learners find themselves in a poor choral situation that they cannot get out of, they need to try to protect their voices as best they can, using recommendations from their voice educator (if this educator is not the choral conductor), with perhaps some 'last resort' options, such as mouthing the words in difficult parts (Kristen Eby cited in Gloss 2009: 13).

5.3.8 Marking

Another technique that may be used to help protect the voice is marking. By marking, dynamics and energy levels are reduced to below those of voce piena (full voice), with pitches only being suggested. It is useful during rehearsals, especially in ensemble singing where frequent repetition may have to be done. A singer should learn how to apply the technique in order to avoid its dangers. Relying on marking for an entire rehearsal can be more strenuous on the larynx than singing would be. The singer should never sing everything an octave lower than being written, although the periodic lowering of a few high notes or an upper-voice phrase should not be harmful. When a singer is experiencing vocal problems, but still has to do the rehearsal, proper marking can be very helpful. To help the rest of the ensemble all entrances should be sung and the other phrases only marked. Habitually marking during rehearsals with the intention of saving the voice for the performance is dangerous. Constantly marking strenuous music right up to performance time will not have taught the required pacing of energy, nor would it have built up the necessary vocal stamina (Miller 2004: 179).

5.3.9 Awareness

While listening to the full choral sound, voice learners should stay aware of their own voices. If any soreness is experienced, the cause should be established. Perhaps the singer is pushing too much in order to produce a desired volume. Voice learners/soloists should relinquish the need to hear themselves over other singers and concentrate on the collective sound.

In other cases, bad techniques in the choir may sometimes be mimicked by the voice learner. If the choir director makes suggestions or requests that strike the voice learner
as vocally unhealthy, their implementation should first be discussed with the voice educator. If the conductor is not promoting healthy technique the voice learner should seriously reconsider participation in the group. “Having a sore voice is not a sign of a good vocal workout!” (Kristen Eby cited in Gloss 2009: 13). Voice learners should always be aware of their responsibility to safeguard their general and vocal health. Guidelines regarding this are given in chapter 7.

6. Conclusion
In conclusion, some quotations are put forward that represent a summary of the different points raised in this chapter. The American Academy of Teachers of Singing (cited in Sjoerdsma 2005: 7) comment as follows on the relationship of cooperation that should always be operative between the learner, the voice educator and the choir conductor:

> It is essential for the well being of all concerned that choral conductors, voice teachers, and singers work together in a spirit of openness and mutual cooperation. Conductors are in a position to refer choristers to appropriate voice teachers. Some conductors are voice teachers themselves. They should develop relationships with voice teachers, seek their advice and be open to their insights about the vocal health or development of their students. Voice teachers should establish a dialog with choral conductors with whom their students sing or might sing. Attending performances or rehearsals can be very helpful in fostering a good working relationship. The highest professional behavior and respect must accompany each of these relationships. For the sake of all, especially the student involved, any power plays or demeaning of authority must be avoided at all costs.

Kristen Eby (cited in Gloss 2009: 12) states that:

> While choral singing has its potential adverse effects, I would contend that most of the dangers of choral singing for the soloist are just as likely to be found in private voice studios. A pushed tone, singing in an unhealthy range, or singing literature that is not appropriate are all issues that I have observed in voice studios as well as choirs.

Smith & Sataloff (2006: 130) summarize the role of the voice educator in the choral context as follows:

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21 Or the voice studio/classroom at school.
Ideally, every singing teacher would be affiliated with a choral organization, acting as a consultant on vocal matters whenever possible. In order to advise students, singing teachers should be acquainted personally with the choral conductors within their immediate area. Solo singing and choral singing are compatible but different vocal activities. Teachers of singing and choral conductors must work together to ensure the vocal health of all singers.
CHAPTER 9

CONCLUSION

1. Introduction
This study of the voice has provided a thorough survey of relevant sources – including selected literature, prescribed repertoire, interviews and personal encounters – that provide for the formulation of a teaching method appropriate for the high school learner studying classical singing, taking into consideration the vocal health of the developing singer and the relationship between solo singing and choral singing.

2. Summary and realisation of aims of the study
Given the fact that a large amount of current literature is either more applicable to the adult soloist than to the teenage singer, or to the class music environment in the case of the literature devoted to the younger singer, a need exists for a critical study of such sources in order to extract from them those principles that are applicable in the case of the developing voice of the school learner involved with solo singing of classical repertoire, either as school subject or in private study, as well as to consider the reciprocal relationship that should ideally exist between such solo singing and participation in choral music performance. The most important endeavour of this study has therefore been to put forward a comprehensive guide, not only for the altruistic purposes of academic critique, or for its usefulness to me in my own teaching career, but ultimately and hopefully to be of use to any or all South African high school educators teaching voice as subject. As such, the guide has had to be relevant within the South African school situation and syllabus guidelines, whilst staying focused on the needs of the adolescent voice and contributing towards the teaching, facilitation, management and protection of the developing voice. With this purpose in mind, I have been at pains throughout this study to ensure that, in addition to being technically reliable, critically engaged and sufficiently comprehensive, it is nevertheless written in
such a fashion that it will be as accessible to music educators who are not voice specialists as it will be to those who are. The training of voices is a technical and difficult task and can seem daunting to some educators at first, particularly if they have not had the benefit of such training themselves. In view hereof this study has attempted to draw together the concepts and principles involved, presenting them in their essence, in a manner that will make them as easily accessible as possible for the benefit of the growing number of learners currently taking voice as school music subject in this country, as well as for the educators who are tasked with ensuring that such learners are properly taught.

In order to achieve all this, I have set out to realize the three outcomes and useful purposes of social research determined by Babbie & Mouton (2001: 79-81), namely, exploration, description and explanation. This has been accomplished in the following ways:

- A critical study of a body of knowledge pertinent to the teaching of voice has been undertaken, exploring, describing and explaining various aspects, points of view and methodological approaches, and deducing from them a set of basic principles on which to build a relevant method of voice appropriate for the high school learner.

- The central chapters of this study have presented the method itself, covering first basic auxiliary principles and practices, and then engaging in greater depth with the classroom situation as such. This latter topic has encompassed all aspects contained in the lesson plan, ranging from the development of fundamental aspects such as posture, breathing, voice emission, voice placement and resonance, to the identification and gradual development of vocal range and other technical abilities. Also covered are vital strategies for warm-up exercises, aural development and sight-singing development. As a supplement hereto, a checklist of typical vocal faults encountered in the teenage singer is provided, along with useful strategies for the identification and correction thereof. These typical faults include intonation problems, breathiness or lack of breath control,
impaired vocal quality and resonance problems, and style and interpretation faults. These chapters are enhanced by the auxiliary materials provided in the various appendices included in this study, providing illustration of the applicability of the methodological principles therein contained in the documentation of various learner cases (Appendix A), suggested repertoire (Appendix B), and a detailed analysis of a number of pieces at each relevant Grade level selected from this repertoire list, with particular reference to the methodological principles and teaching strategies discussed (Appendix C).

A brief summary of sources has been given to provide an explanation of basic physiological facts relevant to the voice and phonation, useful not only as auxiliary learning material in the classroom situation itself, but in the case of this study serving as necessary background for the detailed study of issues affecting the vocal health of developing singers which follows thereafter. This involves an outline of the numerous vocal disorders that may affect such learners, with suggestions for possible rehabilitation and remedial programmes provided. It is concluded that there is a definite interrelationship between music and health. Music generally affects health (usually positively), and health – with specific reference to vocal health – affects music production, particularly in the case of singers.

Finally this study has considered the relationship that should ideally pertain between the voice educator and choir director, and between the teenager as soloist and as chorister. Despite potential detrimental effects, which should not pose great problems if managed with care by all concerned, it is argued that choral participation has a host of benefits for the learner studying solo voice as instrument, and should be encouraged in order to enhance the overall musical learning experience.

In addition to a thorough study of relevant literature, throughout this study I have drawn extensively from the notion of the so-called “phenomenological encounter”. These encounters (good and bad) range from my experiences as teenage singer
and later as student singer studying voice at the Jill Nock Studio in Port Elizabeth, as one who has experienced vocal health problems in the past, as chorister of various Port Elizabeth based choirs over the years, and as voice educator and choir director at Framesby High School and Harvest Christian School in Port Elizabeth. They also describe my encounters with the lived experiences of others, including those of my teacher, Jill Nock, those of the medical practitioner Dr John Black (as evidenced in the interviews conducted with them and attached to this study as Appendix D) and those of a selected number of learner cases included in Appendix A. In addition, the basic research problem that has motivated this study is grounded in my encounters with the lived experiences of fellow music educators in the Nelson Mandela Metropolitan area, where the growing number of music learners wishing to specialise in voice was noted, as was the general sense amongst such educators, many of whom are not themselves voice specialists, that guidance in a voice teaching method was needed that was specifically aimed at the developing voice of the teenage singer. However, although much of this study is grounded in the idea that “a good phenomenological description is collected by lived experience and recollects lived experience, is validated by lived experience and validates lived experience” (Von Manen 1990: 27), I have nevertheless attempted throughout to ensure a healthy balance in the inevitable tension such an approach brings about between that which “is learnt through personal experience” and that which is “learnt through theory or abstract reflection” (Barnacle 2001: 3).

3. **Implications and suggestions**

Although this study and its proposed teaching method for the developing voice of the teenage singer does not profess to be the definitive or ultimate answer to this intriguing subject, it does present strategies that I have found to be effective in my own practice, as evidenced, for example, in the progress results of the learner cases discussed in Appendix A. Fields (1984: 114-115) very aptly states: “Therefore, the test of any teaching device is its useful results”. It is hoped that continued critical and scholarly
discourse on this particular subject will never lose sight of such pearls of wisdom, thus ensuring appropriate accomplishment of Von Manen’s suggestion that “a strong and oriented pedagogical relation to the phenomenon” should form one of the cornerstones of the phenomenological research approach within the educational context (Von Manen 1990: 30-31).

Education, as stated earlier in this study, involves lifelong learning. In the light of the many under-qualified and unqualified voice educators I regularly encounter in the Nelson Mandela Metropolitan schools alone (and I have no reason to assume that similar circumstances do not exist elsewhere in South Africa), and in the light of my own need of more experience, it appears that there exists a great need for continued education and both formal and informal training for voice educators in the high school environment. This may be done through the attendance of master classes, mutual support-networking (where educators assist one another, not only at a particular school, but also regionally, between schools or even between schools and studios) and professional support by societies. Professional societies also offer training opportunities and the prospect to network and meet knowledgeable colleagues.1 Networking not only provides opportunities to discuss problems and frustrations, but, in my particular case, has in fact provided valuable encounters that served as rationale for this very study.

A further dimension of networking that might be explored as a useful strategy to address the needs of voice educators in the South African schooling system is described by Deeter (2008: 37-39) as ‘team teaching’, which he explains as follows:2

Just as students can learn from watching their peers during a studio class, teachers also can gain knowledge from observing techniques taught by colleagues. By recognizing that students understand and process information in a variety of different styles, another teacher’s input can validate methodology already taught or perhaps communicate something in a different way that formerly was not comprehended. Additionally, observing a colleague working with one’s own singers opens up the possibility of exploring a dialogue through which teachers can learn from each other. The ability to have an open exchange of ideas in front of students sets a strong

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1 E.g. The South African Society of Music Teachers (SASMT).  
2 Studio classes within the South African educational environment may involve educators from different schools and private institutions. Qualified teachers and educators from private schools and studios may get involved in these endeavours and contribute their knowledge and skills.
example of collegiality and encouragement, and serves as a role model for students to create supportive peer relationships.

In the same way that students and teachers need time to establish good working relationships, it can take time for colleagues to learn how to communicate with each other about differing ideas (teaching styles, technique, performance style, etc.). Honest communication in and out of the classroom is essential to developing the collaboration necessary to run an effective joint studio class.

But whatever good may be brought about by such networking initiatives, it is clear that, given the fact that subject music is accommodated as official FET subject, it is ultimately the responsibility of the Department of Basic Education to identify the growing need for well-trained voice educators in South African schools, and to address this need in a concerted, all-encompassing and organized fashion by implementing the necessary strategies at provincial or even national level, and making the funding and mechanisms available that will bring this about.

4. Conclusion

In closing, I reiterate the hope that voice educators everywhere, and particularly those tasked with the sensitive and vulnerable voice of the teenage singer, will continue to experience joy and a sense of fulfillment and achievement in their work, while always keeping in mind that learners are not just voices, but complete people with their own personalities, fears, hang-ups, emotional problems and their own particular songs to sing. The old adage “By your pupils you’ll be taught”; so eloquently stated by Anna in The King and I, is as true now as it was when it was first coined. Through our encounters with our learners, our own learning in all its facets never ends. They spur us on to greater reflection, sometimes to new theoretical abstraction and other times to new classroom strategies and improved practice, but always to places where the music is that much more powerful and the songs that much sweeter.

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 SOURCES


Keel, F. 1926. *Vocal studies for class singing. Grade 1 (Junior)*. London: ABRSM.


Lamprecht, J. *nd*. *We love singing!* Unpublished leaflet with warm-up exercises for choir rehearsals. Port Elizabeth, South Africa.


Purcell, H. 1688. “Ah! how pleasant ’tis to love”. Arranged by A. Moffat. 1900. Forsyth Bro. ©1900.


Slater, DD. *nd*. *Vocal physiology and the teaching of singing – a complete guide to teachers, students, and candidates for the A.R.C.M., L.R.A.M. and all similar examinations*. London: J.H. Larway.


http://www.trinitycollege.co.uk/resource/?id=4193.

Trinity Guildhall. *nd*. *(Various technical exercises)*.


Unisa. 2002. *(Various technical exercises)*.


http://kidsandteens.dansk.org/uncategorized/vocal-health/.


APPENDIX A

LEARNER CASES AS EXAMPLES OF PHENOMENOLOGICAL ENCOUNTERS

Name: Learner case A.
Age: 15 (2010).
Sex: Female.
Academic ability: Strong.
School grade: Grade 9 (2010).
Voice type¹: Soprano (high voice).
Music grade: Grade 3.
Musical ability: She is very musical and sings in the school choir.

Problems/challenges: She finds it challenging to keep the sound lifted as she sings down her vocal register.

Corrective procedures: She has been given the Frühling exercise.²

She is encouraged to “think up” when singing a descending interval or passage, which helps to lift the sound.

Progress: Her forward sound placement has improved. She has become more adept at widening the throat as she sings a descending passage.

¹ See Chapter 2: Section 3 Range (p.29-31).
² See Chapter 4: Figure 4.8. Exercise for resonance (p.82).
Name: Learner case B.
Age: 15 (2010).
Sex: Female.
Academic ability: Average.
General description: Her keen interest in and her talent for sports takes up much of her time, so that it is often difficult to fit in lesson times.
School grade: Grade 9 (2010).
Voice type: Mezzo soprano (middle voice).
Music grade: Grade 3.
Musical ability: Not very strong. She chose to take music as a subject for grade 8 and 9, merely because she did not want to take isiXhosa. Needing an instrument, she decided on voice.

Problems/Challenges: She does not have a big range, which limits my selection of music for her. She is inclined to lift the shoulders as she breathes in. Her pitch also tends to go sharp.

Corrective procedures: Since the onset of her voice lessons, attention has had to be given to her breathing. She has to be encouraged to understand the concept of expanding the waist and not lifting the shoulders while she inhales. She is told to put her hands around her waist and to try pushing them away while inhaling. She needs to put the focus there and not up at the shoulders, because this creates tension in the neck area, with a negative effect on the vocal folds.

Another way of getting her to put the focus at the right place for breathing, is by letting her bend over at a 90° angle with one hand on the waist. As she breathes in, she is instructed to feel the expansion of the waist with the hand. This exercise can be done while standing upright as well. Care has to be taken not to use both hands on the sides of the waist while doing this exercise, because that will tend to let the shoulders move upwards, which is incorrect.

For the pitch problem she has to focus all the sound into her head register as the pitch rises, but to project the sound more forward, using her middle register as well. She has to remember not to put too much breath pressure
into the sound, as that will cause the pitch of the tone to go sharp. The following exercises (Figures A.1 to A.3) are recommended:

**Figure A.1. Nênônooni - legato**

```
nenônooni nenônooni nenônooni nenônooni nenônooni
```

**Figure A.2. Nênônooni - staccato**

```
nenônooni nenônooni nenônooni nenônooni nenônooni
```

**Figure A.3. Interval exercise**

```
nô
```

Ng then adding -oo. She is required to do the exercise on moo as well, widening the back of the throat.

**Progress:** By paying more attention to breathing exercises she is starting to do the breathing correctly and shifting her focus to expanding the waist while inhaling instead of lifting the shoulders. The above exercises have made her more aware of forward sound placement.

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3 Nock nd.
4 Nock nd.
5 Nock nd.
Name: Learner case C.

Age: 18 (2009).

Sex: Female.

Academic ability: Strong.

General description: A school prefect who took part in the annual school musical.

School grade: Grade 12 (2009).

Voice type: Soprano, with a vocal range extending from about b⁰ to b♭² (middle c being c¹).

Music grade: Grade 7.

Musical ability: Gifted. Very musical. Very good intonation and sight-singing abilities. Member of the school choir.

Problems/challenges: She took music as a subject at school, and changed her main instrument focus from piano to voice in her grade 10 year. As a gifted and academically strong candidate, she was able to cope with this change. She proceeded through the graded voice repertoire with relative ease so I did not want to hold her back, while still taking into consideration her young developing voice. In her grade 12 year I decided to enrol her for the Grade 7 Trinity Guildhall voice examination, which she was keen to do as she was thinking of studying music at university. She has a lyrical sounding soprano voice with a light and sweet tone, and a well-developed musical ear. Since her Grade 7 repertoire contained runs, she had to develop this ability and therefore the following exercises were recommended to promote agility of the voice.

Corrective procedures (Figures A.4 to A.8):

Figure A.4. Exercise for runs⁶

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⁶ Nock nd.
Progress: She eventually excelled in her Trinity examination, as well as in her practical examination for the Senior Certificate Examination, was accepted as voice student at university (where she is doing very well) and is also currently a member of the university choir.

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7 Nock nd. (original version on p. 261)
8 Nock nd.
9 Unisa 2002 syllabus. (Various technical exercises).
10 Trinity Guildhall nd. (Various technical exercises).
Name: Learner case D.
Age: 18 (2009).
Sex: Male.
Academic ability: Strong.
School grade: Grade 12 (2009).
Voice type: Baritone -- his vocal range comprises a¹ to d². As this is a boy’s voice, the tone will sound an octave lower.
Music grade: Grade 5.
Musical ability: Musical. He sang in the school choir and school worship group and played the piano.

Problems/challenges: He had a limited range, being unable to sing very high or very low. He also had an overall breathy and husky tone, because he let out too much air while singing. He forced the voice when singing into his upper register. This was the sound that he liked when listening to recordings. It was crucial to correct this habit of forcing the voice up, as he could damage his vocal folds. He was already complaining about discomfort in his throat when he sang higher notes.

Corrective procedures: First of all he had to do exercises alleviating tension, as shown in Figures A.9 and A.10 below.

Figure A.9. Moi on intervals¹¹

![Figure A.9. Moi on intervals](image1)

Figure A.10. Staccato arpeggio exercise¹²

![Figure A.10. Staccato arpeggio exercise](image2)

He was given exercises to obtain a more even tone, for example exercises that work on the vowel sounds – first saying the vowels (ʊ, i:, ɔ:, a:, ə, ü) and

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¹¹ Nock nd.
¹² Nock nd.
then adding pitch, e.g. Exercise for resonance 1 (Figure 4.4), Exercise for resonance 2 (Figure 4.5)\textsuperscript{13} and Figures A.11 to A.13 below.

**Figure A.11. Blüh-blau**\textsuperscript{14}

![Blüh-blau notation]

He had to be encouraged to keep the space in the head open by lifting the soft palate (the yawning feeling).

**Figure A.12 Unisa Grade 3 no. 1**\textsuperscript{15}

![Unisa Grade 3 no. 1 notation]

He first did this in minims and then quavers.

**Figure A.13 Unisa Grade 4 no.1**\textsuperscript{16}

![Unisa Grade 4 no.1 notation]

This exercise was done on Kô, with the jaw moving on the crochets, and no jaw movement on the quavers.

The following exercise (Figure A.14) helped prevent forcing the voice up.

**Figure A.14. Ni-yôh exercise**\textsuperscript{17} (ni:yô):

![Ni-yôh exercise notation]

He was encouraged to sing the exercise with an even flow between the registers, while opening up. Ni keeps the intensity forward, while Yôh widens the back of the throat.

\textsuperscript{13} See Chapter 4: Section 2.1.4.1 Higher resonance (p. 80).
\textsuperscript{14} Nock nd.
\textsuperscript{15} Unisa 2002 syllabus. (Various technical exercises).
\textsuperscript{16} Unisa 2002 syllabus. (Various technical exercises).
\textsuperscript{17} Nock nd.
**Progress:**
What made it easier for him to overcome his problems was using his hand when singing to the top note. Raising his arm at an angle of 45° from the shoulder up and moving downwards with the hand while reaching for the top note helped him to orientate his brain into thinking downwards while singing upwards to his top notes.
**Name:** Learner case E.

**Age:** 15 (2010).

**Sex:** Female.

**Academic ability:** Average.

**General description:** She is very involved in sports and drama at school.

**School grade:** Grade 10 (2010).

**Voice type:** Soprano (High voice)

**Music grade:** Grade 3.

**Musical ability:** Very musical. Very involved in choir singing both at school and at provincial level. She has started with music as a subject in her grade 10 school year, but has been with me as a private student since the beginning of 2009.

**Problems/challenges:** Her tongue is inclined to go to the back of the throat, especially at her high notes. When the tongue goes back as high notes are sung the sound will sound smothered and not free. She came to me with this problem. Since then she has also been very much involved with choir singing, where the problem is unfortunately reinforced. It has therefore remained a difficult habit for her to break, related as it is to muscle memory. It is not always possible for the choir director to notice individual problems. After a year of singing lessons some progress has begun to be noticeable. However, as soon as she has been back at choir rehearsals and singing with the other choristers the bad habit would return so that she constantly needs to be reminded to keep her tongue forward.

**Corrective procedures:** She has to stand in front of the mirror so that she can see the placement of her tongue. She has to be reminded that the moment her tongue goes back she is closing the vocal fold passage, as if her brain is being prepared to swallow food and closing the vocal fold passage to prevent the food from going down the wrong passage. She seems to grasp that concept clearly. Tongue exercises like *Tingalinga* (Figure A.15) and *Snake tongue* (Figure A.16), as well as an articulation exercise (Figure A.17) are recommended to achieve flexibility of the tongue.
Figure A.15. Tingalinga\textsuperscript{18}

tongue moving up and down like see-saw on *ting*, the *(i)ng* sound is constant (feel the vibration in the nasal area)

Figure A.16. Snake tongue\textsuperscript{19}

tongue moves in and out of the mouth like a snake's tongue

Figure A.17. Articulation exercise\textsuperscript{20}

Also to be done on: lili, kiki, pipi, bibi, sisi, fifi, titi (tongue only), shishi, vivi, gigi

Progress: She has made progress, although she constantly needs to be reminded about her tongue. She can hear the difference in the sound when her tongue is back. She has to be reminded to keep her tongue forward during choir practices. She has recently received the highest marks at a local regional eisteddfod and was chosen to perform at the final gala concert, where she was chosen as one of the two best vocalists overall at the eisteddfod.

\textsuperscript{18} Nock \textit{nd}.  
\textsuperscript{19} Nock \textit{nd}.  
\textsuperscript{20} Nock \textit{nd}.
Name: Learner case F.

Age: 15 (2010).

Sex: Female.

Academic ability: Below average.

School grade: Grade 9 (2010).

Voice type: Alto - her vocal range extends from $a^1$ to $d^2$.

Music grade: Beginner.

Musical ability: She chose music as a subject from grade 9 and sang in the school choir. She has a good alto voice, but because her musical background is very limited, she struggles to sing from musical notation.

Problems/challenges: The challenge with her is that she has a strong voice, but a problem with intonation, which is connected to an ‘ear problem’.

Corrective procedures: Pitch exercises has to be done with her by playing a note (or singing it, because sometimes the overtones confuse learners when they are played on the piano) and letting her repeat it. If she struggles to reproduce the given pitch accurately, the pitch she has just sung is played (or sung) to her, leading her to discover the difference. This has helped her to become more conscious of pitch accuracy. Quite often she has to be reminded to listen carefully, a new concept to her. In addition, she is inclined to force her voice a little, for which purpose the *Ha ha ha ha / koo koo koo koo* staccato exercise on 2 tones would be beneficial (Figure A.18). This helps to lighten up the voice and also uses and activates the diaphragm to support the tone while singing higher notes.

Figure A.18. Staccato intervals

![Staccato intervals](image)

21 Nock *nd.*
**Progress:** In the school choir she has been put next to a learner who has a good sense of pitch and this has improved her listening skills, which in turn helps her to sing more on pitch. She has also been told not to sing louder than the learner next to her, which helps to remind her not to force her voice. Her sound has improved and she has a much less forced sound. She still needs to be reminded with hand gestures to lighten up the sound, but she is starting to grasp the concept.
Name: Learner case G.
Age: 17 (2010).
Sex: Female.
Academic ability: Above average.
General description: She excels at various sports and was a school prefect.
School grade: Grade 12 (2010).
Voice type: Alto - her vocal range extends from g to e\textsuperscript{2}.
Music grade: Grade 4.
Musical ability: She enjoys singing, but her musical ability is average. She sang in a gospel group at school, performed in groups at church and sometimes as soloist.

Problems/challenges: She experienced intonation problems, which presented as flat singing. As she was so involved in sports it was often difficult to find lesson times or even time for substitute lessons.

Corrective procedures: She needed to lift the soft palate when singing her higher notes. She was encouraged to experience the feeling of opening up inside the mouth to activate the soft palate, as if preparing to yawn, a sensation that may also be compared to having a hot potato in the mouth. The following exercises (Figures A.19 and A.20), as well as the Nênônooni – legato exercise (Figure A.2) were recommended to address her developmental needs.

Figure A.19. Kookoo exercise for resonance\textsuperscript{22}

\textsuperscript{22} Nock \textit{nd}.
Progress: Her singing and pitch accuracy eventually improved a great deal and she has made a lot of progress.

Figure A.20. Lunôh exercise

\[ \text{Figure content goes here} \]

23 Nock *nd.*
**Name:** Learner case H.

**Age:** 17 (2010).

**Sex:** Male.

**Academic ability:** Above average.

**General description:** Involved in drama at school.

**School grade:** Grade 11 (2010).

**Voice type:** Bass -- low voice, with a range extending from c to e₈². As this is a boy's voice it sounds 1 octave lower.

**Music grade:** Grade 4.

**Musical ability:** He is very musical and a member of the school choir, taking music as subject with voice as instrument. He started with singing lessons in grade 9, taking piano as instrument for subject music. In grade 10 he discontinued piano lessons to do voice as his instrument, as he was making good progress with it.

**Problems/challenges:** His high register was at first restricted and he experienced difficulty with relaxing the throat at the top notes. He has a very good lower register and has been used in the choir for especially that ability. When he first came to me his upper register was weak and he had to be helped to practise his upper register/falsetto. He was given exercises to lighten up the top notes. Most pieces for bass voices go as high as d₂, so it is crucial for him to exercise his upper register. He has to be kept aware of supporting his top notes by widening the back muscles and contracting the stomach muscles. If he were to rely on his voice to sing these top notes he would hurt his voice, for the voice alone cannot endure the pressure from singing high notes – the sound must be supported by a relaxed throat.

**Corrective procedures:** Apart from letting him do sustained high-pitched humming, the following exercise (Figure A.24) has also helped:
He is encouraged to place the $ah$ high and make it bright, keeping the lips and sound forward.

**Progress:** He now sings with much more freedom in his upper register and reaches the $d$ an octave above middle $c$ with a great deal of ease. He progressed to the third round of the 2010 Idols Competition at the Port Elizabeth auditions.

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24 Nock *nd.*
Name: Learner case I.

Age: 16 (2010).

Sex: Female.

Academic ability: Very strong.

School grade: Grade 10 (2010).

Voice type: Soprano (high voice).

Music grade: Grade 5.

Musical ability: She is very musical and plays the piano and saxophone. She sings in the school choir, as well as in the Eastern Province Youth Choir.

Problems/challenges: The challenge with this learner is to help her improve her diction. She does not articulate her consonants enough. Her vowel sounds like *ah* and *eh* are too dark. Because she plays the saxophone for which she needs to purse her lips together to make a sound, she is inclined to do the same when singing, causing some strain on her throat. At voice lessons she sometimes complains of a pain on the side of her throat when she sings her top notes. She has therefore been introduced to exercises that will assist in relaxing the jaw and the throat while singing.

Corrective procedures: To help articulate the consonants for clearer diction, the *Articulation exercise* (Figure A.17) and the following exercises have been recommended:

The *Dahmêh exercise* (Figure A.26) is done to lighten the *ah* and *eh* sound and to focus the vowel sounds forward by adding consonants in front of them:

Figure A.26. Dahmêh$^{25}$ (da:me)

Putting an “I” in front helps to make *ah* brighter.

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$^{25}$ Sieber (1822-1895).
The following exercise (Figure A.27) may also be used:

**Figure A.27. Mia**(mi:a:)

Unisa Grade 4 no.1 (Figure A.13) (p. 255) is sung on *Mwah (Moi)* and requires a relaxed jaw, an open throat, dilated inner nostrils (by utilizing the yawn feeling) and a lifted soft palate.

Learners who have a problem with lightening up the vowel sounds like *ah*, *eh* and *eeh*, should be encouraged to imagine opening a fan in the nose and head area. This mental picture will remind them to make use of the nose and head area when they sing these vowels.

**Progress:** She is starting to focus more on speaking the text as well as on making her vowel sounds lighter and keeping the jaw more relaxed while singing, although she still needs to be reminded about it. She has commented that the mental image of the fan has helped her to understand the lightening up of the vowel sounds.

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26 Nock *nd.*
Name: Learner case J.
Age: 15 (2010).
Sex: Female.
Academic ability: Above average.
School grade: Grade 9 (2010).
Voice type: Soprano – she has a high voice with a vocal range from middle c\textsuperscript{1} to g\textsuperscript{2}.
Musical grade: Grade 3.
Musical ability: She plays the piano and sings in the school choir. She is also an active participant in musicals and involved in drama.

Problems/challenges: She has a problem with projecting the sound forward, especially on the eeh sound. Her mouth is inclined to pull sideways into the smiling position.

As with all learners who experience problems with keeping the sound and lips forward, this exercise is suggested: She has to sit on a chair while leaning forward at an angle of about 45° as she sings. This causes the lips to go forward automatically. She is then encouraged to keep that same feeling in the lips when standing up and singing. The Lunôh/Lee law exercise (Figure A.20) is helpful here, as it focuses on lifting the cheeks slightly to lighten the sound.

The following exercises also help with sound placement as well as breath control: Nênônooni – legato exercise (Figure A.1) and Nênônooni – staccato exercise (Figure A.2).

Progress: With time she has grown accustomed to positioning her lips a great deal more forward on the eeh sound, without constant reminders to have them in that position.
Name: Learner case K.

Age: 16 (2010).

Sex: Female.

Academic ability: Very strong.

General description: She is very good at sport at school.

School grade: Grade 10 (2010).

Voice type: Alto – she has a medium low voice with a vocal range from a₁ to e₂.

Musical grade: Grade 4.

Musical ability: She plays the piano and sings in the school choir.

Problems/challenges: A major personal problem this learner has is setting high goals for herself. She becomes very disappointed if she struggles with something and will then get dejected about it. As she is so temperamental, this will influence the way I behave towards her during her lesson. With her being an average voice learner, she has to receive constant positive encouragement. With this learner it would not help to confront her about the way she acts, because that would just make her angry or let her cry. When I notice that she is depressed, I ask her what songs she would like to work on and then take it from there. Learners sometimes have problems that we as educators are not aware of. Because of the fact that the voice educator is working with a voice (which is so personal to each learner), as well as with the emotional human being, it is important never to criticize a learner to the point of discouragement. The educator must find ways of turning the negative into a positive challenge. After having consulted with the school principal about the learner’s problem, he has encouraged me to persevere with this learner, believing that the intimacy of the one-on-one teaching environment in the music lesson might well be the least threatening environment in which she will be encouraged to develop emotional maturity. I do not put so much emphasis on technique, but rather work on extending song repertoire. Through this she learns about different styles and explores various kinds of rhythms (which also helps with the problem she has with counting in music).
**Progress:** She recently agreed to perform at a music concert at school, which is a huge step forward for her. After four years of singing lessons she passed her first external singing examination (Trinity Guildhall Grade 4) and did well.
**Name:** Learner case L.

**Age:** 18 (2010).

**Sex:** Female.

**Academic ability:** Very strong.

**General description:** She is very musical, sang in the school choir and provincial choir, and was a school prefect.

**School grade:** Grade 12 (2010).

**Voice type:** Soprano (High voice)

**Music grade:** Grade 6.

**Musical ability:** Musically gifted.

**Problems/challenges:** She was referred to me at the beginning of 2010, well into in her grade12 year, because she had entered for an external singing examination to prepare her for studying music at university in 2011. The educators at her school were unable to prepare her for such an examination, because of their limited knowledge of voice training. She had progressed to Grade 6 Trinity Guildhall with her technical exercises and had been singing mostly repertoire from the Trinity Rock School syllabus. My challenge was to get her to the Grade 6 Trinity Guildhall standard for the examination at the end of the year. I knew it was possible to do this, because of her work ethic and advanced musical ability. Some fundamental techniques were not in place: She was inclined to tighten the jaw when singing higher notes and thinning the sound out as she went higher. Apart from that she tended to sing in the smiling position. Another challenge for her was singing repertoire from different style periods and in different languages (French and Italian). This was completely new to her.

**Corrective procedures:** Exercises were recommended for loosening the jaw and focusing the sound more forward instead of sideways. She was also given exercises to keep the resonance as she went up into her higher register and to prevent thinning out the sound as she sang higher. She had to listen to recordings of the foreign language pieces in her repertoire in order to facilitate the learning process, but it was made clear to her that she should not attempt to copy the singers.
These are examples of exercises that assisted her with maintaining resonance while singing higher:

The *Ni-yōh exercise* (Figure A.14) and *Exercise for runs* (Figure A.4).

**Progress:** She passed her Senior Certificate external practical examination with 97% and she also went on to pass the Trinity Guildhall Grade 6 examination. All the points on which she was criticized in these examinations had to do with the fact that she did not have enough time to prepare thoroughly. For instance, as she had to learn the new foreign language songs in so short a space of time that it was risky to rely on her memory under these stressful circumstances. As a result, singing from the music had some influence on interpretation and communication during her performance. Apart from that she did very well.

She was accepted into university studies in music and voice in 2011.
Name: Learner case M.
Age: 14 (2010)
Sex: Female.
Academic ability: Very weak.
General description: She was often absent from school.
School grade: Grade 9 (2010).
Voice type: Soprano (High voice)
Musical grade: Beginner.
Musical ability: A very talented singer with an exceptionally good voice. Of all the grade 8 voice learners in her school in 2009, she received the highest marks for her practical music examination.

Problems/challenges: Although the problems this learner experienced were not directly related to her voice lessons, their outcome has probably destroyed whatever future she might have had as a singer. From the very first lesson with this learner I experienced an uncomfortable feeling that things were “not altogether alright” with this very pretty girl. There seemed to be some discrepancy between her very sweet and innocent demeanour and the grown up way in which she actually presented herself physically. Although she really had a beautiful voice, she seemed not truly motivated and interested in singing. As soon as I began to think that she was finally making some progress, she would be absent again. She never wanted to perform. Even after having agreed to do so, she just would not arrive for the concert.

I eventually discovered that she came from an unstable home and that she had been involved with a much older man, who also happened to be a perlemoen (abalone) smuggler. At the end of her grade 8 school year she changed subjects and dropped Music for isiXhosa, stating “financial reasons” and declaring her intention of pursuing her singing lessons with a private teacher who apparently offered a more affordable option. I am not sure whether that ever happened, but the next I heard was that she was in a very serious condition in a hospital in a nearby town. It appeared that her boyfriend had introduced her to the drugs Ecstasy and cocaine. Following a rehabilitation course she had a serious relapse after having taken some other
pills. At that stage she was still in a coma in the intensive care unit. Amongst other internal damage her one lung had collapsed, the insides of her nose, throat and complete vocal mechanism were burnt and damaged and her legs were paralyzed. This meant that even after having survived the trauma, which she eventually did, she would never be able to sing the way she used to, if at all. The boyfriend admitted that he never had any feelings for her, but was only playing with her.

This case should act as a warning to all voice learners (and learners in general) on the dangers of drugs and should also stress the importance of vigilance and guidance on the part of voice educators.

**Progress:** She dropped music as a subject and her singing lessons with me. After a few months back at school, she suffered a relapse and had to leave school again. To date she has not returned to school.
APPENDIX B  
REPERTOIRE: GRADED EXAMPLES

These examples are drawn from the prescribed repertoire lists for the Unisa, Trinity Guildhall and ABRSM voice examinations, but also include a number of my own suggestions for songs suitable at each Grade level. Songs marked in these lists with an asterisk are discussed in Appendix C, in order to serve as examples of the manner in which the proposed methodological principles put forward in this treatise may be practically applied in the teaching-learning experience of vocal repertoire at each Grade level. Songs marked with a ✓ should only be attempted as a challenge for advanced/gifted learners.

Initial
Food* – C. Crawly
My mother said – P. Gritz
I do confess thou’rt smooth and fair – J.M. Diack
Cradle song – N. Strogers
I know where I’m going – D. Wright
My father’s garden – F. Fowler
Kumbaya – Traditional folksong
The Lord’s my shepherd – S. Townsend

Grade 1
Where is love?* – L. Bart
My little pretty one* – J.M. Diack
As jy my kon volg – K. du Plessis
My uncle Rumbold – P. Harris
Edelweiss – R. Rodgers and O. Hammerstein
My favorite things – R. Rodgers and O. Hammerstein
My bonnie lies over the ocean – Traditional folksong
Lullaby – W. Davies
The garden where the praties grow – Traditional Irish song
Windy nights – C.V. Stanford
Candle on the water – A. Kasha and J. Hirschhorn
Away in a manger – W.J. Kirkpatrick
Caterpillar – D. Runswick
It’s a small world – R.M. Sherman and R.B. Sherman
All through the night – Traditional Welsh song
Whatever will be will be – J. Livingston and R. Evans
Love me tender – E. Presley and V. Matson
Passing by – E. Purcell
The paper boat – S. Young
The end of the world – A. Kent

Grade 2
Getting to know you* – R. Rodgers and O. Hammerstein
The miller of the Dee* – Traditional Folksong
Gebed – K. du Plessis
Cockles and muscles – Traditional Irish song
The second star to the right – S. Cahn and S. Fain
Let there be peace on earth – S. Miller and J. Jackson
A spoonful of sugar – R.M. Sherman and R.B. Sherman
Supercalifragilisticexpialidocious – R.M. Sherman and R.B. Sherman
A dream is a wish your heart makes – M. David, A. Hoffman and J. Livingstone
Who will buy – L. Bart
Part of your world – H. Ashman and A. Menken
Tomorrow – M. Charnin and C. Strouse
Chim chim cher-ree – R.M. Sherman and R.B. Sherman
Camelot – A.J. Lerner and F. Loewe
The ashgrove – Traditional folksong
Sweet nightingale – Traditional folksong
Go tell it on the mountain – Traditional folksong
I believe – E. Drake, I. Graham, J. Shirl and A. Stillman
Morning has broken – E. Farjeon and C. Stevens
Wiegenlied – A. Moffat (attributed to W. Mozart)
Wiegenlied – F. Schubert
The mallow fling – Traditional Irish song
The mermaid – Traditional folksong
You gentlemen of England – Traditional folksong
Mockin’ bird hill – V. Horton
Lullaby – W. Davies
Little boates – arr. H. Hughes
I got the sun in the morning – I. Berlin
A time for us – N. Rota
We kiss in a shadow – R. Rodgers and O. Hammerstein
Trust in me – R.M. Sherman and R.B. Sherman
Once upon a dream – S. Fain and J. Lawrence

Grade 3
Wouldn’t it be loverly* – A.J. Lerner and F. Loewe
Ah! how pleasant ‘tis to love* – H. Purcell
Ek het ‘n huisie by die see – L. Hofmeyer
Castle on a cloud – C-M. Schönberg
In a simple way I love you – N. Ford
Heidenröślein – F. Schubert
Early one morning – Traditional folksong
I whistle a happy tune – R. Rodgers and O. Hammerstein
The white rose of Athens – M. Hadjidakis
Tomorrow belongs to me – J. Kander
Whispering hope – A. Hawthorne
Can’t help falling in love – G. Weiss, H. Peretti and L. Creatore
True love – C. Porter
Greensleeves – English folksong
In my own little corner – R. Rodgers and O. Hammerstein
Red river valley – Traditional folksong
Bright eyes – M. Batt
Moon river – H. Mancini
What a wonderful world – B. Thiele and G.D. Weiss
Ye banks and braes – Traditional folksong
The Gartan mother’s lullaby - trad. Arr. D.Wright
My little pretty one – J.M. Diack
A soft day – C.V. Stanford
Non nobis domine – R. Quilter
God be in my head – W. Davies
Try to remember – T. Jones and H. Schmidt
Since first I saw your face I resolved – T. Ford
Die alte Mutter – E. Grieg
Schmetterling – P. Cornelius
Consider yourself – L. Bart
Perhaps love – J. Denver
It don’t mean a thing – D. Ellington
Early one morning – Traditional folksong
Shenandoah – Traditional folksong
All I do is dream of you – A. Freed and N.H. Brown
Charade – H. Mancini and J. Mercer
Enjoy yourself – C. Sigman
Best of friends – R. Johnston

**Grade 4**
Whistle down the wind* – A.L. Webber
Silent worship (Non lo diro col labbro)* – G. Handel arr. Somervell
Scarborough fair – Traditional folksong
Vaanwel my eie soetelief – Afrikaans folksong
Beauty and the beast – H. Ashman and A. Menken
Die berggans het ‘n veer laat val – P. de Villiers
A whole new world – A. Menken and T. Rice
I feel pretty – S. Sondheim and L. Bernstein
One hand, one heart – S. Sondheim and L. Bernstein
I don’t know how to love him – A.L. Webber
Hello young lovers – R. Rodgers and O. Hammerstein
The sound of music – R. Rodgers and O. Hammerstein
Unchained melody – H. Zaret and A. North
When daisies pied – T.A. Arne
Sandmänchen – J. Brahms
An die Laute – F. Schubert
Over the rainbow – H. Arlen and E.Y. Harburg
The lark in the clear air – arr. P. Tate
Nel cor piu non mi sento – G. Paisiello
When to her lute – T. Campian
Amazing grace – Traditional song
My love is like a red, red rose – Traditional folksong
My true love hath my heart – F. Keel
The turtle dove – arr. V. Williams
Lass of Richmond Hill – Traditional folksong
Care selve – G. Handel
Schneeglöckchen – R. Schumann
The Lord is my shepherd – H. Goodall
The way we were – M. Hamlisch
Pleading (Bitte) – R. Franz
Oh, what a beautiful morning – R. Rodgers and O. Hammerstein
Any dream will do – A.L. Webber
O for the wings of a dove – F. Mendelssohn - Bartholdy
For music (Für Musik) – R. Franz
Close to you – H. David and B. Bacharach
Smile – C. Chaplin
Se nel ben – A. Stradella

**Grade 5**
Star Vicino* – S. Rosa
Who is Sylvia?* – F. Schubert
Op Blouberg se strand – U. Jürgens
Shall we dance – R. Rodgers and O. Hammerstein
But not for me – G. Gershwin
They call the wind Maria – A. J. Lerner and F. Loewe
Oktobermaand – S. Le R. Marais
I dreamed a dream – C-M. Schönberg
Once upon a dream – F. Wildhorn
Panis angelicus – C. Franck
It was a lover and his lass – T. Morley
I attempt from love’s sickness – H. Purcell
Vieni, vieni o mio diletto – A. Vivaldi
Maria Wiegenlied – M. Reger
Love walked in – G. Gershwin
I could have danced all night – A.J. Lerner and F. Loewe
On the street where you live – A.J. Lerner and F. Loewe
I have dreamed – R. Rodgers and O. Hammerstein
The last rose of summer – F. von Flotow
Plaisir d’amour – J. P. E. Martini
Gia il sole dal Gange – A. Scarlatti
Seeligkeit – F. Schubert
The lass with the delicate air – M. Arne
When Laura smiles – P. Rosseter
My lovely Celia – G. Munro
Ich liebe dich – E. Grieg
Fly me to the moon – B. Howard
So deep is the night (Reviens mon amour) – F. Chopin arr. M. Melfi
Caro mio ben – G. Giordani
I’ll walk with God – P.F. Webster and N. Brodszky
No matter what – A.L. Webber and J. Steinman
Reflection – M. Wilder and D. Zippel
Beautiful – L. Perry
Waterloo – B. Anderson, B. Ulvaeus and S. Anderson
Great is the Lord – M.W. Smith and D.D. Smith
Bois epais – J-B. Lully
When love is kind – Old melody
Over the rainbow – H. Arlen
I asked the Lord – J. Lange and J. Duncan
Weep you no more – R. Quilter

**Grade 6**
Someone to watch over me* – G. Gershwin
Rêve d’Amour* – G. Fauré
Kom dans Klaradyn – S. Le R. Marais
Op my ou ramkietjie – P. Aerts
Alma del core – A. Caldara
Ständchen – F. Schubert
Somewhere out there – J. Horner, B. Mann and C. Weil
On my own – C-M. Schönberg
Someday – A. Menken and S. Schwartz
O holy night (Cantique de Noël) – A. Adam
Ave Maria – C. Franck
Ombra mai fu/Merciful God – G.F. Handel
Bel piacere (from Agrippina) – G.F. Handel
Oh sleep, why dost thou leave me? – G.F. Handel
Verdi prati – G.F. Handel
Voi che sapete – W.A. Mozart
Vouchsafe o Lord – H. Purcell
Where `er you walk – G.F. Handel
Somewhere – L. Bernstein
Love is here to stay – G. Gershwin
Can’t help lovin’ dat man – G. Gershwin
Don’t cry for me Argentina – A.L. Webber
If I loved you – R. Rodgers and O. Hammerstein
The impossible dream – M. Leigh
Under the greenwood tree – W. Walton
Tonight – L. Bernstein
If ever I would leave you – A.J. Lerner and F. Loewe
Chanson d’amour – G. Fauré
Auf ein altes Bild – H. Wolf
Élégie – J. Massenet
Vittoria mio core – G. Carissimi
Die Lotosblume – R. Schumann
Pur dicesti – A. Lotti
Fair, sweet, cruel – T. Ford
Still the lark finds repose – T. Linley
Bill – J. Kern
Dein blaues Auge – J. Brahms
What I did for love – M. Hamlisch
An die Musik – F. Schubert

**Grade 7**

Pie Jesu* – G. Fauré✓
Eis van die vonk* – G. Fagan
Kokkewiet – P.J. Lemmer
‘n Treurlied – S. Le R. Marais
Bist du bei mir – attrib. J.S. Bach
Die Forelle – F. Schubert
Summertime – G. Gershwin
O had I Jubal’s lyre – G.F. Handel✓
Vedrai carino – W.A. Mozart
Sebben, crudele – A. Caldara
Come again, sweet love doth now invite – J. Dowland
Lascia ch’io pianga – G.F. Handel
If music be the food of love – H. Purcell
Leave me, loathsome light – G.F. Handel
Ein Mädchen oder Weibchen – W.A. Mozart
An den Frühling – F. Schubert
Amarilli, mia bella – G. Caccini
Les cloches – C. Debussy
E’en as a lovely flower – F. Bridge
Not even summer yet – B. Britten
I got rhythm – G. Gershwin
Nice work if you can get it – G. Gershwin
Show me – A.J. Lerner and F. Loewe
Send in the clowns – S. Sondheim
Luck be a lady – F. Loesser
Something wonderful – A.J. Rodgers and O. Hammerstein
Stars – C-M. Schönberg
Take me to the world – S. Sondheim
In his eyes – F. Wildhorn
Clair de lune - G. Fauré
Sea fever – J. Ireland
I got plenty o’ nuttin’ – G. Gershwin
Ich liebe dich – L. Beethoven
Hark the echoing air – H. Purcell

---------------------------------------------
Figure C.1. System of “Hieroglyphics” used at the Jill Nock Studio

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Figure" /></td>
<td>Catch the bottom note, lift it out of the throat and sing over the top note very smoothly – do not reach up for it</td>
</tr>
<tr>
<td><img src="image" alt="Figure" /></td>
<td>Vice versa of the above</td>
</tr>
<tr>
<td><img src="image" alt="Figure" /></td>
<td>Lift the bottom note out of the throat</td>
</tr>
<tr>
<td><img src="image" alt="Figure" /></td>
<td>Sing over the top note and do not reach up for it</td>
</tr>
<tr>
<td><img src="image" alt="Figure" /></td>
<td>Open up inside the mouth</td>
</tr>
<tr>
<td><img src="image" alt="Figure" /></td>
<td>Think the note up or down</td>
</tr>
<tr>
<td><img src="image" alt="Figure" /></td>
<td>Widen the back muscles and push sideways</td>
</tr>
<tr>
<td><img src="image" alt="Figure" /></td>
<td>Lighten up the sound by lifting the cheeks and keeping the lips forward</td>
</tr>
<tr>
<td><img src="image" alt="Figure" /></td>
<td>Hold the long notes for their full value</td>
</tr>
<tr>
<td><img src="image" alt="Figure" /></td>
<td>Use this breath if needed, but otherwise it can be omitted</td>
</tr>
</tbody>
</table>

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1 2 pieces per Grade (1 piece for Initial Grade).
2 Nock _nd_. Only selective indications serving as examples have been made on the scores included in this Addendum. Detailed analyses and indications should be added by educators themselves.
Initial Grade

Food (Figure C.2)  C. Crawly

1. **Background**  
From *Ev'ryday things*.

2. **Aim of song** (for educator's information only)  
Technique should not be stressed in the early stages of singing. The aim of the song should be that of establishing a sweet sound and a non-breathy tone. Exercises that should facilitate this are for example *Nenohnooni*\(^3\) and *Wah*\(^4\). The educator may also make up a warm-up exercise based on the dotted rhythm of this song. Range should develop at its own rate. The educator should always determine whether the range of a song encourages expansion in a natural way. It is important that songs for beginners should be in a comfortable range for the learner. Breath control exercises should be practised to strengthen the body. Learners should be made aware of where to take a breath when starting a song. In this case they should prepare the breath in bar 2 at about beat 3. If this preparation is not done, the breath taken will not be sufficient for completing the phrase. When choosing a song, the educator should explore songs with different moods (slow, sad, fast, lyrical, humorous, etc.). This lends itself to different dynamics. This song can be taught in one lesson since the melody is not complicated and repetition occurs. Attention should be given to the dotted rhythm and to clear diction.

3. **Introducing the song**  
Play a recording of the song (preferably a good one) or sing it to the learner.

4. **Teaching the melody**  
The melody is taught on *Noh* or *Koo*, because it facilitates forward placement of the sound. As soon as the learner knows the melody the song can be done on the words. It usually helps to speak the text first according to the rhythm of the notes, especially if the rhythm is a bit tricky or if there are various dotted rhythms (as is the case here),

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\(^3\) See Appendix A: Learner case B: *Figure A.1* (p. 250).  
\(^4\) See Appendix A: Learner case D: *Figure A.13 (Unisa Grade 4 no.1 - sing on wah in stead of kô)* (p. 254).
syncopation (there are some examples in this song) or tied notes. The educator should explain what a *melisma*\(^5\) is as it occurs in this piece and will occur frequently in song literature throughout the learner’s study of voice.

5. **Breathing**

Teach breathing within a phrase as indicated.

6. **Marking music and identifying terminology**

The learner should write in the meaning of *molto moderato* as this term is also covered in subject music Grade 1 theory. The educator should explain musical and “hieroglyphic”\(^6\) signs and any annotations as indicated.

7. **Identifying key and time signatures**

The educator may mention that the piece is in d minor if the learner has some knowledge of minors. The learner should note that the time signature changes from \(\frac{3}{4}\) to \(\frac{2}{4}\) in bar 10.

8. **Interpretation**

The educator has to explain to the learner what the song is about and can also ask learners about their own favourite foods to help them relate to the words. The educator should find out what *Ev’ryday things* is.\(^7\) Since it is the title of a song collection it will not in this case contribute to the interpretation of the song. The mood of the song should be discussed as well as the dynamics used. This is a humorous song and the learner should note that bar 20 and 21 are the loudest of the whole piece, because of the *forte* indication, the use of capital letters and the use of an exclamation mark.

9. **Phrasing**

Explain to the learner that music has to be phrased and just briefly mention the phrases within this song.

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\(^5\) Two or more notes to one syllable.

\(^6\) Term coined to refer to system of singing indication used by Jill Nock Studio (See p. 281).

\(^7\) More information on [http://www.musicroom.com](http://www.musicroom.com) and other sites.
Figure C.2. Food\textsuperscript{8}

FOOD
(from Ev'ryday Things)

Words by the composer *
Clifford Crawley

\textit{Molto moderato \{J = 92\}}

\textit{Molto moderato \{J = 93\}}

\textit{Some like tof - fee, Some like cho - c - o - late and some like tof - fee.}

\textit{Some like hot food and some like cold, Some like new po - ta - toes,}

\textsuperscript{8} Copyright 1985 by Leslie Music Supply, Oakville, Ontario, Canada
Reprinted by permission of Roberton Publications
* The second verse has been omitted. The complete song may be purchased from the publishers or their agents, Roberton Publications.

\textsuperscript{8} Crawley 1985.
some like old.

2. Some like vegetables and some like pickles. Some eat far too much and

some too little, I eat most things and when I’m in the mood

I like, I like, I LIKE FOOD!
Grade 1

Where is love? (Figure C.3) L. Bart

1. **Background**

This song comes from the musical *Oliver!* based on the novel *Oliver Twist* by Charles Dickens. The educator can explain to the learner that a musical combines music, songs, spoken dialogue and dance. The emotional content of the piece – humour, love, anger – as well as the story itself, is communicated through the words, music, movement and technical aspects of the show as an integrated whole. Other examples of musicals can be mentioned like *The sound of music, High school musical, The phantom of the opera* and *Les Misérables*. Examples from other musicals on DVD can be shown (if possible) or played to the learner.

2. **Aim of song** (for educator’s information only)

The aim of this song is to establish good breath control and legato singing. Studies that can be used in conjunction with this song are *Study nr. 1* and *2* (Keel 1926: 3,4). Both studies facilitate legato singing as well as opening up at the top notes.

Range expansion in this song is done in a natural way, as the highest note in the piece is a d which is not too high and is approached in a stepwise manner through the notes.

3. **Introducing the song**

Play a recording of the song (preferably a good one) or sing it to the learner.

4. **Teaching the melody**

The melody is taught on *Noh* or *Koo*. Syncopation occurs in the melody which may be troublesome to some learners. Let learners clap the syncopated rhythm if they struggle to sing it. This will help them to feel the rhythm. If they struggle to sing the correct pitch at the notes with accidentals, the concept of tones and semitones (whole steps and half steps) can be explained to them. The educator can play a few pitches and ask the learner to sing a tone or semitone above or below the given pitch. This also helps with aural training.

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9 More information on the official website *Oliver! The musical* 2009.
10 More information on musical theatre may be found on [http://www.guidetomusicaltheatre.com/](http://www.guidetomusicaltheatre.com/).
5. **Breathing**

Teach breathing within a phrase as indicated on the score. Explain that rests may sometimes be used to take breaths as needed. When working out where to take breaths the learner may find it useful to read the text out loud.

6. **Marking music and identifying terminology**

Write in and explain musical and “hieroglyphic” signs and any annotations as indicated.

7. **Time signatures**

The learner should know that the time signature is $\frac{4}{4}$ and that the semibreves count four and not less. Keeping notes for their full value is crucial to the correct phrasing of a song and should be taught in the early grades.

9. **Interpretation**

Explain to the learner what the song is about as well as its context within the musical *Oliver!* This is a song about an orphan boy looking for the mother’s love he has only dreamt of but never experienced. Knowing where the song fits into the musical will also assist with the interpretation. Discuss the mood of the piece which in this case is rather sad. The dynamics can be done as follows: Bar 5-12 *mp*, bar 13-20 *mf*, bar 21-24 *mp*, bar 25 – 26 *crescendo*, bar 27 – 28 *decrescendo*, bar 29-32 *crescendo*, bar 33-34 *crescendo*. The learner must note the repeat sign and repeat as/where indicated. There is a tie in bar 31-32 where the note should be sung for seven counts. The *fermata* sign on the semibreve in bar 34 has to be adhered to with three counts added to the already eight counts established by the tie.

10. **Phrasing**

The phrasing (as written in the score) can be mentioned, as this will give the learner an idea of the movement of the music.
Where Is Love
Words & Music by Lionel Bart
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All Rights Reserved. International Copyright Secured.

Slowly, but rhythmically

Where is love?

Does it fall from skies above?

Is it underneath the willow tree that I've been dreaming?
of? Where is she

who I close my eyes to see? Will I ever know the

sweet "hello"—that's meant for only me?

Who can say where she may hide?

Every night I kneel and pray.
Must I travel far and wide
till I am beside the

someone who I can mean something to?

Where, where is love?
Grade 1

My little pretty one (Figure C.4) J.M. Diack

1. **Background**

The origin of this song arranged by J.M Diack is unknown. It is an old English song as can be detected from the text.

2. **Aim of song** (for educator’s information only)

The aim of this song is to explore the old English repertoire and to learn something about the poetic way in which words can be used. It may be compared to the way Shakespeare wrote.

3. **Introducing the song**

Play a recording of the song (preferably a good one) or sing it to the learner.

4. **Teaching the melody**

The melody is taught on Noh or Koo. Attention needs to be given to bar 13 as there is a four note melisma on a one syllable word. This song seems to have a variety of dotted rhythms, but in fact the rhythm in bar 7 is repeated throughout the piece except for a change in bar 12 which should be noted by the learner.

5. **Breathing**

Teach breathing within a phrase as indicated. The breath for the start of this song is prepared in bar 5.

6. **Marking music and identifying terminology**

The learner must know what allegretto means as this indicates the tempo and character of the piece. D.S. (Dal Segno) must also be explained. Write in and explain musical and “hieroglyphic” signs and any annotations as indicated on the score. In bar 13 the piano part has a rallentando (gradually getting slower) marked in followed by a tempo (back to the original speed at the beginning of the piece). The learner must note this and write it in at the vocal line as well. The song is rich in many other aspects regarding
development of musical material which the educator may explore taking into account the musical ability and interest of the learner.\textsuperscript{12}

7. **Identifying time signatures**
   The learner must know that the piece is in \(\frac{3}{2}\) time and that the dotted minims need to be held for three counts.

8. **Interpretation**
   The educator must explain what this song -- which is a love song -- is about and must thus be sure of the meaning of the text. The dynamics in the piece can be done as follows: Bar 6-14 \textit{mf}, bar 15-18 \textit{mp}, bar 19-23 \textit{crescendo}, second verse, bar 6-9 \textit{mp} and then the same dynamics are followed as in the first verse.

9. **Phrasing**
   Breaths should not be taken after each comma as this will break the line of the phrasing. Appropriate phrasing has been indicated on the score.

\textsuperscript{12} See footnote 2 (p. 281).
Figure C.4. My little pretty one

My little pretty one.

Allegretto.

1. My little pretty one, My pretty bonny one, She is a joyous one,

2. My winsome dainty one, My merry smiling one, She is my only one,

And gentle as can be.
And tender as can be.

With a look she comes anon, With a wink she will be gone, No doubt she is alone Of all that ever I see.

Anonymous nd.
Grade 2

Getting to know you (Figure C.5) R. Rodgers and O. Hammerstein

1. **Background**

The song comes from the musical *The king and I*.

2. **Aim of song** (for educator’s information only)

This song provides practice in singing triplet rhythms. The melody line moves up and down a lot which gives the learner practice in keeping the sound lifted when singing a descending passage and opening up with the ascending passage. Exercises that can be used to assist with this piece are triad exercises up and down the scale, the first five notes of the scale moving down only or moving up and then down. The **Lunôh exercise**\(^\text{14}\) will help with the triplet rhythm in the piece. The range of this piece is within an octave which is good for the beginner, especially for those learners who still have a limited range.

3. **Introducing the song**

Play a recording or visual recording (if possible) of the song (preferably a good one) or sing the song.

4. **Teaching the melody**

The melody is taught on *Noh* or *Koo* to facilitate forward placement. There is an indication that the first part of the song should rather be spoken, but as there is a written melody it may also be sung. The learners may be given the option to choose if they want to speak or sing this part. Most of the learners choose to sing this though. Some learners doing drama use the opportunity to give a spoken presentation of this part. They may also have the option of singing this part and only speaking the last bit with the indication “spoken”. The fact that the melody is moving up step by step when the middle *c’s* (bar 1-8) are excluded and then moving downwards again when the *a’s* are excluded should be pointed out. It is important for the learner to connect the sound in this first part as a continuous melodic line so that they do not try to sing the low notes

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\(^{14}\) See Appendix A: Learner case G: **Figure A.20 Lunôh exercise** (p. 261).
down in the throat. The educator can tell them to imagine the sound as one even line. This is a good tip for getting an even sound where there are jumps in the melody.

5. **Breathing**

Teach breathing within a phrase as indicated.

6. **Marking music and identifying terminology**

The learner should know the meaning of *moderato* (moderate speed). The learner must also note that the second part of the song should not be sung fast, but gracefully. The metronome indications are also given as guidelines to the speed of the different parts of the song. Write in and explain musical and “hieroglyphic” signs and any annotations as indicated. The pause sign should be adhered to and there should be communication between the pianist and the singer/learner. In this case a mere inhalation on the learner’s part will be a sign for the pianist to carry on playing after the pause.

7. **Identifying key and time signatures**

Learners need to note the time signature changes from ¼ to ⅜ and to know what the difference between the two time signatures are to know how to count and for how long the semibreves and tied notes should be held. It should be made clear to them that when the time changes to ⅜ this does not mean that the speed of the song increases.

8. **Interpretation**

Explain what the song is about and where this song fits into the musical. A short summary of *The king and I* can be given if the learner does not know the story. The mood should be discussed, which in this case is happy. The dynamics can be done as follows: Bar 1-8 *mp*, bar 8-17 *mf*, bar 17-21 *mp*, bar 21-29 *mf*, bar 29-33 *crescendo*, bar 33-37 *mp*, bar 37-41 *mf*, bar 41-45 *crescendo*, bar 45-52 *mf*.

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15 More information on various sites, e.g. *TheatreHistory.com* 2002.
GETTING TO KNOW YOU
from The King and I

Lyrics by OSCAR HAMMERSTEIN II
Music by RICHARD RODGERS

Copyright © 1951 by Richard Rodgers and Oscar Hammerstein II

16 Rogers & Hammerstein 1951.
Gracefully and not fast \( \dot{\text{d}} = 120 \)

know you, getting to know all about you. Getting to

like you, getting to hope you like me. Getting to

know you, putting it my way, but nicely. You are pre-

cisely My cup of tea! Getting to
know you, Get-ting to feel free and eas-y. When I am with you.

Get-ting to know what to say. Hav-en't you no-iced? Sud-den-ly I'm bright and

breez-y be-cause of all the beau-ti-ful and new things I'm learn-ing a-bout you day by day.
Grade 2

The miller of the Dee (Figure C.6)  English 17th century tune, with 18th century words

1. Background

As this is a folksong the educator needs to explain what a folksong is so that the learner may be able to interpret the music. This also serves as educational background information. Folksongs developed anonymously, usually among the uneducated classes, originally transmitted aurally and thereby becoming subject to modification. Folk music exists in practically every part of the world. The greatest part of this repertory involves singing and therefore is known as folksong. Western folksong developed together with artless poems dealing with various aspects of daily life: work songs, love songs, cradle songs, etc. (Apel 1970: 323). The miller of the Dee is a folksong from the Chester area in the north-west of England.17

2. Aim of song (for educator’s information only)

This song provides an opportunity to introduce to the learner a traditional song that is from a different part of the world and from a different era/time. Seeing that this song is in a minor key, it will train the learner’s ear to sing in the minor key. Studies in a minor key can be given, for example: Study nr. 2 (Diack 1938: 3) on Noo, Oh, Ah. The learner should practise mastering the interval jumps up and down while achieving a smooth connection between them.

3. Introducing the song

Play a recording of the song (preferably a good one) or sing the song to the learner. The educator can ask the learner in what key the song has been written if the learner has dealt with minor keys before. If the learner has not dealt with minor keys yet, the educator should give a short explanation of what happens in a minor key and how it sounds. In order to demonstrate the difference between the major and minor sound, the educator might play the accompaniment, changing it to a major key where it is possible and then again as it is written in the minor key. The melody starts with an anacrusis (upbeat) which has to be explained to the learner if necessary. It should be stressed that an anacrusis should not be accentuated except when it is marked specifically with

an accent sign. The educator may also ask what interval is represented by the notes in bar 2 beat 6 and bar 3 beat 1 and 2. Intervals that may create a problem, for instance f♯ to d in bar 3, need attention. Attention should be given to the semitones occurring between the g’s and f♯’s and the learner can mark them in the music for easier recognition. Bar 15 has an e♮, which is in the melodic minor. The educator can explain that it is easier to sing in the melodic minor -- usually used in songs, thus called melodic -- than in the harmonic minor. Care should be taken to keep the melody from becoming boring as a result of the repetitiveness. Bringing in some dynamic variation (indicated on the score) should help with this.

4. **Teaching the melody**
The melody is taught on Noh or Koo to help with forward placement.

5. **Breathing**
Teach breathing within a phrase as indicated on the score. The learner must be made aware of the first breath that has to be taken in advance (during the last bar of the introduction). The first breath cannot be taken just before singing “There...”, for the breath would then be too shallow and the learner will come in late (the same applies to choral singing). The leaner needs to take the breath18 by inhaling, expanding and contracting the abdominal muscles and for all this enough time should be allowed. It may be suggested that they start inhaling in the middle of the fifth bar of the piece.

6. **Marking music and identifying terminology**
Write in and explain musical and “hieroglyphic” signs and any annotations as indicated. The fermata sign must be adhered to in bar 16. The Da Capo at the end has to be explained.

7. **Identification of key and time signatures**
The song is in g minor. If the learner has no knowledge of minor keys this can be briefly explained to them. Some learners may have been introduced to minor keys in the music

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18 See Chapter 4: Section 2.1.2.2 *Exercises on breathing*, especially section b) on breath control (p. 72).
theory class. The time signature is compound duple which must also be explained, especially if there are problems with counting.

8. **Form**

The phrases are mostly carried over four bars. The educator should explain to the learner to sing through the phrase and although a breath may be taken at the places indicated on the score, the line should be kept going. Reading the song aloud as a poem will help with this.

9. **Interpretation**

The mood is conveyed by the lyrics which state that the miller cares for nobody – this is covering an underlining sadness in spite of the otherwise cheerful mood. The miller is a healthy, wealthy businessman, but alone -- he does not have companionship, which is in all probability something he wants.

The learner does not have to sing all the verses and it could be decided to sing only verse 1 and 3 (for instance). Unknown words should be looked at so that the learner will understand what the song is about, especially since this is old English. The educator can explain to the learner that the reason why this song is in a minor key is to convey the pain of the lonely miller. He is saying “I care for nobody, no, not I, if nobody cares for me” probably to mask his own pain and to protect his feelings. The text of verse 3 is more jovial compared to that of verse 1, putting the focus more on the people joining in. In the last two bars a crescendo can be made to put emphasis on the phrase “Long live the King”. A ritenuto can also be made here to show that it is the end of the song, as well as for dramatic effect. A rubato may be made at the 5th bar from the end to provide a variation from the first verse.
Figure C.6. The miller of the Dee

THE MILLER OF THE DEE

Arr. ARCHIBALD JACOB

[Music notation]

There was a jolly miller once Lived on the river Dee; He
I live by my mill, she is to me Like parent, child and wife; I
Thus, like the miller, bold and free, Let us rejoice and sing; The

worked and sang from morn till night, No lark as blithe as he. And
would not change my station For any other in life. No
days of youth are made for glee, And time is on the wing. This

this the burden of his song For ever used to be
law, you, surgeon, or doctor; Her had a great from me
song shall pass from me to thee, Along this jovial ring

[Chorus]

care for nobody, no, not I, If nobody cares for me,
care for nobody, no, not I, If nobody cares for me,
heart and voice and all agree To say "Long live the King!"

19 Anonymous nd.
Grade 3

“Ah! how pleasant ‘tis to love.” (Figure C.7) H. Purcell

1. **Background**

This song dates from 1688 and is part of the Baroque tradition. It is a poem by Dryden which was set to music by Purcell (Ezust 2003). The educator may give some background information on the Baroque period, as this is also being dealt with in subject music (grade 10). A short overview of Purcell’s life may be supplied or the learner may be requested to find out something about the composer, after having made sure that the learner will have access to the necessary reference material. This song is an air which also lends itself to an explanation of what an air\(^{20}\) is.

2. **Aim of song** (for educator’s information only)

This song expands the range of the higher voice, with bigger intervals up and down the range. The learner will have to lift the sound while singing a descending passage, relaxing the jaw and opening up inside the oral cavity at the top notes, as well as supporting the high notes by contracting the abdominal muscles and pushing the back muscles sideways (creating the sensation of widening the back muscles). This song is also exploring different dynamic levels. The educator can add ornaments\(^{21}\), for example *appoggiatura*, at the marked bars, as this is a characteristic of the Baroque period which the educator has to explain to the learner. Studies, e.g. *Study nr. 3* (Keel 1926: 5) and range expansion exercises, as well as exercises on intervals can be done in conjunction with this song.

3. **Introducing the song**

Play a recording of the song (preferably a good one) or sing it to the learner.

4. **Teaching the melody**

The melody is taught on *Noh* or *Koo*. *Melismas* are used quite frequently in this piece, for example in bars 5, 6 and 7, and the learner should know that this occurs when there are two or more notes to one syllable. The learner should be careful not to let

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\(^{20}\) Melodic piece.

\(^{21}\) See Chapter 4: Section 4.1 *Agility* (p. 93).
descending passages (for example in bar 13) end up in the throat. The sound should be lightened up so that there is a more even sound when going up to the e in bar 14. The learner has to notice that there is a modulation to a minor key in the B-part of the song and that this fits the text. The educator can give arpeggio exercises in conjunction with this song, because the same movement occurs in the piece. The opening bars of the song need to be piano, but the learner should still have a resonant sound.

5. **Breathing**

Teach breathing within a phrase as indicated. The song consists of 4 bar phrases and the breathing in the song can be done according to that.

6. **Marking music and identifying terminology**

Write in and explain musical and “hieroglyphic” signs and any annotations as indicated. Terms like *Allegretto con grazia* and *poco rit.* need to be explained.

9. **Interpretation**

The educator can explain to the learner that the song is in ternary form which will present a clearer description of how the song is laid out. The B part of the song creates a contrast and is also in a minor key, giving the learner the opportunity to do something different here, for example to sing it slower and more dramatic than the A part. Change the “every” in bar 5 as indicated on the score. (It sounds silly as it is written and they will put an accent on the “d”.) They need to know the meaning of the text and what the song is about. It should also be noted that in bar 10, the learner should sing the ‘s’ on the third beat. The sound needs to continue by singing on the vowel ‘i’ in ‘pri’ and thus only add the ‘s’ on the first half of the third beat. The same concept needs to be followed throughout the song.
Figure C.7. “Ah! how pleasant ‘tis to love.”

“Ah! how pleasant ’tis to love.”

by

HENRY PURCELL.

Allegretto con grazia.

Arranged by ALFRED MOFFAT.

Voice.

Piano.

Ah! how pleasant ’tis to love! Every moment
does improve; joys surprising new I meet,

The first strain of this air occurs in the second book of the BANQUET OF MUSICK, 1688. The whole melody, as given above, is from an early 18th-century manuscript. It may be observed that the verse beginning “Thou dost make a god of plea...” although given in the BANQUET OF MUSICK, does not suit the rhythm of the major strain.

Alfred Moffat.

Copyright 1900, by Forsyth Bros.

22 Purcell 1688.
Nothing's like love so charming, sweet. Some do

make a god of pleasure, Others worship hoarded treasure, While the lover's still addressing

to his nymph, for every blessing. Ah! how pleasant
This is love! Every moment does improve;

Joys surprising new I meet, Nothing's like

love, so charming, sweet.

Nothing's like love, so charming, sweet.
Grade 3

Wouldn’t it be loverly (Figure C.8) A.J. Lerner and F. Loewe

1. Background

This song is from the musical *My fair lady*. The educator has to describe to the learner what a musical is and has to give some background on the story of *My fair lady* which is an adaptation from *Pygmalion* by Bernard Shaw. Information should be supplied on the era in which the story takes place, as well as on its setting, Covent Garden. Illustrations of the characters and set can be useful in the interpretation of the song.

2. Aim of song (for educator’s information only)

This song provides the learner with an opportunity to learn complex rhythms such as ties and triplets. If the learner is struggling with the rhythm, the educator can let him/her clap it. The educator can keep a steady beat while the learner is clapping the complex parts. French time names can also be used as a method of explaining rhythms. The learner needs to practise singing intervals containing notes foreign to the key. The educator should make the learner aware of listening to the piano in these instances, as the piano is playing these chromatic, non-chordal notes. Another aim of this piece is to do legato singing. The educator may tell the learner to imagine the jumps between notes on one straight, horizontal line. This will help with legato singing. The song also affords the learner an opportunity to attempt a character piece. Emphasis on expression in a piece is important here and the mere singing of notes will not be sufficient. The background of the piece is therefore very important for interpretation purposes.

3. Introducing the song

Play a recording of the song (preferably a good one) or sing the song to the learner. *Study nr. 7* (Keel 1926: 9) can be done together with this song. In the study the learner also needs to keep the phrase going, despite the rests. There is also a modulation taking place where the learner may be guided by the notes in the piano accompaniment. Both the study and the song are in F major. The learner also has to strive for an even tone at the interval jumps.

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24 See Chapter 4: Section 4.3 (p. 95).
4. **Teaching the melody**
Sing the melody on Noh or Koo.

5. **Breathing**
Teach breathing within the phrase as indicated. Breaths should not be taken after each *lovely* in the last five bars, as this will break the flow of the phrase. The first breath of the song must be prepared in bar 4 of the piano introduction in order to have sufficient breath for singing through the phrase.

6. **Marking music and identifying terminology**
Write in and explain musical and “hieroglyphic” signs and any annotations. Words like *Refrain* and *Moderato* should be explained. In the third last bar there is a *Rallentando* written in at the piano accompaniment. The singer must slow down from this point.

7. **Identifying key and time signatures**
The key is F major. The $\text{¥}$ time signature needs to be explained so that the learner will know how to count for $\text{¥}$. While the learner is learning the notes, the educator can change the time to $\frac{3}{4}$ and play the piece at a slower tempo.

9. **Interpretation**
The educator must explain the text of the piece and any strange words, as well as the reason why the character is speaking the way she does. The words *still* and *till* have to be pronounced with a light (i:), lifting the (i:) out of the throat -- almost like saying “steele” and “teele”. The dynamics can be done as indicated on the score. When looking at the text, the atmosphere that has to be created is almost dreamlike, with the hope of something better to come.

A slight *rubato* can be made at bar 28 to introduce the return of the main melody and to prepare the listener for this return which will be sung *A tempo*.

10. **Phrasing**
The piece consists of four bar phrases. The learner has to understand, for example, that the first four bars of the piece is one phrase and one thought and should be sung through until the end of the phrase. A quick snatch breath may be taken after the second bar at the comma, if needed.
Figure C.8. Wouldn’t it be loverly \(^{25}\)

Wouldn’t It Be Loverly

Music by FREDERICK LOEWE

Words by ALAN JAY LERNER

Moderato

Piano

Key F

REPRISE (graciously)

All I want is a room some-where, Far a-way from the cold night air,

With one e-nor-mous chair; Oh! would it be Loe-ver-ly?

Lots of chocolate for me to eat; Lots of coal ma-hi! lots of heat;

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PRINTED IN ENGLAND

\(^{25}\) Lerner & Loewe 1956.
Warm face, warm hands, warm feet. Oh, would it be

Loverly! Oh, so loverly sitting ab-so-bloom-in-

Gently still. I would never budge till

spring crept over the window sill. Someone's head restin'
1. **Background**

The song is from the musical *Whistle down the wind*. The educator can give a summary of *Whistle down the wind* and then ask the learner to go and read up on the composer and the composer’s music for the next lesson.\(^{26}\)

2. **Aim of song** (for educator’s information only)

The aim of the song is to reinforce legato singing while also practising to keep long notes for their full value. The octave interval is introduced and the educator has to explain to the learner how this will be executed. The learner must prepare physically and mentally for this interval by taking a good breath before attempting it, contracting the stomach muscles and opening up (yawn feeling) on the top note while widening the throat in the back to support this top note. The learner has to keep this open feeling inside at the passages moving downwards as well, otherwise the sound will drop. The educator has to remind the learner not to reach up for the top note of the interval, but to imagine just gliding over the note. The educator may demonstrate the movement of gliding over the note by using the hand. This image will help the learner not to force the sound upwards, which can lead to intonation problems. It may also assist in reinforcing the idea of not tightening the throat when singing ascending intervals. The learner should not emphasize the upbeat *make it*, but should put the emphasis on *clear* and even more so on *strong*, as these are the words towards which the phrase is moving. At “let your voices carry” the emphasis should not be on the *ry* of the word *carry*, but rather on *car*. This will prevent the learner from pushing the sound upwards and causing intonation problems and will also make the top note lighter. The *Moi* exercise\(^{27}\) may be done here to establish freedom at the top note of the interval. *Study nr. 2 and 3* (Diack 1938: 3) will assist with legato singing as well as with singing through phrases and keeping long notes for full values.

3. **Introducing the song**

Play a recording of the song (preferably a good one) or sing the song.

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\(^{26}\) More information on the official website: [AndrewLloydWebber.com](http://AndrewLloydWebber.com) 2011.

\(^{27}\) Appendix A: Learner case D: *Figure A.9. Moi on intervals* (p. 253).
4. Teaching the melody
Sing the melody on Noh or Koo.

5. Breathing
Teach breathing within a phrase as indicated.

6. Marking music and identifying terminology
Write in and explain musical and “hieroglyphic” signs and any annotations as indicated.

7. Identifying key and time signatures
The song is in D major and the time signature is \( \frac{4}{4} \), which implies that semibreves should be held for a full 4 counts.

8. Interpretation
Explain what the song is about. This is an encouraging song with a message that may be applied to the learner’s everyday life, for example, through questions about friends and support. There are some passages in the song that are repeated, for example in bar 5 and 6, and these repeated passages should not develop into a kind of ostinato which may become boring if not executed well. The learner also has to take care at the long line (starting at the last beat of bar 20 until bar 24) to prevent this from becoming monotonous. Learners may automatically put an emphasis on every first beat of the bar of this line. It is essential that the learner knows towards which point the phrase is moving, and does not just sing notes in a non-directed fashion.28

9. Phrasing
The song consists of long phrases and the learner will have to keep the flow of each phrase going. For example, after wind in the first bar, the educator can tell the learner to keep the connection of the four bar phrase by imagining that the wind is carrying the voice away. This will help the learner to carry the idea through till after carry, even though there is a rest in the second bar.

28 In the NMMU choir the conductor calls this singing of notes “singing through the yellow pages”.

Figure C.9. Whistle down the wind

WHISTLE DOWN THE WIND
from *Whistle Down the Wind*

Music by ANDREW LLOYD WEBBER
Lyrics by JIM STEINMAN

Moderato con moto

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Webber 1998.
D6   D  Dmaj7  D6 (v)  D
Howl at the stars ➔ Whisper when you're sleeping

A7/D
I'll be there to hold you I'll be there to stop the

cresc.

D6/9     D
chills and all the weeping ➔ Make it

D/F#  Em7
clear and strong ➔ so the whole night
long

Ev'-ry sig-nal that you send un-til the ver-y end I will not a-ban-don

you my prec-i-ous friend So try and stem the tide

Then you'll raise a ban-ner Send a flare up in the sky Try to burn a torch and

try to build a bon-fire Ev'-ry sig-nal that you send un-til the ver-y end I'm
there.

So whistle down the wind for I have always been right here.

Make it

whistle down the wind for I have always been right there.
Grade 4

Silent worship  (Figure C.10)  G.F. Handel

1. **Background**

The learner has to acquire background information about the Baroque period as well as about the composer, who was one of the most prominent composers of the Baroque period. The learner has to know what an opera is and must be given a summary of the plot of the opera, *Ptolemy*, for interpretation purposes. The original language of this aria is Italian. Other examples of operas in Italian can be played to the learner, to provide an idea of the sound of the language.

2. **Aim of song** (for educator’s information only)

This aria will introduce the learner to singing in Italian. The text is not difficult and there is a lot of repetition. The learner has to know what the text means. The educator can look up some of the Italian words—the English translation is not a direct translation but a free, poetic version. *Lektion 1 -- The scale and Skips of thirds* (Vaccai 1942: 5,6) can be introduced to facilitate singing in the Italian language.

3. **Introducing the aria**

Play a recording of the aria or sing it.

4. **Teaching the melody**

Let the learner sing the melody on *Noh* or Koo. At bars 8 and 22 the learner should not sing the last beat of the bar, but should sing the last beat of bar 15. The educator can explain sequences to the learner and show where they appear. Sequences are also introduced when learners have to write their own melodies in subject music theory classes. At the last beat in bar 25, only one note should be sung, because there is one word, *che*.

5. **Breathing**

Teach breathing within a phrase as indicated on the score.

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30 More information on *The Metropolitan Opera International Radio Broadcast Information center* 2011.
31 The translate button on the computer may be used.
6. **Marking music and identifying terminology**

Write in and explain musical and “hieroglyphic” signs and any annotations as indicated. Terms like *Andante* and *Rallentando* have to be understood.

7. **Form**

Briefly explain to the learner that this aria is in ABA form (da capo Aria - this can be explained). The learner will get a better understanding of the construction of the song, which will also assist with the interpretation.

9. **Interpretation**

Explain what the aria is about. To make the second A-part slightly different from the first one, the educator may add a few ornaments, as that is how Baroque pieces were and still are traditionally performed. Embellishment is subject to individual taste. The educator will know if the learner will be up to singing these ornaments\(^{32}\) -- some learners enjoy a challenge. There are a few sequences in this aria and the educator can explain these. It is important that the sequences do not become too repetitive. The learner needs to know to which point in the phrase the music is moving. There is a five bar piano introduction to this song and it is important that the learner should keep focus and take sufficient breath before entering at bar 6. In bar 6 where there is a an upward interval between the $g^1$ and $c^2$, the top note of the interval should not stand out, but should rather be made lighter. In bar 12 there is an even more difficult interval jump on “labbro” – $e^1$ to $c^2$. The educator can give the learner some vocal exercises on intervals while emphasizing that the top note in each case should be sung lighter. The *Mwah on intervals* exercise\(^{33}\) will help with this.

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\(^{32}\) See Chapter 4: Section 4.1 *Agility* (p. 93).

\(^{33}\) Appendix A: Learner case D: *Figure A.9. Mwah on intervals* (p.253).
Figure C.10. Silent worship

Silent Worship
Non lo dirò col labbro

G.F. HANDEL
from the Opera "PTOLEMY"
Arr. by ARTHUR SOMERVELL

Words by
ARTHUR SOMERVELL

Andante

Did you not hear my lady
Go down the garden singing
Non lo dirò col labbro
che tanto ardir non ha

Handel 1728.
Black-bird and thrush were silent To hear the alleys ringing.
Non lo diró col labbro Non lo diró col labbro Che

saw you not my lady Out in the garden there?
Che tanto ardir non ha Che tanto ardir non ha

Shaming the rose and lily For she is twice as fair.
Non lo diró col labbro Che tanto ardir non ha.
15

Though I am no-thing to- her
Though she must rare-ly look at me,
And
For-se con le fa- vil-le
dell a-vi-de pu-pil-le
per

17

though I could nev-er woo- her
I love her till I die

dir co-me tut-to ar-do
lo sguar-do par-le rà.

19

Sure-ly you heard my la-dy
Go down the gar-den sing-ing

Non lo di-ré col la-bro
che tan-to ar-dir non ha.
Si-lenc-ing all the song-birds: And set-ting the al-leys ring-ing. But
Non lo di-ro col lab-bro Non li di-ro col lab-bro Che

Sure-ly you see my la-dy Out in the gar-den there. Tan-to ar-dir non ha. Che tan-to ar-dir non ha.

Riv'ling the glitt'ring sun-shine, With a glo-ry of gold-en hair. Non lo di-ro col lab-bro Che tan-to ar-dir non ha.
Grade 5

Star vicino (Figure C.11) S. Rosa

1. **Background**

   This is an example of music from the Baroque period. The learner should know the characteristics of Baroque music, since this is a subject music requirement in the grade 10 FET syllabus. The educator can play recordings of Baroque vocal pieces to the learner, so that an idea may be formed of how songs in this period should be sung. It may also be pointed out that the original accompaniment for the song would probably have been done by a harpsichord or string quartet, or the educator may test the learner’s knowledge by asking questions about this. All of this should give the learner a better understanding of the period of the piece, which would again assist with interpretation.

2. **Aim of song**

   This song with its runs and musical ornaments provides an opportunity to work on vocal agility. An even sound also needs to be established between intervals, so that the learner will not drop the sound in the case of a descending interval (for example in bar 23) or push the sound upwards in the case of an ascending interval (bar 23). The longer phrases in the song present good breathing practice.

3. **Introducing the song**

   Play a recording or sing the song to the learner.

4. **Teaching the melody**

   Sing the melody on Noh or Koo. The sound should be lifted in the case of a descending melody or interval (for example in bars 15-16 and in bar 10 beat 1 and 2) and the learner should imagine the sound upwards as well in the case of a melody or interval moving upwards (for example in bar 22 beat 3 – bar 23 beat 1, as well as in bar 23 beat 2 and 3). The quavers, semi-quavers and demi-semi quavers can be taught slowly so that the learner will be sure of the correct rhythms and pitches. The speed may be increased gradually until this part will be sung with fluency and ease. In keeping with

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35 See Chapter 4: Section 4.1 Agility (p. 93).
Baroque style, the quavers, semi-quavers and demi-semi quavers should be light. I recommend additional exercises with runs\textsuperscript{36} to facilitate this process. These exercises will also contribute towards voice building.

5. Breathing
Teach breathing within phrases as indicated. A good breath needs to be taken at especially bar 17 and bar 40 (insist on this breath, with no breath in bar 43, as the line is moving towards the breath in bar 44), so that the runs and the musical line will be supported, with the abdominal muscles also being contracted for good support of the sound.

6. Marking music and identifying terminology
Write in and explain musical and “hieroglyphic” signs and any annotations as indicated. The tempo is \textit{andante}, but the phrases need to move and should not be taken too slowly, otherwise the learner may struggle with the breathing. There is an accent marked on the first beat of bar 22 which means that this note needs more emphasis and should stand out more. Seeing that the learner can very easily get a tight and piercing sound on the accented note it is important that the educator tells the learner to open up at the top note, while imagining gliding over the note which will give a more resonant sound.

7. Identifying key and time signatures
The key is G major and the time signature is \(\frac{4}{4}\), which gives the song a feeling of a dance. Bars 9, 15-16, 34, 38 and 48-49 all have the loud to soft dynamics that have to be adhered to. The \textit{pianissimo} in bar 46 should not be too soft, otherwise the sound will disappear. The learner should sing it as if it is marked \textit{piano}. It is important that the space at the back of the throat should be kept open (yawning feeling) at the piano and pianissimo parts so that there will be enough resonance. Clear diction is also essential when singing parts that need to be softer in dynamics. The educator may draw the learner’s attention to the dynamic level being used on the last page and how this dynamic level relates to the text of the song. The first part of the song may be sung louder, because the text conveys the “delight of love”.

\textsuperscript{36} See Chapter 4: Section 4.1 Agility (p. 93).
8. **Form**
This is a strophic song of which the melody for both verses is the same. It is therefore important that the two verses should not be sung exactly the same, otherwise the meaning of the text will be lost and the song will become tedious. The first part can be done more lively with some inner excitement and the second part can be done more *rubato* (if possible) with emphasis on *legato* singing.

9. **Interpretation**
Explain what the song is about. The learner should read the text out loud like a poem and get used to saying the Italian words. It will be helpful to have an Italian dictionary at hand to look up certain words, because learners should always know what they are singing about.

10. **Phrasing**
The appropriate phrasing is indicated on the score. The learner should know towards which point each phrase is moving and this can be indicated in the score by adding an arrow sign at the end of the phrase sign, as I have shown in the case of the first two phrases.
STAR VICINO

SALVATOR ROSA
(1615-1673)

Figure C.11. Star vicino

Star vicino ai bell' idol che s'ama,
È il più vago dilettò d'amor!

Star lontan da collei che si brama
È d'amor il più nerto dolor.

To be near the loved one
is a delight of love!

To be far from a loved one
is grief and anguish.

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37 Rosa nd.
È il più vago di - let - to d'a - mor!

va - ga - go di - let - to di -

let - to d'a - mor, il più va - go di - let - to d'a - mor!

Sta lon - tan da co -
Grade 5

Was ist Sylvia? (Figure C.12) F. Schubert

1. **Background**

The educator can present a short biographical overview of Schubert’s life to the learner, as well as background on the Romantic period. The educator may tell the learner about the character Sylvia, providing a summary of the story of Shakespeare’s play, *Two gentleman of Verona*. This should assist in the interpretation of the song. This song is a kind of serenade and the educator should explain what this means.

2. **Aim of song** (for educator’s information only)

The original language of this song is English, translated into German and the learner should know this, but the educator can decide if the learner should do the song in German or in English. If the learner is really finding the German pronunciation difficult, it will be better to sing the song in English. For external examination purposes a song usually should be sung in its original language except when stated otherwise in the syllabus. When singing in German, the sounds need to be in the front of the mouth. This may take some adjustment. In English, for example, an “R” sound will be spoken at the back of the oral cavity, but when one sings the German “R” it should be pronounced in the front of the mouth, using the tip of the tongue. The aim of this song is also to get a good *legato* sound when singing up and down through the range, for example at bar 15-17 which encompasses a range of a ninth. The sound of descending passages like in bar 17 needs to be lifted. The semiquaver passages as in bar 31 can be practised *staccato*, because these notes should not slide and have to be well articulated.

3. **Interpretation**

Since this is a strophic song – explain this to the learner – repetitions can become tedious. In such a case dynamic variation will keep the song from becoming too monotonous. The text in bar 5 and 6 represents a question and the learner should interpret it as such. The diction in the song is therefore very important. If the learner is singing the song in German other recordings of similar German songs may be played, so that the learner gets used to the pronunciation of the German language. In this song the piano accompaniment does not assist the learner much with the melody as it does

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38 More information on *ClassicalNet* 2011.
not duplicate the melody entirely, so the learner has to know the song so well that the vocal melody may be kept against the accompaniment. There are a number of notes in the melody that are not part of the key and these should be practised well if the learner has problems with singing the intervals. The educator can point out to the learner where the melody notes are being played by the piano and where special attention should be paid to the accompaniment in order to pick up these notes.

The following exercises can be used in conjunction with this song. Exercises on the intervals 1-3-1-5-1-8 will help with the connection of the sound between the intervals. Another exercise that will improve *legato* singing in passages with a wide range and will keep the sound connected between passages with a lot of interval jumps, is to sing NG and then glide up to a range of an octave while keeping the forward sound placement. The learner should know what a *melisma* is as this occurs quite often in the song. Where rests occur within a phrase, the learner should still sing through the phrase and not use every opportunity to breathe at the rests, as this will break the line of the phrase.

4. **Introducing the song**
   Play a recording of the song (preferably a good one) or sing the song to the learner.

5. **Teaching the melody**
   Let the learner sing the melody on *Noh* or *Koo*.

6. **Breathing**
   Teach breathing within a phrase as indicated on the score.

7. **Marking music and identifying terminology**
   Write in and explain musical and “hieroglyphic” signs and any annotations as indicated.
Figure C.12. Was ist Sylvia?\textsuperscript{39} (verse 1 only)

Who is Sylvia?
(WAS IST SYLVIYA.)

FR. SCHUBERT.

Moderato.

PIANO.

1. Who is Sylvia, What is she, That
1. Was ist Sylvia, saget an, dass

all our swains commend her? Holy,
sie die weite Flur preist? Schön und

fair and wise is she; The heavenly grace did
zart, seh ich sie nah; auf Him-mel Gunst und

lend her, That adored
gespur weist, dass ihr al-les
She might be, That is she kind,
unsatter than, as she is
erz, For beauty lives with kindness,
Therrem Ang'elit Amor, To repair.
Grade 6

Rêve d’amour (Figure C.13)  G. Fauré

1. **Background**

The educator has to explain that this is a song from the Romantic period, having been composed in 1865. The educator can give the learner some background information on the Romantic period as well as on the composer. The educator can play other examples of compositions by this composer to acquaint the learner with the style in which it should be sung. The learner should also know that the text, written by Victor Hugo, greatly influenced Fauré when he wrote the melody to the song.\(^{40}\)

2. **Aim of song** (for educator’s information only)

This song introduces the learner to French repertoire. The song requires a lot of dynamic variation as well as a wide vocal range.

3. **Introducing the song**

The educator should play a recording of the song or sing the song. *YouTube* is a good source of recordings of songs. Any other good recording can be helpful, especially if the educator is not familiar with French (as would also be the case for any other song). Different singers also give different interpretations of songs and by listening to different recordings the educator may find ideas for interpreting a song. It has to be emphasized that the educator must never let the learner copy another singer. A recording should at the most only provide guidance.

4. **Teaching the melody**

Teach the melody on *Noh* or *Koo*. To avoid confusion, the learner has to note where there are repetitions of notes in the different verses and where rhythmic changes or pitch changes between the verses occur. An example of this can be found in the rhythmic differences between bar 11 and bar 35. When the learner sings an ascending passage in for example bar 17-20, the sound at the top notes should not be pushed. The learner should try to think downwards when singing upwards and should imagine singing smoothly over the top notes (like floating on a cloud) and not reaching up to

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\(^{40}\) More information on *ClassicalNet* 2011.
them. The image of a flower opening at the top note may also help to illustrate this idea. There are tied notes in the piece and if the learner finds them difficult, the rhythm may be clapped to feel the rhythm in his/her body. If the learner struggles to count correctly it helps to sing the song without the ties at first and then to put in the ties when the rhythm has been securely learnt.

5. **Breathing**
Teach breathing within a phrase as indicated on the score.

6. **Marking music and identifying terminology**
Write in and explain musical and “hieroglyphic” signs and any annotations as indicated. Musical terms need to be identified -- `beaucoup plus lentement` (in an even slower tempo) and `rallentando`.

7. **Interpretation**
The learner needs to know what the title of the song (Dream of love), as well as the text mean in order to interpret the song correctly. The text has to be read out aloud as a poem. If there is no English translation printed on the music, the educator would have to find out what the meaning of the text is by using a French dictionary (or using the translating button on the computer) or by asking somebody who understands French. The mood of this piece is ethereal and delicate. The melody must be flowing and fluid (very legato). The learner has to speak the text, with consonants and clear diction being very important in contributing towards conveying the mood of the piece effectively. When singing in French, the “R” sound should not be rolled in the back of the throat (like the “R” in spoken French), but it should be pronounced in the front of the mouth. French sounds are nasal, so the learner should get a balance between proper resonance and the way the words have to be spoken. The dynamic variation in this piece contributes greatly towards creating the mood and should be implemented effectively. I suggest some exercises on Messa di voce\(^{41}\), as there are some crescendos and decrescendos in the song, as well as arpeggio\(^{42}\) exercises for the pattern in bars 17, 19 and other places.

\(^{41}\) See Chapter 5: Figure 5.2. Messa di voce (p. 110).
\(^{42}\) For example: Appendix A: Learner case D: Figure A.10. Staccato arpeggio exercise (p. 253).
Figure C.13. Rêve d'amour

A Madame C. de Gomiscour

1. Rêve d'Amour

S'il est un charmant gazon
Que le ciel arrose,
Où naisse en toute saison
Quelque fleur éclose,
Où l'on cueille à pleine main
Lys, chèvrefeuille et jasmin,
J'en veux faire le chemin
Où ton pied se pose.
S'il est un aîné bien aimant
Dont l'honneur dispose,
Doct de teindre dévouement
Nait rien de morose,
Si toujours ce noble azur
Bat pour un digne dessein,
J'en veux faire le cousin
Où ton front se pose.
S'il est un rêve d'amour
Parfumé de rose,
Où l'on trouve chaque jour
Quelque douce chose,
Un rêve que Dieu bénit,
Où l'âme à l'âme s'unit,
Où j'en veux faire le nid
Où ton cœur se pose.

VICTOR HUGO

(Original key F major)

Allegretto

Voice

PIANO

If there is a lovely lawn
Watered by the sky,
Where in every season is born
Some blossoming flower,
Where one gathers freely
Lily, woodbine and jasmine,
Where I went to make a path
For your feet to tread.
If there is a loving breast
Where honor dwells,
Where a tender devotion
Never is morose,
If this noble breast always
Beats for a worthy aim,
I will make of it the pillow
Where your head can rest.
If there is a dream of love
With the scent of roses,
Where one finds every day
Something that is sweet,
A dream blessed by the Lord,
Where two souls unite,
Oh, I will make of it the nest
Where your heart will rest.

GABRIEL FAURÉ

(1845-1924)

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Copyright renewed

43 Fauré 1900.
dévouement N'ait rien de rose. Si toujours ce noble sein

Bâl pour undir nostre sein, j'en veux faire le sousin Où ton front se po-

se, a tempo

beaucoup plus lentement

S'il est un rêve d'amour, Par - sun - dé

beaucoup plus lentement
Grade 6

Someone to watch over me (Figure C.14)  
G. Gershwin

1. **Background**
The learner may be asked to find information about the musical *Oh, Kay!* and its composer, or the educator may provide the information. This song is a jazz ‘standard song’ and learners should listen to some musical examples of jazz songs if they are unfamiliar with the jazz style. This may be complemented by providing the learner with notes on the characteristics of the jazz style. It is also interesting to mention that the 1987 movie *Someone to watch over me* took its title from this song. The learner needs to know where this song fits into the musical, which character sings the song and why. Knowing this will help with the interpretation of the song.

2. **Aim of song** (for educator’s information only)
This song provides practice in singing a character piece. The song also has a variety of dotted rhythms that need to be sharp (clear) and some syncopated notes. If counting creates a problem the learner should clap the rhythm, while the educator keeps a steady beat. Good breath control is needed to hold the long notes for their full value.

3. **Introducing the song**
Play a recording of the song (preferably a good one) or sing the song.

4. **Teaching the melody**
Teach the melody on *Noh* or *Koo*. The rhythm of bars 5 and 6 is the same as that of bars 7 and 8 and the learner should phrase these bars sufficiently avoiding singing note for note. In bar 10 and bar 18, the top note *d* is on the words “seek” and “ever” and the learner should be careful not to tighten the throat and the sound on these words or let the mouth go sideways -- this can easily happen on the *ee* (i:) and *e* (ε) sounds. The learner should keep the sound forward and resonant at the top. Practising these ascending passages on *noh* will help to get a relaxed sound at the top and focus the sound forward. The **Ni-yôh exercise** can also be done in this case. Where there are

44 More information on Jazz standards on [Jazzstandards.com](http://Jazzstandards.com) 2011.
45 [Jazzstandards.com](http://Jazzstandards.com) 2011.
46 See Appendix A: Learner case D: Figure A.14. Ni-yôh exercise (p. 254).
long notes, for example in bar 35 and 36, there should be a change in dynamics so that the notes do not sound repetitious. The piano accompaniment has dynamics written in and these same dynamics can be emulated in the vocal part to add some interest.

5. **Breathing**

Teach breathing within a phrase as indicated on the score. The song is constructed in 4 bar phrases. In bar 4 of the piano accompaniment, the learner should start taking a breath and stay in a suspension phase in order to be ready to come in at bar 5.

6. **Marking music and identifying terminology**

Write in and explain musical and “hieroglyphic” signs and any annotations as indicated. The learner has to know what *Scherzando* and *un poco rall.* mean.

7. **Interpretation**

The time signature is $\frac{3}{2}$ and the learner needs to know how counting should be done for this time signature and for how long the long notes should be held.

When preparing this song for an external examination the repetitions should be done unless if stated otherwise in the syllabus. The repeat should be given a different interpretation, for which the learner can change the dynamics, the tempo (the second time can start slower for instance) and add some ornamentation. The ornamentation is not strict ornamentation in a classical sense, but more of an interpretive ornamentation. For example in bar 30, little passing notes can be put in for emotional interest. At the second ending (the final two bars) of the song the learner can end an octave higher on the notes $\text{c}_2^2, \text{b}_1^1, \text{c}_2^2$ while keeping the resonance in place. The educator can try different examples of endings depending on the ability of the learner.
Figure C.14. Someone to watch over me
g

SOMEONE TO WATCH OVER ME

from Oh, Kay!

Music and Lyrics by GEORGE GERSHWIN
and IRA GERSHWIN

Gershwin & Gershwin 1926.
Someone who'll watch over me.

I'm a little lamb who's lost in the wood. I know I could always be good.

To one who'll watch over me. Although he

may not be the man some girls think of as handsome.

To
my heart he carries the key.

Won't you tell him please to put on some speed, Follow my lead,

Oh, how I need Someone to watch over me.
Grade 7

Pie Jesu  (Figure C.15)  G. Fauré

1. **Background**

The educator has to present the learner with some background information on the song. This aria is part of Fauré’s *Requiem*⁴⁸ and is a motet (the educator can give a short explanation of a motet), derived from the final couplet of the *Dies Irae* (“Judgement Day”, from the *Requiem*) and often included in musical settings of the *Requiem mass*. The text needs to be explained to the learner: “Kind Lord Jesus, grant them rest” (repeat 2x); “Kind Lord Jesus, grant them everlasting rest.” The word *Pie* normally means dutiful, godly or kind. A faithful translation would be “rest”. The educator can name the different movements of the Requiem Mass and play musical examples of these to the learner. The terms “requiem” and “mass” should be explained, as this information contributes towards the learner’s understanding of the aria as well as to the kind of atmosphere that has to be created.

2. **Aim of aria** (for educator’s information only)

This aria serves as an introduction to the Latin language. The aria requires good breath control as the tempo of the aria is *Adagio*, with a good *legato* line as well as abundant dynamic changes. The learner also needs a well developed higher register, since the *tessitura* of the aria is high throughout. The learner must have good support from the diaphragm and back muscles to support the top notes and to be able to sing through the phrases.

3. **Introducing the aria**

Play a recording of the aria (preferably a good one) or sing the aria.

4. **Teaching the melody**

Sing the melody on *Noh* or *Koo*. To assist with *legato*⁴⁹ singing the educator can use the visual image of the notes being connected like syrup/honey dripping from a spoon. The piano passages of the aria should be resonant, so that the sound does not disappear.

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⁴⁸ More information on *ClassicalNet* 2011.
⁴⁹ See Chapter 4: Section 4.3 (p. 95).
Attention has to be given to the bars where the b♮ and e♮ occur as these notes are not part of the key and may create a problem. In these cases, it helps to work out if the distance between two notes is a semitone or a tone with the notes moving in a stepwise passage as in bars 12 and 13.

5. **Breathing**
Teach breathing within a phrase as indicated on the score.

6. **Marking music and identifying terminology**
Write in and explain musical and “hieroglyphic” signs and any annotations as indicated. Musical terms that occur in the aria need to be explained.

8. **Form**
The learner should work towards distinguishing the different parts A, B, C, D, E by varying the use of dynamics. The piano parts should not be too soft, as there are pianissimo parts as well and a clear distinction is needed between the different dynamics.

9. **Interpretation**
The atmosphere and the mood of this aria should be very ethereal, sacred, sweet flowing and tranquil (Dolce e tranquillo). The tempo is Adagio, but the learner should be careful not to sing too slowly and still keep the tempo going. Bar 27 should have momentum with a build-up towards bar 28, where the last statement of the opening theme can be heard.
Figure C.15. Pie Jesu

IV PIE JESU

Adagio $\text{J} = 44$

SOPRANO SOLO p dolce e tranquillo

Pie Je-su Do-mi-ne, do-na-e-sis

re-qui-em, do-na-e-lo re-qui-em.

Do-mi-ne, do-na-e-la re-qui-em.

Fauré 1900.
dona eis requiem,

Domine,

dona eis requiem, sempiernam

requiem, sempiernam requiem,
V D
sem - pi - ter - nam re - qui - em.
Pl - e, pi - e

Jesus, pi - e, Jesus Do - min - e,
do - na - le, do - na - le sem - pi - ter - nam

re - qui - em, sem - pi - ter - nam re - qui - em.
Grade 7

Eis van die vonk (Figure C.16) G. Fagan

1. Background

The educator can mention to the learner that this song was taken up in the FAK-kunsliedbundel. This means that the song is an art song in the Afrikaans language, compiled in a book with other Afrikaans art songs. The learner needs to know what an art song is. A short background of the composer and the lyricist (C.L. Leipoldt) can be given. As an example of a 20th-century composition, the educator could assist the learner to identify typical features of modern music that are found in this song, of importance for the development of the learner’s general musical knowledge.

2. Aim of song (for educator’s information only)

The aim of this song is to give a learner who is Afrikaans speaking or who would like to explore the Afrikaans language a chance to do so. The learner will get practice in keeping the melody against a complex and dissonant piano accompaniment, where the melody line is not being played, as well as to sing chromatic notes. All of this will develop the learner’s aural skills. This song also explores a wide spectrum of dynamics to which the learner will have to adhere, as well as a lot of tempo changes. The learner will get the opportunity to sing a song that consists of complex rhythms and will get practice in singing a lot of repeated notes, which need to be executed effectively in this song. This song, which is somewhat dark, is more suited to a male voice as it needs power and strength. Good breath control is needed for this piece, especially on the long notes.

3. Introduction of song

Play a recording of the song (preferably a good one) or sing the song.

4. Teach melody

The key of E major needs to be established. It will be useful for the learner to clap the rhythm, before the melody is sung, so that there will be no confusion on how to count correctly. Sing the melody on Noh or Koo. The learner can count in crotchets instead of minimis while the melody is being learnt.
5. **Breathing**
Teach breathing within a phrase as indicated on the score.

6. **Marking music and identifying terminology**
Write in and explain musical and “hieroglyphic” signs and any annotations as indicated.

7. **Interpretation**
The learner needs to know what the song is about, to interpret the song correctly. This is a love song. The learner can read the text out loud, so that pronunciation will be correct. The Afrikaans language has a lot of sounds that are formed in the throat. It is important that the educator make sure that the learner pronounces the sounds in the front of the mouth and not in the throat. The educator can make the learner aware of the way the piano accompaniment illustrates the movement of a fish, as in bar 8, and of the sea and waves, as in bars 12-13. The word *Eis* in bar 3 needs to be placed well forward and the sound needs to be lifted, otherwise it will sound “stuck in the mud”. The learner should not start the song too softly, because the second part of the song starts piano and there should be a difference in the initial dynamics of these two verses. In bar 8 the learner should take care that the high note does not stand out. The learner should think over (across) the note and not reach up for it. The *decrescendo* on the long note needs to be done effectively by allowing the sound to resonate in the head and keeping the back of the throat open. On the word *tel* in bar 9 the learner should lift the sound, so that it does not drop into the throat. The learner should make an emphasis in bar 10 on the *jam* of the word *jammer*, because of the dynamic marking at the top. The line should be thought through towards the word *sug* and the energy not dropped because of the quaver rest in bar 10. The learner’s pitch should be controlled on the repeated notes, for example in bar 12, and the line needs to move forward on these notes. The piano accompaniment also creates an urgency in bar 13 that facilitates the forward movement. In bar 17 the comma can act as a break, but a breath should not be taken here. The emphasis in bar 17 is on the word *ek*, which is created by the comma. In bar 25 the energy of the *crescendo* should not be lost because of the comma. The learner needs to open up on the top note in bar 26 as well as lift the cheeks and relax the jaw on the ‘i’ sound in *wit*. In bar 28 the *p* should not be sung too softly, because there is a *pp* still to follow. In bar 31 there are repeated *g’s* and the learner should phrase effectively here and sing a little louder towards ‘-geet-heid’. In bars 32 and 33 the
learner should take a breath, but still connect the line mentally as if reciting a poem. In bar 35 the intensity of the crescendo should not be lost when singing the interval jump of an octave down. Here the learner should remember to lift the sound out of the throat when singing the bottom note of the octave interval. Bar 38 should not be started too loudly at the ff, because the piano’s fortissimo comes in bar 39 and then the learner should still have enough power to sustain the sound at a fortissimo level till the end of bar 39. In bars 40-42 the same dynamic levels should be used as those indicated in the piano accompaniment.
Figure C.16. *Eis van die vonk*\textsuperscript{51}

9. *Eis van die vonk*

\textsuperscript{51} Fagan & Leipoldt 1941.
p poco rit.  
poco meno mosso  

Geet-heid  
blink my hart,  
wend wit-ter  
as die wit-ste see

is wat jou lief-de  
vir my

Tempo 1 subito  

Gee.

INTERVIEW WITH JILL NOCK, VOICE TEACHER, CONDUCTED IN PORT ELIZABETH IN DECEMBER 2010

1. What are your qualifications and what do they represent?

I have a BMus from Rhodes University. It’s a general Bachelors degree - four years - which is an honours degree. I majored in singing. We also had to do, you know, theory, harmony, history, performers. Um, I always think of my BMus as a very important part of the start of my career, because it opened up all sorts of opportunities and experiences, um, but a musician never stops learning.

2. Name any personal highlights and achievements of your career.

Well, I studied in Santiago de Compostella under Conchita Badia, um, a Spanish singer, who had been a pupil of Valaros. Um, I also had my children in between, but I have been solo soprano for the Oratorio choir in the years between 1987 and 2004. I also soloed for the ECPO in Handel’s Messiah, um, I did two with them, ’94, ’97… First night of the Proms with them in 1996. I’ve also put on a lot of concerts, um, with other singers - 3 sopranos, a little company of singers. We also have a Baroque ensemble. I’ve done a lot of, um, concerts, with my husband with guitar and voice for various societies - English societies doing Elizabethian songs - so a very varied career over a long period of time and it is ongoing, it never stops.

3. A good teacher of singing is a musician, an educator, a psychologist. He tries to develop good singers, not just good voices” (Fields 1984: 115). What are your views on this?

I totally agree. A singer’s voice isn’t just an instrument - the whole person is what is important and any physical, emotional, psychological problems will affect not only the person but the voice. So as a teacher you have to encompass all of that in dealing with a student, cause they could come to a lesson with a terrible hurt inside of them and you can start the lesson and you can see you’re not getting anywhere and the minute you say: “Is there a problem?” it all floods out. You sort it out and you can continue with the lesson, because they … the tension that it has created has gone. So it is very important, yes.

4. Do you think the high school voice learner should be burdened with learning the technical aspects of phonation or should they just sing for the fun of it?
Well, I think they’re already learning Biology, Physiology – that sort of thing, um. So what you as a singing teacher are doing now is applying what they are learning … and I find that a lot of them actually get a thrill out of saying: “What we’ve done in our singing lesson we did in Biology today and I knew all about it and I could relate to it”, and I find that it actually excites them a little bit more - and in this day and age people like to know how things work. So I definitely think that they should be taught in these aspects.

5. In the light of your experience as voice teacher, do you find the high school learner capable of understanding the physiological detail and mechanism of the vocal apparatus and the respiratory system?

Um, most definitely. As I say, because they’ve been doing it in Biology and that sort of thing and also because there’s so much out there for them nowadays on the Internet and if you think of cell phones … They are more technologically minded then today, so they need to know and I find that if they understand what is going on within them it becomes, um, more, um, more user friendly to them and it is not just an airy fairy idea and “why must I do it”.

6. With extra effort it is always possible to teach even an average learner to develop a good musical ear. What is your opinion on this?

It is possible. It takes a lot of effort and a lot of patience. Um, I have done it with several people on occasion. There are limitations - it depends on the amount of time the learner will put in, how motivated they are, how much practicing they are going to do at home and also their understanding of what their problem is. It can be a long term thing. They will never get to the same point as your person who has had a musical background, who has a more, um, trained ear, but you will improve things definitely.

7. What would you consider the perfect method of teaching voice?

(Sigh) There … no, there’s no real perfect method – they’re guidelines. We have information available to us, we have personal experience. I reckon what the old Italian masters had to teach in the bel canto style of singing, that is a very valid starting point. Each voice is individual, each teacher is individual and we must use the basic guidelines and then adapt to what we find works for us and also what works in one student might not necessarily work effectively in another. So you are continually adapting your method. So there is no perfect method, but there is a good starting point.

8. What is the most important aspect(s) of vocal technique?

Ah … Well, breathing, placement, resonance - those are, that’s the cornerstones. Um - they’ve got to go hand in hand with a focused mind of (for) the student. Um, good aural training helps … but there’s … yah those are like three, I would say, are the main ones.
9. What are your views regarding resonance, the resonating chambers and vocal registers as identified in Chapter 2 and 4 of this thesis?\(^1\)

*Well, resonance is an integral part of a singer’s production of sound. Um, without using your resonating chambers the sound will be thin. So we need to know how to use them, we need to know the different areas, because the different areas denote different timbres and sounds. So, for instance, if you’re singing a bright happy song, you need to understand what the registers are, how to employ them, how to get mixed resonance so you have an easy passage from the upper to the lower, if you’ve got jumps and … its … I think it’s very important.*

10. How would you explain resonance to the learner?

*Well, we always take any learning experience from the known into the unknown, so I usually discuss it as if you sit in a room where there is lots of curtains - the sound is dead. If you walk into a big empty hall and you talk, your voice echoes and resonates around. Then I will say: “If you’re calling to your friends across the field, you’ll say helloooo! and your voice doesn’t carry, but you cup your hands around and there’s extra resonance and your voice will carry better.” And then I start using the nasal sounding consonants m, n, ng and let them feel how it buzzes, so that they can feel where their resonance happens in … in themselves and then obviously give other exercises moving on from that, but that’s my starting point.*

11. Do you think it is possible to learn vocal technique via the Internet?

*No, you have to have teacher’s ears and a teacher’s experience. Um, otherwise you develop bad habits, which, once they become embedded are very [hard] to break. So, no.*

12. Are there any Internet sites that you could recommend to the teenage singer?

*Well, any site where they can actually listen to proper classical singers, people like Bryn Terfel, Renee Fleming, Cecilia Bartoli - any of these experienced singers, because in this country, especially, we don’t get to hear proper singers. So, those kind of sites would be an asset for the student to listen to.*

13. Do you consider it important that a voice teacher/educator should be a singer?

*I do - because how can you describe what is going on in a singer’s body if you haven’t experienced it yourself? Um, there is a lot that a singer goes through in terms of singing in front of an audience or even in an exam or anything which, unless you have experienced it yourself, um, you’re not going to know how it’s going to affect the student, so I think it’s very important.*

\(^1\) As I relied heavily on the teaching method being presented by this interviewee at her studio, she had to verify the information I put forward in this treatise in so far as these pertained to her. Furthermore she had to be prepared for the interview questions, especially since we only had a limited time period for the interview.
14. Are there any vocal techniques that you consider specifically harmful?

   Well, in my experience um one of the things that I dislike is this word belting, which comes up with the musical theatre people. They’ve always got to belt things. They tend to just push the sound out, because they don’t know how to do it properly and I find once they have established a classical technique then you can help them, because it is using … Belting technique uses a speech based um technique and once you understand classical technique it’s easier to then… because you’ve isolated your areas of resonance … it’s easier then to teach the belting technique. But a lot of them try and do that without understanding technique, so then I find [it] is a bit harmful, because they use the throat and you see huge tension in the throat and they squeak the sound and it’s quite a difficult habit to break.

15. Give your views on some of the advantages and disadvantages of the examinations for singers of the external examination boards (i.e. Unisa, ABRSM, Trinity Guildhall). Which do you personally prefer?

   Well, I use Trinity Guildhall for high school learners. Um, there’s a very varied choice of pieces, so you can um base it according to the ability and the interest of the students. Um, I use it for older students as well, for the same reason. I like the Unisa syllabus. The technical exercises I prefer for university students and I also think that their syllabus is more geared to the person [so far anybody who is wanting that I like that technique]. I use … I will use all their technical exercises on my students, but not, um, not to the same extent as I would for a university student. I’ve Royal schools for anybody who wants to do it. I use it, but I find also their syllabus is slightly limiting and there is no technique, so ja, and technique’s important.

16. Are there any noteworthy phenomenological encounters involving teenage singers whom you have taught that you can recount? (No personal detail required)

   Well, I find that this an ongoing thing while you’re teaching, because one’s applying technique into songs and that sort of thing … um … and you will find … um … in a song where they’re struggling as to say to get a jump or to get a run, and you then apply one of their technical exercises into that part of the song and you will see this sort of like, what Oprah calls the “aha” moment. You will see their recognition of “okay, this is how it happens, this is what this is; what I can do and it works”, and they then start applying it. So yes, from that point of view - but it can happen in every lesson, it can happen every second lesson, it depends also on the student, on how focused they are, but for the most part I guess it happens every day.

17. How should a voice learner who also plays a brass or woodwind instrument be taught vocal technique, as the technique for playing these instruments are in conflict with vocal technique in some aspects?
Yah, this is something I’ve experienced quite a lot. I find, um, that for instance let’s say a flute player … they have a lot of tension in the jaw and in the pharynx, so … uh … I find specially when they’re going up into higher notes, because with the flute they adjust the mouth and the jaw position slightly… , um … that they want to do that when they sing. So I have to work very hard in getting relaxation in that area. With the brass pupils you also tend to get a lot more pressure in the vocal chords area, because they are used to pressuring the air in the whole pharynx area - so it’s having to again get relaxation. I try to work a lot on exercises that relax in this area of the pharynx and the jaw … um… and getting that low larynx feel, because they’re not used to it. So we’re working against things, but once they’ve … they have recognized the differences… um … they apply them and it’s better. I find also their breathing, that I need to work quite a lot on that because although we breath in a similar way, the expulsion of the air is different, because they can pressurize the air for the instrument, whereas for the singing instrument your pressure comes from a different place. So I have to work quite hard, but once they have got the difference I find that they actually progress well.

18. What should the role (if any) of voice classification be when working with a high school learner?

Well, this is always a tricky one, because first of all everybody wants to know what kind of a voice they have. If they’re singing in a choir in school, then you have to be able to put them into their groups, where it is soprano, alto, tenor, bass; so you have that aspect. With a young voice it is very difficult to categorize the voice, because they are young and the voice is developing and what might start out as a mezzo soprano voice might end up as a high soprano as the voice develops, and the same with a boy. He might be going to be a tenor, but you don’t know yet, because he’s still too young and the voice is still coming out of the change, so what I tend to do is I check the range, listen to the timbre of the voice, then I work in the middle of the voice and allow the voice through with exercises to go up and down. You have to look at whether it’s a high voice or low voice, but I tend not say you are definitely this type of a soprano or that type of a bass or baritone or whatever. I will say “in general it looks as though you’re this type of a voice, but things can change.” And when I’m looking for a piece I’m looking within the range of their voice and what is comfortable for the voice, specially a young voice. You have to be careful, so I know they like to be categorized and one has to do a generalization of category, but it is something that can change, so we take that into account.

19. How should a solo singer adapt to a choral setting as a) a soloist and b) a choir member?

Well, when I was a student and singing in choirs we were always told, because we were solo singers, we were always told, listen to the voices on either side and blend so that you’re not sticking out, so that’s the way I’ve always tried to tell people what to do. If you’re going to be a solo voice then obviously you have to apply more of your resonance and your carrying qualities to the voice for when you are solo, but the minute you go back into choir you then
adapt that to blend with the rest of the choir, because your voice musn’t stick out, so that’s my way of dealing with that.

20. Is there any important issue regarding the method of teaching voice to the high school learner that has not been covered in this thesis? Any further comment that you would like to make?

Um, I can’t see anything that hasn’t been covered. It’s a very composite method that you’ve set out here. Um, I think it’s important that people understand what goes into teaching singing - that it isn’t just note bashing and learning songs - that you are actually looking after a young voice that is still in the making and still growing and so we have to be very careful and not overtax the voice. So, having a guideline like this is actually essential for any teacher.

INTERVIEW WITH DR. JOHN BLACK, EAR, NOSE AND THROAT SPECIALIST, CONDUCTED IN PORT ELIZABETH ON 13 DECEMBER 2010

1. What are your qualifications and what do they represent?
   
   MB ChB (Basic medical degree); FCS (Otorhinolaryngology Specialist); MMed (UCT) (Extra specialist degree).

2. Name any personal highlights and achievements of your career:
   
   Obtaining MMed, opening private practice and maintaining academic profile.

3. Could the terms otolaryngologist and Ear, Nose and Throat specialist be used interchangeably?
   
   Yes.

4. Do you have any special interest in the voice of the singer? Why?
   
   Basically my wife and my children all sing, so that is one of the reasons why I have become involved with it and also because it is such a big part - with voice related problems like teachers (not only singers), teachers and learners, so voice ___ income ___ professional, but the actual teaching and lecturing staff is a big patient profile of my patients.

5. What are the most predominant medical conditions for which teenagers in general come to see you?
   
   Nasal allergies, allergies, allergies, allergies…

6. What percentage of patients that come to see you constitutes high school learners?
   
   All in all about 20%.

7. What are the most predominant medical conditions for which teenage singers come to see you?
   
   Just voice abuse and misuse, more than anything else.

8. Are the most predominant medical conditions for which adult singers come to see you very different from those for which teenagers seek advice?
   
   Yes, I think if you are an adult you have much more problems with related lifestyle and lack of muscle tone, etc. - that just gets fat and flabby and all associated with that…

2 See footnote 1.
9. Are there any choral singers between 13 and 20 years of age that you know of who come to see you specifically because of problems related to choir singing?

There have been a few, I mean, Anna Mart was one, you were one, there are a few of them, not many. Not many choral singers - a lot of soloists, in the productions of Robin Williams, Everard and those guys. No.

10. Do you consider the Internet a good/safe source of medical information for the layman/teenage singer?

No, it's a disaster. You can't trust any of that, all the data. If you said an Academic or University site, you will be alright - the other stuff's rubbish.

11. Are there any Internet sites that you could recommend to the teenage singer?

No not off-hand, I have'nt got anything off-hand - I got a whole discipline at home.

12. Do you have any personal opinion regarding the role of the chest and nasal cavities as resonating chambers?

I think they are essential, absolutely essential. You have to pay attention to the whole spectrum. Nose, mouth, lips, tongue, the whole works, everything nasal.

13. Are there any vocal techniques that you consider specifically harmful?

I leave all of that to voice trainers, speech therapists, or specifically voice training teachers. There are a few of them, but they, I think they are essential in the whole process. It's all team here, it's all team.

14. Is there a difference in the incidence and nature of medical conditions for which singers from classical and popular backgrounds come to see you?

Yes, I think more popular ones are generally poorly trained and they come with the typical abusive - the nodules, the polyps, the trauma, the sort of bloody trauma on the vocal chords themselves. They're just about poor technique more than anything else.

15. Is there any specific noteworthy case involving a teenage singer (or teenager) that you can recount? (No personal detail required)

Yes, I think it was the girl who was in Le Mis last year at Alex' who was required to sing I think way out of her range in terms of what [voice]she was. They were trying to get her to sing too high. That poor girl was in trouble from moment one and stayed in trouble all through the whole performance. It was a disaster ... silly.

16. Are there any new medications (prescription or over-the-counter) that you would recommend for general nasal and/or laryngeal problems of singers?

I think the standard nasal sprays still apply. There has been one that's quite nice called Avamy, which is a true once a day nasal spray whereas the others are often twice a day. That's probably the only new thing that has come in.

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3 The interviewee here refers to local music theatre producers.

4 The interviewee here refers to a production of the musical Les Misérables at a local high school, Alexander Road High School.
17. Why is cortisone bad for the voice?

   *It makes it more friable, it makes the vocal chords… all mucosal surfaces - if you over-use - can become friable and then bleed under the skin or under the mucosa. That’s much easier if you continue to abuse it.*

18. Are there any new surgical or diagnostic procedures that are of interest to the singer?

   *Yes, most of the surgery now is much less invasive surgery, with hardly any excisions. So it’s more incisional surgery, where you incise something, remove it and then leave the mucosa intact. Now that’s a different technique.*

19. In the light of what has happened to Julie Andrews, what is the success rate of surgery involving the vocal folds?

   *Well surgery is limited, very limited. You only do that in a very few select cases after you’ve tried your medical treatment for long periods of time. But there are some absolute indications for surgery. The sulcas is something you have to operate on, but with things like nodules and all that you try to stay away from surgery.*

20. Is there any important issue affecting the voice of the high school learner that has not been covered in this chapter? Any further comment that you would like to make?

   *No, I think it’s quite, quite, you know what, “omvattend” (comprehensive).*

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5 Dr. Black was asked to read Chapter 7: THE VOCAL HEALTH OF ADOLESCENTS and Chapter 6: A BASIC OVERVIEW OF THE ANATOMICAL AND PHYSIOLOGICAL ASPECTS OF SINGING to help him prepare himself for the interview, to verify the medical information, and also because we only had the 30 minutes of a medical appointment available for the interview.