A REMEDIAL AURAL DEVELOPMENT PROGRAMME

FOR ADVANCED MUSIC STUDENTS

by

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"I declare that

A REMEDIAL AURAL DEVELOPMENT PROGRAMME

FOR ADVANCED MUSIC STUDENTS

is my own work

and that all sources that I have used or quoted

have been indicated and acknowledged by means of complete references."
SUMMARY

The aural development process is governed by the attitude of the teacher, student, the time factor, methodology employed and materials available. This process and the aforementioned contributing factors are explored within the context of the current requirements of the aural and practical musicianship examination syllabi of The Royal Schools of Music, Trinity College and UNISA.

Suitable methods are explored which should develop skills enabling the student to deal with sounds and their corresponding symbols, first in isolation then within a musical context with attention to the curriculum, musical skills and personal development of the student within a positive learning situation.

Four main areas of development are isolated i.e. rhythm, pitch, harmony and critical ear skills. A suitable development programme is presented in each area focusing on systematic skill development.

TITLE OF THESIS:
A REMEDIAL AURAL DEVELOPMENT PROGRAMME FOR ADVANCED MUSIC STUDENTS

KEY TERMS:
Maxims; examination requirements; methods; materials; rhythm; pitch; harmony; critical ear.
Dedicated to Helena van Heerden

for her advice

and to my former students

Kae-Yng Ou and Emilie Davies

who inspired this study.
"Perception itself does not mean very much until you have understood what you are actually perceiving."

(Henson, M. 1987:74)
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ABBREVIATIONS USED

RSM or Royal Schools of Music = The Associated Board of the Royal Schools of Music
UNISA = The University of South Africa
TCM/TCL = Trinity College of Music, London

Piano = pianoforte

M = major
m = minor
P = perfect
A = augmented
D = diminished

INTERVALS
2nd = second
3rd = third
4th = fourth
5th = fifth
6th = sixth
7th = seventh
8ve = octave

TRIADS/CHORDS
I = tonic
II = supertonic
III = mediant
IV = subdominant
V = dominant
VI = submediant
VII = leading note
1st inv = first inversion
2nd inv = second inversion

3rd = third of the triad/chord i.e.  
5th = fifth of the triad/chord i.e.  

NB: Whether "3rd" or "5th" refers to an interval or triad depends on context.

Time signatures are printed as follows 3/4, 12/8 etc.
INTRODUCTION

HYPOTHESIS
The two chief participants in the aural development process, namely the teacher and student, communicate with the aim of the former increasing the aural competence and awareness of the latter (although the converse may also occur at times). Their attitude to the subject at hand may produce either positive or negative results and may be further influenced by the following resources - available time, suitable teaching methods and educational materials.

The interaction between participants and resources in the aural development process may be hypothesized as follows:

AIMS AND OBJECTIVES
This dissertation explores both the positive and negative effects of the above interaction, with attention to the current aural syllabi of the Royal Schools of Music (RSM), Trinity College (TCM) and The University of South Africa (UNISA). Available materials will be scrutinized, followed by the presentation of a systematic Aural Development Programme which aims to provide maximum use of the aforementioned interaction to positive effect in the area of aural skills development, with particular reference to more advanced students (approximately Grades 5-8).
The use of this Programme is not restricted to examination candidates. It strives to be of benefit within any learning situation involving more advanced musicians with the aim of promoting an improvement in overall aural perception i.e. more acute LISTENING, a situation which can only be of benefit to students in other aspects of musical training, namely History of Music, Theory, Harmony and Counterpoint, Composition, Formal Analysis and Performance skills. Focus will fall on elements of Rhythm, Pitch, Harmony and the Development of a Critical Ear.

Two assumptions are made. Firstly, an understanding of certain theoretical concepts is required as stipulated in certain sections of the Programme. If necessary the Programme may be used simultaneously with theoretical pedagogy to reinforce concepts aurally as they are studied. In the case of less advanced students (up to and including Grade 4) this would reduce the need for remedial aural at a later stage in the student's development. Secondly, the student who may be categorised as an advanced musician should have practical performance skills on at least one instrument. This practical element is vital to the success of the programme as will be explained.

Students who undertake RSM or UNISA practical examinations of Grade level 6 or higher should fulfil both of these criteria while those at Grade 5 level should already have some theoretical knowledge. A minimum theoretical standard of RSM Grade 5 is necessary in order to receive credit for RSM Grade 6 practical. Some students may choose Practical Musicianship rather than Theory Grade 5. They will, however, require theoretical knowledge prior to practical implementation thereby meeting theoretical requirements. UNISA students also receive enforced theoretical training. For Grade 4 practical the theoretical requirement is Grade 3, Grade 4 for Grade 5 and Grade 5 theory for Grades 6-7 practical. Grade 6 theory is required for the Grade 8 final practical examination. TCM has no theoretical requirements up to and including the Grade 8 practical examination but students will be unable to fully understand technical work and repertoire without theoretical knowledge.
CHAPTER 1
THE NATURE OF AURAL DEVELOPMENT

Aural training is a misnomer, we train the whole mental process. (Thackray, R.M. c1978:4)

WHAT IS MEANT BY AURAL DEVELOPMENT?
The word "aural" pertains to a process of sound perception and understanding (hearing) which involves interaction between the human ear and the brain. Sound messages received by the ear must be understood by the brain, the centre of all control in the human body, "the nerve centre that recognizes and interprets these messages according to established images. In order to record an aural impression, the brain must perceive and coordinate the sounds delivered by the ear." (Wunsch, I.G. 1973:55)

The eye, however, also has an important role to play. A link must be established between sounds, concrete objects and their written descriptions in order for full comprehension thereof to take place. This ensures that at a later stage, when either an aural or visual stimulus is present, the other may be inferred.

How does this specifically apply to the musician?

Gerry Frank Davidson defines the interrelationship between the ear and eye as follows:

"The seeing ear ("phantom eye") and the hearing eye ("phantom ear") are to me perhaps the most important aspects of ear training. The phantom ear refers to the ability to hear mentally sounds from what one sees in the musical score. The phantom eye refers to the ability to visualize notation from an aural stimulus."
(Davidson, G.F. 1984:32)

It is therefore clear that a musician's aural development must involve linking aural stimuli as well as musical notation to facilitate recognition of one when the other is presented. Furthermore, the ear and eye must select from the varied soundscape and/or notation presented. The EYE must actively LOOK to select from what can be seen in the environment, while the EAR must actively LISTEN to select from sounds audible at any given time. This requires concentration, which is centred in the brain.

The final physical participant in the aural process which must be considered is recognised by Denegar who states that aural [ear], visual [eye], intellectual [brain] and muscular/kinaesthetic
elements must all be present in the learning experience. (Denegar, D. 1983:30)
Muscular/kinaesthetic development i.e. co-ordination to perform various tasks, from a musical
perspective, includes training in singing, clapping, tapping, playing an instrument, dancing
(movement to music) and writing musical notation. This involves the voice, and body parts
such as hands and feet in conjunction with the ears, eyes and brain. These, therefore, are
the physical elements in the aural development process.

WHAT ARE THE AURAL SKILLS WHICH NEED TO BE DEVELOPED?
Paul Loeb van Zuilenburg gives the aim of aural tests as complete insight into and
understanding of musical materials. (n.d.:1) Eric Taylor defines aural ability as being able to
"realise the significance of musical sounds; to understand their organisation in patterns. In
practical terms this involves measuring relationships between sounds and written symbols." (Taylor, E. n.d.:5)

Aural pedagogues who have defined skills in a similar manner include Davidson and Gauldin.
The latter identifies five basic ears skills: Firstly sound is converted to symbol. This may
take the form of dictation where musical elements heard are written down, usually on a stave.
It may also involve writing down a composition. The converse is the conversion of symbol
to sound. This occurs every time a musical extract is performed from notation, for example
sight reading as performed by an instrumentalist or sight singing performed by a singer. In
both cases the musical symbol need not be restricted to pitches or rhythms notated on a stave,
but may include musical terms, for example forte or poco rit. A third skill involves the
comparison of sound and symbol which may take the form of a multiple choice exercises
where the extract heard must be selected from a group of notated examples. Alternately this
skill may be applied in the area of error detection, for example in a musician's own repertoire
or when rehearsing a sight singing or dictation exercise.

The fourth skill, conversion of a symbol to an imagined sound may be explained as hearing
a composition in one's head, for example when playing from memory or mentally rehearsing
a sight reading or sight singing exercise. Immediate reproduction in sound of a previous
sound source, in other words direct dictation or "instant replay" is the fifth basic ear skill.
Gauldin points out that this should be accomplished instrumentally as singing back is
accomplished too easily. The musician is therefore required to play from memory. (Gauldin,
R. 1974:75)
The decoding and analysis of sounds in relation to their corresponding symbols therefore are essential basic skills. What is the nature of the sounds and symbols which confront the musician?

Winold and Allen state that:

"Music is a form of human behavior [sic] in which sound events are intentionally organized for intrinsic aesthetic effect." (Winold, A. 1971:2)

This definition encompasses the entire spectrum of music - whether tonal (key-orientated) or atonal (key is avoided), electronic (from an instrumental and/or electronic source for example a sine wave generator) and Musique Concrete (a sound collage in which recorded materials based on traditional instrumental and vocal sounds, noises etc. are modified, for example by changing the recording or playback speed). For the purpose of this dissertation, however, the musical "sound events" to be dealt with are to be limited to the tonal medium (with the addition of the whole tone and pentatonic scale) as these alone are required for the syllabi of the examining bodies up to and including Grade 8. Refer to Chapter 2 for more details.

**HOW SHOULD THESE SKILLS BE DEVELOPED?**

Aural development should take place on two levels. The first involves the recognition of the five basic elements of music i.e. rhythm, pitch, harmony, timbre and dynamics, while the second involves their interaction in a musical context, for example

**ELEMENTS**

D major Simple triple time 3
Rhythm: n J k~ IJ J IJ
Intervals: M2 M2 P5 etc.
Sequence between bars 1 and 2
Dynamics: 2
Moderate speed.
Implied harmonies: I II V I

**INTERACTION**

Various theorists have examined this two-fold approach to aural development. Murray Gould (Gould, M. J. 1979:1) and Emily Brink (Brink, E.R. 1980) refer to "perceptual" and "structural" elements, while Bruce Benward emphasizes micro listening - note by note - and macro listening - the relationships of larger sections, for example phrases, periods and sections. (Benward, B. c1974:1)
Peer Alldahl points out the importance of concentrating on musical patterns:

"Ear training has, in my opinion, been traditionally somewhat misguided. Just as the strict rules of classical harmony have come to create a special idiom which has no equivalent in actual music, so has ear training become limited to some general, neutral distillate of musical material without quite reaching music as a whole, with all its nuances in terms of style, idiom and expressive power. Having a good ear does not mean simply knowing note values, intervals, or chords, but it also involves the ability for instantaneous recognition of the rhythmic, melodic, and harmonic patterns that combine into music." (Alldahl, P.G. 1974:112)

This view is supported by Robert Neidlinger who points out that each sound is only important within the given context, and if style and form are grasped as an entity (Neidlinger, R.J. 1972:52-53), while Carl Seashore believes that it is the educator's task to give the student "a concrete concept of time, pitch, loudness and timbre of a single sound", first in isolation, then in an actual musical situation. (Seashore, C.E. 1938:158)

The musician therefore needs to be able firstly to identify and work with the various elements and secondly analyze their interaction in a larger musical context. How should this be presented?

Alfred T. Hewson discusses two basic ways of specifically teaching music reading, but which may also be applied in a general context. Firstly, the educator may teach from the specific to the general i.e. various techniques are drilled, then combined to form the whole (for example separate rhythm and melody), or secondly, work from the general to the specific, i.e. the student experiences a musical problem in a natural setting, then it is isolated and explained. (Hewson, A.T. 1966:289) Although the first approach may be methodologically preferable to enable a thorough drilling of techniques, the second also has validity in the development of critical faculties and must therefore not be entirely ignored.

The application of Hewson's first approach, i.e. beginning the development of aural acuity with basic rather than structural elements, for example motives, themes or specific tonalities, will enable later progress to the atonal, twelve tone or other media as the five basic elements are applied in a different context. An analogy may be drawn with the acquisition of reading skills. A wide vocabulary is necessary before more difficult texts will be understood.

Another issue with relevance to aural skills development is the overall approach, one which should encapsulate all interactions with sound and symbol, basic elements and their musical context. Three overall approaches are mentioned by John Sloboda: The educator may
choose to be **curriculum orientated** i.e. governed by the curriculum and ways to obtain best results, or **skills orientated** i.e. aiming to develop skills needed to perform successfully in a musical career, for example as an operatic performer, orchestral musician or repetiteur. Finally the course may be **personal development orientated** and deal with enhancing and drawing out unique and individual talents, rather than focusing on curriculum or occupational possibilities. (Sloboda, J. 1987:24)

We are usually governed by the first in the case of most young musicians, however a suitable aural development course should achieve a balance between these three, thus catering for all categories of student, whether each intends embarking on a career in music, passing examinations or merely enhancing the enjoyment of music.

**IMPORTANT MAXIMS EFFECTING SKILL DEVELOPMENT**

Within the broader framework of Sloboda's overall approaches the following more specific methods must also be applied to ensure a systematic and relevant Aural Development Programme.

Expressed in simple terms, the aural student must **hear, do, see and discuss** every concept presented. In other words aural, vocal, verbal and kinesthetic reactions will prepare students for the full range of responses required in aural tests or examinations. The verbal response is particularly important in order to highlight misunderstandings the student may have with regard to material covered and specific terminology.

**Each student should be viewed as an individual** with individual strengths and weaknesses and levels of perception. Not all will derive equal benefit from the same approach. There are many techniques to improve aural acuity, so any that bring results should be encouraged, whereas those that produce only frustration without perceptible progress should be abandoned. Furthermore, do not expect equal progress in every area. The psychological element is also of vital importance. Each student will require differing amounts of positive reinforcement and criticism in order to develop fully. The latter should never outweigh the former.
Set clear objectives. Performance objectives (PO's) may be used as a base for accelerating good students and holding back those with difficulties. Performance objectives should therefore be realistic depending on the ability of the student concerned. Learning activities planned should encourage the students to discover and progress at their most effective learning speed. It is good to establish a minimum standard first so that students know what is required, as well as the degree of deviation accepted. (Davidson, G.F. 1984:9) The student should never be in doubt as to what is required, therefore instructions pertaining to the achievement of objectives should be clear at all times. Use of performance objectives would ensure that students do not concentrate solely on their strengths and ignore their weaknesses. Davidson points out the importance of monitoring the application of PO's to enable re-evaluation if necessary. The value of PO's lies in students identifying with their own education and visualizing the end-product.

He does not believe, however, that the mere use of PO's will make students more competent, but that a "thoroughly-worked-out, systematic approach to ear training with performance objectives as the central, unifying focus" is required. (Davidson, G.F. 1984:135-136)

Students should practice taking tests during class for some time before actually doing an examination, with test results being made known as soon as possible after the conclusion of the test so that the exercises do not lose impetus. The simulation of examination conditions (testing) which is supported by Gerry Davidson forms an integral part of his system of PO's. (Davidson, G.F. 1984:135-6, 138) It should be noted, however, that constant testing should not be a substitute for skill development.

Proceed from the known to the unknown in order to build on what the student already knows, even if this is minimal. In this manner confidence will be built up. Students do not think in music but try to construct musical examples in terms of what they understand i.e. a familiar medium. Teaching students to think in music begins with the triad and diatonic scale. (Gould, M.J. c1979:2)
Proceed from easy to difficult. Basic concepts must be mastered before more difficult ones can be undertaken. Mastery of concepts and progress to more difficult activities serves to build confidence as aural ability is seen to improve and any negative feelings associated with past aural experiences may be overcome. Activities should be challenging but not too complex or difficult to learn.

Many students grasp theoretical principles but cannot integrate them with practical experience, while aural training is separated from real musical activities, for example playing an instrument. (van Zuilenburg, P.L. n.d.:2) Aural training must be relevant and relate to other disciplines, rather than present a series of musical hurdles to be overcome. For example, theoretical aspects may be reinforced through the aural medium and are closely related as they provide competence in notational elements. "The most satisfactory method is the total integration of the aural requirements with each theoretical concept as it is introduced, thereby consolidating the concept." (Reid, S. 1994:90) As Winold points out, the single most important benefit to derive from aural skills training is that concepts and skills must be applied immediately and continually to your own musical experiences as a performer and listener. (Winold, A. 1971:xvi) This integrated approach should therefore take other musical disciplines e.g. harmony, counterpoint, analysis, music history and performance practice into account (Viljoen, N. 1994:26), a point of view which may be summed up as follows:

"Aural training should be regarded as a skill, a technique, not as a goal in itself. Aural culture should be looked upon as the application of aural principles to music as a whole, be it in the realm of performance, composition or musical appreciation."

(van Zuilenburg, P.L. 1975:25)

Exercises may include listening to and playing of examples (i.e. a passive and active response). Links with Theory, Performance, History and Formal Analysis lessons will be highlighted in Chapter Four.

A related matter is that of musical excerpts used in aural exercises. The educator should make use of a wide range of actual examples from the literature without restricting exposure to certain styles and periods. Compositions used may include current popular music, local ethnic music, Gregorian chant, Bach, Haydn and Stravinsky. Analysis of all types of music has value for the music student and provides a concrete link with practical repertoire and History of Music. Aural within in the theory syllabus is important only when developed as complementary to analysis of actual compositions. (Brink, E.R. 1980) Styles unsuitable within
a certain context may feature in another. Atonal music, for example, will not suit dictation or harmonic exercises but may feature in a discussion of texture.

"Met hoe meer musiek die leerling in aanraking kom, des te meer ontwikkel die gehoor en hoe veelsydiger die repertoire des te vollediger word die begrip gevorm."

(van Zuilenburg, P.L. n.d.:1)

Reference to the renowned Suzuki method is appropriate here. A central point of this method is that anyone is capable of amazing achievements in memory and aural perception and increased learning speed, if a suitable learning situation is created. The ten books of violin repertoire and repertoire for 'cello, piano and viola are all on record and tape. One third of the lesson time is devoted to listening to music to improve aural discrimination of detail in previously learnt material. (Lester, C. 1987:19) This is a vast field of study, however, with further detail not appropriate in this context.

**Elementary keyboard skills** are necessary for non-keyboard players particularly when dealing with harmonic intervals, triads and chords, which they cannot produce on their own instruments. According to James Lyke the requisites for keyboard experience in the classroom are one or two pianos, plastic or wooden keyboards for those not at the piano, a chalkboard with staves and a teacher skilled in group techniques who will help his/her students discover the important elements of music through experimentation and performance. Lyke's investigation into the effect of keyboard experience on the listening abilities of fifth grade elementary children revealed that keyboard study can have an important influence on the development of the ear and improvement of musical understanding. (Lyke, J. 1967:64-72)

The results of this study may also be applied in a more advanced learning situation. Donna Mosbaugh Bogard, who explored the reinforcement of theoretical concepts on the keyboard using first year university theory classes concluded that procedures and materials can be developed to reinforce melody, harmony, rhythm and form on the keyboard and thereby improve functional piano skills. There was no significant difference in the final scores of the experimental and control groups, but the experimental group scored better from Pretest to Post-test. (Bogard, D.M. 1984)

A piano is no longer a necessity, however. An electronic keyboard/synthesizer may prove very suitable assuming that the following criteria have been met for more advanced aural work, for example harmonic progressions: The keyboard should have a range of three to four octaves to enable the performance of harmonic progressions in all keys. As harmonies may need to
be sustained a sustaining pedal is a recommendation. The keyboard should also be touch sensitive if dynamics are to be performed. An electronic keyboard with limited range (for example 2 octaves) or a model keyboard may be used as a tactile aid, for example when writing dictation, as recommended by Thackray. (Thackray, R.M. c1978:142)

The educator must ensure, however, that the piano is not the sole source of musical stimulation. Non-pianists should use their instruments to provide varied timbres and help to maintain student interest in the tasks at hand. The use of other instruments whenever possible is supported by Janet McGaughey. (McGaughey, J.M. 1966:2)

Students need intrinsic motivation (supplied by the activity itself), rather than extrinsic i.e. rewards promised. Initially some extrinsic motivation may be necessary but the aim should be to diminish it as soon as possible. (Sloboda, J. 1987: 28) In other words an Aural Development Programme should stimulate and maintain student interest thus promoting further study. Singing should alternate with writing, performance, analysis, and discussion. Note that performance should include ensemble work, which will not only promote interactional music making but may provoke an interest in similar work beyond the classroom environment.

Break out of the mould of sitting at the piano with students at the table regurgitating exercises as this will inevitably lead to boredom. Observation of freshmen at ear training classes over several years prior to Davidson's PO experiment showed that their attention span was 10 minutes maximum. (Davidson, G.F. 1984:110)

Creative activities are an important means of maintaining interest, for example the use of improvisation. Students should also have the opportunity to correct each other i.e. all are involved in each exercise. Alternatively, different activities may take place simultaneously. This may result in a rather noisy classroom, but the resulting buzz should encourage concentration rather than break it. Brighter students should be challenged with more difficult exercises or may teach/assist weaker ones. Students may also devise their own exercises. (Greater detail will be given in Chapter 4).
Aural development should not be restricted to the classroom environment. George Pratt and Michael Henson stress the following:

It is important that aural development "happens not simply in a timetabled weekly hour but in rehearsals of choirs, orchestras, bands and chamber groups, in several hours a day of private instrumental practice, in all the exposure to music from radio, record or background music in shops and in encounters with non-musical sound too. So 'do-it-yourself' assignments focus, each week, on one particular facet from the whole range of developing skills, and students do them at whatever time is most appropriate. Some can be done during the bars rest of an orchestral rehearsal, some while walking home, while some need a few minutes set aside exclusively for them." (Pratt, G. 1987:116-117)

Pratt expresses similar views on the value of background music in shops, radio listening and concerts etc. (Pratt, G. 1990: 30) Extra-mural aural activities may include the identification of the intervals between the tones produced by ambulance sirens, airport chimes or door bells in addition to more traditional homework such as sight singing or keyboard harmony.

Repetition is valuable. Educators must break out of the mould of believing that all students must always arrive at the correct answer within a certain number of hearings particularly when teaching a new skill to less able students. The speed of work in the early stages of development should be governed by the needs of the student rather than the passing of time. How many times should an examples be played?

George Pratt feels that it is good to use recordings to which a student may listen 25 times if necessary in order to get it correct. In subsequent examples the student may need to listen only 20 times, then 15, 8 etc. (Pratt G. 1987:10) Obviously the number of times an example must be played depends on the context, for example if trying to detect $sfz$ or an absence thereof, the example need only be played once, as opposed to more repetitions for dictation. The educator should exercise his/her discretion.

A related area is that of repetition of an extract in another context. Vernon Kliewer points out that some works should be reused, not to teach the work, but to foster familiarity and therefore add to the student’s musical resources. (Kliewer, V. 1974:1) For example, dictation exercises could later be used for sight singing and vice versa.
A third application, which may serve to boost confidence, is "rehearsal" of exercises. This is particularly suited to sight singing and keyboard harmony where certain exercises may be prepared before presentation to the teacher and class. "Rehearsal time" may vary according to context.

Finally, in my opinion, the most important requirement for a good aural development programme is that the musician must learn to reason, rather than be "nursed" by the teacher. I have therefore chosen to refer to aural development rather than training, as the latter implies the student following prescriptions from the teacher rather than learning to think and reason independently. The results produced when the teacher is absent are of ultimate importance.

"Aural understanding, which is the reflection of accurate auditory perception, results from intelligent thought and not from mechanical imitation, from judgements made independently by the child in terms of his understanding of basic musical concepts and not from judgements made for the child by the teacher." (Petzold, R.G. 1963:43)

The teacher controls the implementation of the aforementioned maxims and therefore the nature of the aural development process, which should develop skills enabling the student to deal with sounds and their corresponding symbols, first in isolation then within a musical context with attention to the curriculum, musical skills and personal development of the student within a positive learning situation.
There may be speculation regarding the relevance of certain of the aural tests as prescribed by the three examining bodies, the Royal Schools of Music (RSM), Trinity College of Music (TCM) and UNISA, however a critique of this nature is not within the scope of this dissertation, which aims to prepare students to be examined according to the requirements of the aforementioned syllabi. The following exploration merely serves to highlight their similarities and differences.

AIMS

The main difference in focus of the three examining bodies is the type of response required. When responding to aural tests during the practical examination the student is required to use either imitation, memory (of aural skills and theoretical knowledge learnt) or insight or combinations thereof when reacting in a tactile or verbal manner. In this context insight is taken to mean use of the critical ear in analysing what is heard and making comparisons with past knowledge to a greater extent than simple recalling the names of intervals, clapping rhythms, echoing melodies or selecting the correct time signature.

Trinity College of Music

The current aural tests (first used in 1989) comprise 10% of the total practical examination mark and are rigidly divided into identification of various elements of pitch, rhythm and harmony with the exact mark allocation given for each section. Tests require imitation and memory, but no critical comparison. A further exactness in the syllabus is the provision of metronome marks and dynamic levels for singing and clapping exercises.

The University of South Africa

The title "Practical Musicianship" aptly reflects the aural syllabus content. Tests requiring imitation play a limited role and mainly mainly in the lower grades, for example the reproduction of rhythmic patterns or melodic lines. Although exercises requiring identification of elements of rhythm, pitch and harmony also feature, insight is required to a larger extent than in the TCM syllabus, as will be shown later on in this discussion. The tests comprise 10% of the total mark.
The Associated Board of the Royal Schools of Music

Both TCM and UNISA make use of specially composed exercises while RSM prefer actual examples from the literature. The advantage of the former is that these should be unfamiliar to the student upon their first hearing, whereas the latter may occasionally be recognized. The latter are, however, useful in strengthening the link between the aural and historical aspects of music and may lead to discussion of period, style or composer; or listening to the complete work from which each is taken.

New aural tests were introduced in 1993 to cover Grades 1-5 and in 1996 for Grades 6-8. As with the old aural tests, the examiner judges "the overall alertness of the ear through application of criteria of accuracy and speed of response whether speaking, singing, humming, whistling or tapping (Mundey, P.J. 1992: no page numbers) and aural contributes 12% of the examination total. Separate marks are therefore not awarded for individual tests. The total aural mark is judged as follows:

- 11 and under = Slow response and inaccuracy in the majority of the tests.
- 12-14 = An adequate response. Some hesitation and error.
- 15-17 = Good response. Minor errors or hesitation.
- 18 = Quick and preceptive response. (AB RSM Aural 1-5 revised 1994:2)

In 1996 Grade 8 students could choose to use the new tests or the old ones which were use in Grades 6-8 until 1995. For this reason, and due to the similarity in the requirements from Grades 6-8 the old syllabus for these grades has been included in this study.

The old RSM syllabus is very similar to that of Trinity College in its focus on imitation and memory, whereas the new syllabus narrows the divide between aural and practical tuition (for example repertoire) as it aims "to place more emphasis on perception and listening with awareness, and less on memory skills. It is important that aural skills are developed alongside the learning of an instrument and that aural forms part of every lesson (regardless of whether or not the student is taking an examination). Students will also benefit from being constantly alert to the rhythmic pulse of the music they are playing, as well as to its melodic shape." (AB RSM 1992:2) If the teacher is a poor pianist he/she should try to find some practice time for his/her students with a pianist even if most practice is done on other instrument. Emphasis should be placed on singing because it is "a good means of demonstrating understanding of the music." (AB RSM 1993: no page numbers)
This altered focus is reflected in the inclusion of sight singing and critical listening whilst excluding the identification of intervals and triads. A further change is the combination of different types of questions using the same extract, whereas in the old syllabus rhythmic exercises were entirely separate from pitch, cadences etc. The new tests 6D and 7D examine knowledge of elements such as form, style and period of a given extract. A phrase from the extract is selected for clapping and identification of the time signature. Candidates are, however, no longer required to identify note values. Test 8A is a good example of the testing of related skills: The candidate must sing the lowest of the three voices in the first half of the extract (a skill useful for the second half), identify the cadence concluding the second half and name the four concluding chords.

Grades 1-5 aural tests have already been subject to alterations (implemented in 1995) which have overflowed into the new syllabus for Grades 6-8. The need for alterations arose as a result of reaction from teachers and examiners to the requirement of accompanied sight singing in Grade 5 without preparation in previous grades. Accompanied sight singing (testing both rhythm and pitch) is included in the Grade 6-8 syllabus following preparatory work in Grades 4-5. Singing is important in all grades but the option to play instead of singing is available with singing only compulsory in sight singing exercises. (ABRSM Libretto May 1994)

**Keyboard harmony** is offered as an alternative to all sections of the old Royal Schools aural tests Grades 6-8, except the two-part exercises of which the upper or lower part must be sung. This caters for students who may have trouble with the identification and/or reproduction of various rhythmic, melodic and harmonic devices without reference to their symbols, but are able to express understanding thereof in a practical way when aided by written symbols. The keyboard harmony option is no longer available in the new aural tests and could not be used as a substitute in 1996.

**Royal Schools** also offers the student an examination in **Practical Musicianship** (instituted in 1990) as an alternative to the Grade 5 theoretical requirement for admission to Grades 6-8 practical. This syllabus has many similarities with the new aural syllabus and the alternate keyboard harmony of the old syllabus. The pianoforte or any other examinable instrument may be used for this purpose and candidates may sing on any vowel sound or make use of sol-fa. (ABRSM 1994/95) Requirements are clearly laid out and extensive details for preparatory exercises are given, in addition to the aims of each exercise. A book of exercises for student use is also included, something which would be a useful addition to the UNISA aural exercise
manuals, for example in the areas of sight singing and error detection. It should be noted that an overall grading rather than a mark is given, either A (distinction), B (merit), C (pass) or F (fail). (ABRSM 1994/95)

RSM have made special arrangements for differently-abled students. For example, special tests are offered for the hearing impaired. Enlarged copies are available for visually impaired candidates, while aural repetition is available for blind candidates.

The three examining bodies therefore have diverse requirements, although some overlap occurs. What specific differences are to be found in their content?

SPECIFIC REQUIREMENTS
In order to enable efficient comparison of the three syllabi and establish unity with the content of Chapter 4, the various subsections of the syllabi have been grouped under the following sectional headings as used in Chapter 4 - Rhythm, Pitch, Harmony and Development of a Critical Ear. Although the main focus of this dissertation is the more advanced musician details of all grades up to and including Grade 8 have of necessity been included because remedial development must begin at an elementary level.

In the tables which follow the numbers used refer to the grade at which understanding of the particular concept is first required. Numbers in brackets in the RSM column refer to the old syllabus. As a rule the various exercises are played twice with the tonic chord and/or note given for most of the pitch exercises. The key may also be named. In all sections the major tonality is assumed unless otherwise indicated.

RHYTHM
RHYTHMIC ECHOES/IDENTIFICATION OF METER

(TCM 1987:21)

The student is generally required to clap or tap the rhythm of a melodic passage - as in the example above - then identify the meter (through verbalising, tapping, beating etc.) RSM
point out the importance of crisp tapping in rhythmic exercises with the strong beats stressed, (Mundey, P.J. 1992: no page numbers) but the same is equally applicable to the tests of TCM and UNISA. In the case of conducting/tapping the beat the candidate should join in as soon as possible after the examiner has begun playing the example. It should be noted that TCM does not include quadruple time while RSM only includes simple quadruple. Both RSM and UNISA introduce compound duple before simple quadruple.

Meter requirements are as follows:

<table>
<thead>
<tr>
<th>Meter Type</th>
<th>Pre</th>
<th>Initial</th>
<th>RSM</th>
<th>TCL</th>
<th>UNISA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compound quadruple</td>
<td>Pre</td>
<td>Initial</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Compound triple</td>
<td>3 (8)</td>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compound duple</td>
<td>2 (7)</td>
<td>6</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simple quadruple</td>
<td>3 (3)</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simple triple</td>
<td>Pre (1)</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simple duple</td>
<td>Pre (1)</td>
<td>Initial</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RHYTHMIC IDENTIFICATION**

While the TCM and the new RSM syllabus do not require this skill, both UNISA and the old RSM syllabus present rhythms melodically. The former requires rhythmic identification from Grades 5-8 with all melodies unaccompanied, whereas the latter provides harmonized melodies which are played with accompaniment, then a second time unaccompanied before the candidate is required to name the note values in a chosen section. The following example, which is taken from the UNISA Grade 7 syllabus, illustrates sections of the exercise used for rhythmic identification.

(UNISA VI-VII n.d.:18)
Note: C major has been used to illustrate the grade requirements for degrees of the scale.

UNISA points out that the student may sing ("a" "oo" "la" "na"), hum or whistle exercises which demand this type of vocal response, while the new RSM syllabus makes it clear that the examiner is sympathetic to poor vocal quality (AB RSM 1993: no page numbers) as pitch, rather than vocal quality, is important. Boys with changing voices may sing an octave lower if desired. (1993 Instrumental syllabus:6) Further assistance from the examiner is that he/she may play each note after it has been attempted to prevent pitches becoming completely out of tune. (Mundey, P.J. 1992: no page numbers)

IDENTIFICATION OF HIGHER OR LOWER PITCHES
UNISA Pre-Grade 1 requires the student to identify which of two pitches is higher or lower. Thisaccustomsthe students ear to identifying the direction of movement or lack of movement. RSM and TCM have no equivalent requirement. (UNISA Pre-1 n.d.:23)

MELODIC ECHO OF A SINGLE MELODIC LINE
This skill forms part of all three syllabi but to a very limited extent in the UNISA syllabus, which requires the singing of individual pitches at Pre-Grade 1 and Grade 1 level. TCM requires the student to echo 4-bar phrases, in duple meter for Grade 4 (2/4 and 6/8), including triple meter (3/4) at Grade 5 level and more complex examples in the above meters for Grade 6, for example:

Examples in simple time in all 3 syllabi use minim or crotchet beat units while those in compound time use dotted minim and crotchet beats. Note values smaller than a semiquaver or larger than a semibreve are therefore rarely used.
The new RSM syllabus makes use of echoes throughout the grades. In the preparatory test individual pitches must be echoed, approximately two-bar phrases for Grades 1-3, while those in Grade 4 increase to four bars and slightly more in Grade 5. The minor key is introduced at Grade 3 level.

![Grade 5 Example]  

**SPECIFIC IDENTIFICATION OF TONALITY**  
This refers to exercises wherein identification of tonality is not tested together with any other skill. TCM limits its requirements to Grade 1 level where the student must work out the tonality of a harmonized phrase as major/minor. Thereafter it is combined with other skills. RSM has no separate tonality tests but combines this skill with other critical ear exercises. UNISA makes more varied demands on its students in this regard, particularly in the lower grades. Identification is required as follows:

- Grades 2 and 3 - major, harmonic or melodic minor scales (only melodic minor for string players).
- Grade 4 - the aforementioned scales together with major and minor arpeggios.
- Grade 8 - whole tone and pentatonic scale. (This corresponds with the Grade 6 theory syllabus where the student is required to write and identify these scales.)

![Whole Tone Scale]  

**Whole tone scale**

![Pentatonic Scale]  

**Pentatonic scale**  

(UNISA 8 Licentiate n.d.:13)
DEGREES OF THE SCALE/INTERVALS

Identification and/or singing thereof is required by the old RSM syllabus, TCM and UNISA but in contrasting ways and at varying stages in the student's development as can be seen in the following illustration of degrees of the scale required:

In addition the old RSM syllabus requires knowledge of all intervals without relation to a tonic for Grades 7-8 level and within the range indicated for Grade 8:

UNISA Grade 5 presents intervals from the upper tonic, while both the old RSM syllabus and UNISA require the use of the harmonic minor at Grade 6 level.

The UNISA syllabus takes the process of interval identification one step further. The student is required to name the actual pitches in a given major or minor key as well as the identification of note values at Grade 8 level. This completes a process which began with identification of the first five notes of the scale at Grade 1 level.
SIGHT SINGING

Exercises which require the conversion of symbol to sound are not included either in the TCM syllabus or old RSM syllabus. The new RSM syllabus, however, introduces this skill at Grade 4 level. Candidates may choose treble or bass clef exercises depending on individual vocal range. Sight singing is unaccompanied for Grades 4 and 5 and consists of singing five and six notes respectively in free time, beginning and ending on the tonic with no intervals greater than a 3rd. A 4th is also required for RSM Grade 5 from the dominant to the tonic. The required range within the scale is as follows:

RSM Sight singing exercises in Grades 6-8 have approximately the same range as Grade 5 requirements, as well as stepwise motion or small intervals, but further complications are introduced, for example use of the minor key. Grade 6 sight singing is accompanied, while at Grade 7 and 8 level the accompaniment consists of a second melodic line below the given one, thereby forming counterpoint between the two voices, for example:

(RSM 6-8 1995:23)

Fifteen seconds are allowed for prior study.
The introduction of sight singing a lower part in Grades 6-8 is considered an important feature of musical training because the ability to hold one musical line against another is experienced in nearly all practical activity. (AB RSM 1995:6-7)

The UNISA syllabus makes extensive use of sight singing from Grades 5-8 with the minor key being introduced at Grade 6 level. UNISA presents its exercises in two different ways: Firstly, the student must compose (sing/hum/whistle/play) an answering phrase consisting of two bars to a melody consisting of two bars. (The given bars may be used for sight singing purposes). This is required in Grades 5-8. Secondly, the student must sight sing a melody of about eight bars for Grade 7 and a more complex one for Grade 8. An example of improvisation from the Grade 5 syllabus is as follows:

![Example of improvisation from Grade 5 syllabus](image)

(UNISA IV-V n.d.:11)

The composition of an answering phrase also forms part of the RSM alternate Keyboard Harmony syllabus, with the main difference between the two that in this case the exercises must be played rather than sung. The student must perform the given four-bar melody then add four bars.

![Example of RSM syllabus exercise](image)

(RSM 1965:22)

The exercise may be in 2/4, 3/4 or 4/4 time using C, G, F, D, A and B flat major in Grade 6. A, E and D minor are included for Grade 7. At Grade 8 level modulations to the dominant, subdominant or relative minor are required. The melody may be harmonized by the student if desired.
HARMONY

SING/PLAY FROM MEMORY UPPER/LOWER PART IN A TWO-PART TEXTURE
(i.e. melodic echo)

<table>
<thead>
<tr>
<th>Part</th>
<th>Type</th>
<th>Lower</th>
<th>Middle</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower part</td>
<td>minor</td>
<td>7</td>
<td>(8)</td>
<td>8</td>
</tr>
<tr>
<td>Lower part</td>
<td>major</td>
<td>7</td>
<td>(7)</td>
<td>8</td>
</tr>
<tr>
<td>Upper part</td>
<td>minor</td>
<td>6</td>
<td>(6)</td>
<td>6</td>
</tr>
<tr>
<td>Upper part</td>
<td>major</td>
<td>6</td>
<td>(6)</td>
<td>7</td>
</tr>
<tr>
<td>RSM</td>
<td>TCL</td>
<td>UNISA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following notational examples reflect the similar requirements of the 3 examining bodies for singing the lower part in RSM Grade 7, TCM Grade 8 and UNISA Grade 8.

(TCM 1987:29)

(RSM 6-8  1995:18)

(UNISA VIII Licentiate n.d.:14)

In the new RSM syllabus an added skill required at Grade 8 level is singing/playing the lowest part in a three-part texture. (A notational example thereof is provided under CHORD PROGRESSIONS) The new RSM requirements for melodic echoes within a harmonic
environment are therefore similar to those of sight singing in the higher grades, although sight singing of the lower part is only required in the Practical Musicianship syllabus.

**INDIVIDUAL TRIADS/CHORDS**

This involves singing and/or identifying the nature of a triad and later a chord as major/minor, root position, first or second inversion. In addition TCM requires the naming of the actual pitches of a major or minor chord above a given note and including V7 in Grade 8.

![Triad representation](image)

**TCM and old RSM format**

(****CM 1987:25)

**UNISA 6 format**

(UNISA VI-VII n.d.:4)

**UNISA 7 format**

(UNISA VI-VII n.d.:20)

The following table shows the progression from triadic exercises to identification of four-part chords as required by UNISA and TCM, whereas the new RSM syllabus omits the identification of triads and proceeds directly to chord progressions.

<table>
<thead>
<tr>
<th></th>
<th>TCM</th>
<th>UNISA 6 format</th>
<th>UNISA 7 format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominant Seventh</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four-part chords</td>
<td></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Extended position</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Diminished (root)</td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Augmented (root)</td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Second inversion</td>
<td>(6)</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>First inversion</td>
<td>(6)</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Root position</td>
<td>(6)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Major/minor</td>
<td>(6)</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RSM</th>
<th>TCL</th>
<th>UNISA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CADENCES

Unlike RSM and UNISA, TCM does not ask all four cadences in the same grade - the imperfect cadence is not required at all - and does not require identification of the imperfect cadence, therefore in the following table the TCM column reflects ALL the grades in which the particular cadences are required rather than the grade in which each first appears as in the case of the other two examining bodies. TCM combines the identification of cadences with the identification of tonality as major/minor, for example:

![Sheet Music Example](image)

Whereas TCM and the new RSM syllabus ask one cadence at the end of a phrase UNISA presents four or five per exercise.

<table>
<thead>
<tr>
<th>Minor key</th>
<th>6</th>
<th>2 3 4 5</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interrupted</td>
<td>only 7 (6)</td>
<td>2 4 5</td>
<td>6</td>
</tr>
<tr>
<td>Plagal</td>
<td>8 (6)</td>
<td>3 4 5</td>
<td>6</td>
</tr>
<tr>
<td>Imperfect</td>
<td>6 (6)</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Perfect</td>
<td>6 (6)</td>
<td>2 3 4 5</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RSM</th>
<th>TCL</th>
<th>UNISA</th>
</tr>
</thead>
</table>

KEYBOARD HARMONY

At Grade 8 level UNISA requires the student to play cadences in C, G and D major using suitable approach chords (i.e. a progression of three chords). In its Alternate Keyboard Harmony syllabus RSM combines cadences with melodic phrases and other harmonies.

Grade 6 students are required to play a melody in C, G or F major and 2/4, 3/4, or 4/4 time which should end in any one of the four cadences, as illustrated in the example opposite:
At Grade 7 level the keys of D and B flat major, A, E and D minor and time signature 6/8 are added. For Grade 8 a four-bar harmonized fragment must be played and followed by another four in the same style. In the example below the student must end with an interrupted cadence.

Although keyboard harmony has been phased out of the RSM aural syllabus it is a valuable asset to the study of chord progressions as will be explained in Chapter 4.

**CHORD PROGRESSIONS**

Grade requirements are as follows:

<table>
<thead>
<tr>
<th>Minor key</th>
<th>(8)</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>V16</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>VI</td>
<td>7 (7)</td>
<td>8</td>
</tr>
<tr>
<td>VI</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>V6 and V7</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>V7</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>V</td>
<td>7 (7)</td>
<td>8</td>
</tr>
<tr>
<td>IV6 and IV7</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>IV</td>
<td>7 (7)</td>
<td>8</td>
</tr>
<tr>
<td>II6</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>II</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>I7</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>I6</td>
<td>8 (8)</td>
<td>8</td>
</tr>
<tr>
<td>I</td>
<td>7 (7)</td>
<td>8</td>
</tr>
<tr>
<td>RSM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNISA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

At Grade 7 level the old RSM syllabus requires the identification of progression consisting two or three chords and three or four at Grade 8 level. The new syllabus is somewhat different. Grade 7 requires identification of the two chords constituting a cadence after the cadence has
been named by the student. Four chords must be identified at Grade 8 level, as illustrated by
the example on the following page. (Note that the first part of the exercise requires echoing
of the lowest part, a valuable skill for chord identification.)

The UNISA progressions consist of 3-4 chords. It may be noted that the primary triads, I IV and V are
most important with VI being the only secondary triad featured. It is, of course, the only one used
as the final chord of any
of the four main cadences.

The RSM Alternate Keyboard Harmony syllabus requires the harmonization of phrases as follows:

Grade 6 - Use I, IV, V and 2/4, 3/4, 4/4 in C, G and F major.
Grade 7 - Include D major and chord II.
Grade 8 - Include A, E and D minor and first inversions, for example:
MODULATIONS

<table>
<thead>
<tr>
<th>Minor key</th>
<th>8 (8)</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative major</td>
<td>8 (8)</td>
<td></td>
</tr>
<tr>
<td>Supertonic minor</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Relative minor</td>
<td>7 (8)</td>
<td>8</td>
</tr>
<tr>
<td>Dominant</td>
<td>7 (8)</td>
<td>8</td>
</tr>
<tr>
<td>Subdominant</td>
<td>7 (8)</td>
<td></td>
</tr>
<tr>
<td>Modulation or not?</td>
<td>only 7</td>
<td></td>
</tr>
</tbody>
</table>

Although all three examining bodies have relatively similar requirements their method of presentation of the material differs. TCM and RSM present one modulation per harmonized exercise. The new RSM syllabus allows naming of the new key instead of the scale degree (e.g. dominant) in Grade 7 and requires it IN ADDITION to the scale degree in Grade 8. Two examples are given in the RSM examination (new syllabus), one each in a major and minor key. UNISA, on the other hand, presents a melodic line with two different endings in Grade 7. Each contains one modulation to be identified. In Grade 8 three modulations are combined in one harmonized exercise. TCM also has a useful introduction to modulation with the student having to distinguish whether a fragment modulates or not, for example:

(TCM 1987:26)
CRITICAL EAR

TCM has no tests of this nature in its current syllabus, but RSM has introduced tests requiring insight in its new syllabus Grades 1-8. This parallels developments in the new theory syllabus Grades 1-8 which has also been gradually introduced over the past few years. The last section in each theory book consists of exercises which test overall understanding of concepts of rhythm, pitch and harmony.

RSM has two separate aural questions of this nature. Firstly the candidate must recognize and explain one alteration made to a phrase which is played twice with Grade requirements as follows:

Grade 1   Rhythmic change, two-bar phrase, using time signatures 2/4, 3/4 or 4/4.
Grade 2   Rhythmic or melodic change (separate example for each). 6/8 time included.
          Major key.
Grade 3   Four bars. Include minor key.
Grade 4   Include rhythmic, melodic or dynamic change.

Candidates may raise their hand where the difference occurs, if they cannot express it in words. (Mundey, P.J. 1992: no page numbers)

Secondly, identification of one or two features of a short extract are required as follows:

Grade 1   Dynamics (p/f), gradation of tone (cresc./dim.) and articulation (legato/staccato).
Grade 2   Include Tempo changes (rallentando/accelerando).
Grade 3   Include major and minor mode.
Grade 4   Include general perception of character.
Grade 5   Include pulse changes and perception of texture, rhythm, form, style and period.

Candidates are told what to listen for before the exercise is played with specific questions asked afterwards. Examiners may repeat the piece or sections thereof if necessary. (Medley, R. 1995)

Understanding of form from Grade 6 upwards includes phrase structure, for example the number of bars and comparison of phrases, as well as binary and ternary form. Style includes the character of definitive pieces - for example a minuet, sarabande and fugue - as well as in relation to a particular period and the student should be able to name composers from each period. Texture should be noted as chordal or using a broken chord accompaniment etc. The extract on the following page, for example, is in ternary form with the melody in the treble clef. Echoes are used extensively and all dynamics change abruptly. Four-bar melodic phrases are
extract on the following page, for example, is in ternary form with the melody in the treble clef. Echoes are used extensively and all dynamics change abruptly. Four-bar melodic phrases are used, thus reflecting the order and simplicity of the Classical period.

Italian terms should preferably be used in answers, which should reveal basic understanding of the periods from which repertoire is taken. Non-technical answers will receive credit, but not as much as those which demonstrate a greater depth of understanding. (Mundey, P.J. 1992: n.p.)

At Grade 8 level candidates should provide relevant information concerning musical features in a short discussion rather than in relation to direct questions. Comments by the student may lead to further discussion and questions from the examiner. (AB RSM 1995:43) The student should notice features such as the use of chromatic scales, augmentation or diminution, dance form, cross rhythms or ornamentation.

An example of this type of question (overleaf) is drawn from the Grade 7 syllabus:
(a) About form: Describe the form of this piece. Did you hear the opening material again? Where?
(b) About texture: Comment on the texture. Does it remain the same throughout?
(c) About dynamics: Were the changes of dynamics usually gradual or sudden? When phrases were repeated, was the second time louder or softer?
(d) About shape of phrases: Did the melody normally move by step or leap? Did it rise or fall at the cadences?
(e) About period: In which period do you think this piece was written? Name a possible composer.
Development of the critical ear begins in Pre-Grade 1 of the UNISA syllabus where the student is required to recognize a melody from a group of three given. In Grades 1-5 the difference is between two renderings of the same phrase with two of the following aspects being included: Grade 1-2 - Loud/soft (for dynamics or tone colour), treble/bass, slow/fast, happy/sad, staccato/legato.

Grade 3-4 - Include crescendo/diminuendo, major/minor, simple/compound time, pedal/none, conclusive/inconclusive cadence.

In Grades 6-8 the student is required to detect inaccuracies in the second rendering of a melody of which he/she is given a written copy. For Grade 6 rhythmic inaccuracies occur, but in Grades 7-8 melodic errors are included.

Inversion, augmentation, diminution and sequence must be recognized in a melodic line in the Grade 7 syllabus.

Finally, UNISA includes a test of memory which is appropriately called "visualization". The student is given a maximum of three minutes in which to memorize a melodic line of four bars on his/her instrument which must then be played back without reference to the notation. The level of difficulty increases throughout the grades with time signatures used as follows:

Exercises for the critical ear therefore form a vital part of both the RSM and UNISA syllabi.

RSM PRACTICAL MUSICIANSHIP SYLLABUS

The following discussion serves to highlight the similarities and differences between this syllabus and the aural syllabus of RSM. The new syllabus and the Practical Musicianship syllabus have many similarities, whereas the old aural syllabus is vastly different.

The student must respond to a variety of practical musical exercises which test understanding of elements of pitch, rhythm and harmony. Firstly, in the early grades melodic and rhythmic echoes are important as these build vocabulary for later creative work. The syllabus separates rhythmic and melodic echoes (groups of two bars in an eight-bar exercise) for Grade 1. In Grades 2-3 the student must clap two-bar ostinati whilst echoing a melody.

Early requirements also include playing two-bar fragments from memory without reference to a score. Singers may play on any other instrument, for example a glockenspiel. The Grade 1 melodies are based on stepwise movement and triads with intervals not bigger than a 3rd. Intervals up to the 5th are included in Grade 2 and up to the octave in Grade 3 including dynamics.

The skills of singing and playing from memory are combined from Grade 4 onwards. A four-bar melody in 2/4 or 3/4 time is played twice by the examiner whereafter the student must sing it back. After a further hearing the student must play it back. 6/8 time is included in Grade 6 and at Grade 7-8 level the melody includes accompaniment. When playing it back piano
Accompanied **sight singing** is compulsory in Grades 1-4, but from Grade 5 onwards these exercises are optional, with a choice being given between part singing and transposition at sight.

A single melodic line of four bars with accompaniment must be sung in Grade 1-4, beginning with stepwise movement and triad shapes then becoming more difficult through the Grades. 2/4 time is used in Grade 1, 3/4 is included in Grade 2 and 4/4 and 6/8 time in Grade 3.

Part singing begins in Grade 4 with the student singing the lower part of a two-bar melody while the examiner plays the upper part. The length increases to four and eight bars in Grades 5 and 6 respectively. In Grade 7 the student may be required to sing the middle or lower part up to a length of twelve bars while the examiner plays the other parts. At Grade 8 level the alto clef is included.

The **transposition** alternative to sight singing involves transposing up or down a semitone at sight, four bars are given in Grade 5 and eight bars in Grade 6. The required interval increases to include a major 2nd and minor 3rd in Grade 7 and major 3rd in Grade 8.

In Grade 6-8 the student is also required to interpret a melody **at sight** (example below) which includes dynamics, ornamentation and marks of expression. No ornaments are required if the melody is sung rather than played. At Grade 7 level a simple accompaniment for keyboard,
harp or guitar players is included. Words may be provided, but need not be used.

Extensive use is made of **improvisation** which plays an important role in the development of creative sense in students as well as testing knowledge of pitch, rhythm, dynamics and compositional techniques, for example sequence, in later grades. The option is often given to sing or play. Keys used begin with one sharp or flat in Grade 1 and present no more than three in more advanced grades. The student is required to improvise in a minor key in Grade 7. In some cases the student may attempt the exercise once before it is examined or may be given a second chance if the result is not pleasing.

**Grade 1-2** Two-bar answering phrase. Tap the rhythm then sing, using first bar and adding tonic for final bar.

**Grade 3** Four-bar phrase and response. ABAC or other pattern.

**Grade 4-6** Improvise a melody using chords I and V of up to eight bars over the given accompaniment played by the examiner. Use chords II and V for Grade 5 and include V\(^7\) in Grade 6. Chords in inversion are recommended for Grade 6.

From Grade 5 onwards the student may choose between the following options: **improvisation of a melody** over a given accompaniment (played by the examiner) or an **accompaniment**, in which case the candidate or the examiner may play the melody.

In Grades 7 and 8 a two-bar melody is to be completed to a length of eight bars in seventeenth or eighteenth century style, while the chord improvisation involves realization of a figured bass using 5 4 7 5 \(^5\) in Grade 7 and including 3 3 3 2 \(^3\) for Grade 8.
Free improvisation using a motif is also required in Grades 5-6. A time limit of one minute is imposed in Grade 5 and in Grade 6 an interval or texture (tremolo, glissando or chord etc.) is provided for improvisation. This is expanded to improvisation on a poem (or a painting for non-English students) in Grades 7-8 with a time limit of two minutes. Mood and musical structure are obviously important in this type of exercise. Examples of notational stimuli are as follows:

(RSM 1-5 1989:14) (RSM 6-8 1989:5)

The only other examination syllabus requiring improvisation is, as previously explained, UNISA Grades 5-8 where a two-bar melody must be completed to a length of four bars. The RSM Practical Musicianship syllabus is thus unique in its emphasis on improvisation.

The student is required to point to and explain differences in the rendering of musical extracts with reference to a score, this being similar to requirements of the "Critical Ear" sections of RSM and UNISA. In Grades 1-3 three to four alterations are made using a melodic line only. This increases to five alterations in an accompanied melody in Grade 4. Differences involve the following:

Grade 1  Incorrect notes and note values.
Grade 2  More difficult.
Grade 3  Include rests and dynamics.
Grade 4  Include tempo changes (sections may be repeated if errors not heard) using actual pieces. Changed notes and rhythms only in melody line.
Grade 5  Articulation and phrasing included.
Grade 6  A two-part score is used.
Grade 7  A score of 1700-1850 consisting of up to four parts (questions on keys, harmonic framework, instrumental style and structure, sequence, imitation).
Grade 8  The score may include voices as well as instruments.
SUMMATION

Obviously many parallels exist between the new RSM aural syllabus and the Practical Musicianship syllabus. This appears to be intentional in the light of RSM's aim of placing more emphasis on perception and listening with awareness with the end result being more relevant to the students' study of his/her instrument. (AB RSM 1992:2) Both syllabi include melodic echoes (and playing from memory), sight singing, error detection, part singing and answering questions based on a score which require musical insight.

Improvisation, which does not feature in the aural syllabus, will complement other areas of aural development (as will interpreting at sight) and in particular aid the application of Sloboda's personal development orientation. (Sloboda, J. 1987:24)

Some skills are introduced at an earlier stage in the Practical Musicianship (PM) syllabus than in the aural syllabus, for example singing the lower part is part of Grade 7 aural but Grade 4 PM - a choice is given between this skill and transposition at sight from Grades 5-8 - and sight singing appears in Grade 4 aural and Grade 1 PM although at a very basic level.

The diverse aural syllabi currently in use therefore offer many opportunities for development of both creativity and necessary skills in rhythmic and melodic echoes; identification of meter and rhythm; tonality; sight singing and identification of scale degrees and intervals; part singing; identification and singing of triads and chords; identification of cadences and chord progressions; keyboard harmony; identification of modulations; error detection and recognition of rhythmic, melodic, dynamic formal and structural features and improvisational skills involving melody and accompaniment. The student is therefore required to use imitation skills, memory or insight or combinations thereof.

The educator should note, however, that of necessity a well structured aural development course is necessary rather than a stampede through the relevant aural manual a few weeks prior to an examination.
CHAPTER 3
FACTORS RESTRICTING AURAL DEVELOPMENT

The interaction between teacher and student in the aural field depends both on their attitude towards the subject and each other and the use of available time, suitable methods and educational materials. The results of this interaction may be positive if the correct approaches and maxims are applied, however restricted aural development often occurs due to interactional problems.

THE TEACHER (ATTITUDES)

As previously stated, the teacher controls the aural development process. He/she determines methods and materials to be used and the most efficient use of available time. The two main problems facing the teacher are attitude and lack of expertise with the two often being interrelated. For example, a teacher with problems in certain areas may not find it easy to assist a student in overcoming similar difficulties. Certain aspects of the aural syllabi therefore become "problem areas" with no immediate improvement seemingly possible within the confines of the present pupil/teacher relationship. The difficulty of certain exercises within the examination syllabi becomes a ready excuse for poor aural results achieved rather than self-analysis and a search for self-improvement on the part of the teacher.

Categorisation of students is an important reason for student non-achievement. Previous results are allowed to determine future achievements in the eyes of the present teacher, either through printed results of tests and examinations made available to him/her, word of mouth or perceptions of the student formed as a result of early interaction between teacher and student.

A study of the results of categorisation was undertaken in Rosenthal and Jacobson's "Pygmalion" experiment which dealt with teacher expectation of students diagnosed as having high academic potential and subsequent student performance. "The moral is obvious. The more you expect of your students, the more they will achieve, the less you expect, the less they achieve." (Sloboda, J. 1987:31) The methodology of this study has been criticised, but the general conclusions were confirmed by many subsequent studies, for example that of Brophy and Good. (Brophy, J.E. 1970) Within a musical context, a study which aimed to determine whether classing a group of intervals as "easy to identify" would produce a lower
error rate when classing others as "difficult to identify." (Jeffries, T.B. 1970:399) Results showed that a significant number of subjects trained with "easy" intervals improved their score, while those with "difficult" intervals did not. (Jeffries, T.B. 1970:405)

The teacher should therefore adopt the attitude of Slaboda: "There is no theoretical reason why any individual should not follow the developmental path of a prodigy." He feels that no categorization according to norms should occur. (Slaboda, J. 1987:23) The result of such an attitude should therefore be the creation of a positive self-image through positive reinforcement, the setting of goals and working towards the achievement thereof without undue attention to past failures. Obviously the past cannot be totally ignored. The teacher must seek areas requiring remedial work, but future successful aural development should be the focal point of aural work.

It is also important to restore the students self-image if it has been eroded over the years as a means of constructing a new basis for aural development and future achievement. This process may be aided by good humour and a relaxed atmosphere as well as careful goal setting. Long-term goals which seem beyond the reach of the student should be accompanied by achievable short-term goals. The information presented is important, but the way in which it is presented is most important of all. Mistakes should become challenges to improve rather than reinforce past failures. (Slaboda, J. 1987:31)

The third important aspect of the teachers attitude is the setting of priorities. Barrett-Ayres points out that aural training "has been the Cinderella of musical disciplines, ousted from a position of primary importance by the techniques of performing and composing. Yet it is impossible to play music properly, or write it with authority or feeling if the ability to hear has not been cultivated." (Barrett-Ayres, R. 1966:300) Sadly, many music students are suffering from the negative effects of aural development which has been condensed into a few very intensive minutes of the lesson during the last few weeks prior to each practical examination and which involves specific testing rather than learning and development within a broader framework i.e. these practice tests are being equated with aural development. The onus rests on the teacher to improve this situation.

As can be seen above, the attitude of the teacher plays a large role in determining the attitude of the student towards present or future aural development and achievements.
THE STUDENT (ATTITUDES)

The attitude of the student determines the way in which he/she reacts to the teacher and must be positive in order for satisfactory interaction and aural development to take place. Various influencing factors must be considered.

A poor aural background, which may be coupled with previously poor performances, leads to negative feelings regarding ability and possible future success. Aural studies are mentally divided into areas that the student considers him/herself capable of doing, failing to realise that past training rather than personal ability is at fault. A lack of theoretical background, for example, will result in difficulty in correlating sound and symbol. Practical and theoretical elements are usually divorced from aural development despite certain syllabi calling for integration.

The current syllabus for extracurricular music (piano) in schools under the jurisdiction of the Eastern Cape Education Department advises the following for each of the 10 steps of the syllabus:

"The pupil should be encouraged to practise the following skills regularly: playing by ear, improvisation, visualisation, transposition and evaluation of his/her own performance." (CED 1993:2-3)

The current Eastern Cape Subject Music Syllabus for Std 6-7 consists of four modules - Performance and Viva Voce, Aural Training, Theory of Music and Rudiments and History of Music, Form and Knowledge of Instruments.

The syllabus requires the following theoretical areas to be studied: staff notation, time signatures, scales and key signatures, intervals, triads, four-part writing and musical terms and signs, including melody writing in Std 7. In each of these areas integration with aural training is stipulated as follows:

N.B. Integrate with Aural Training (Module 2)

The only areas excluded from this stipulation are four-part writing and melody writing. (CED 1991:14-18, 31-35) It is interesting to note the exclusion of four part writing - which involves cadences - as the identification of cadences is required in the aural training module (CED 1991:13, 30) Both four-part writing and melody writing demand inclusion as will be shown in Chapter 4.

Furthermore at Std 6 level the study of Form, which involves phrases, cadences, periods, sections, Binary, Ternary and Old Rondo form should also be integrated with aural training.
The aural modules in both Stds 6 and 7 involve sight singing, dictation, rhythm and time, intervals, triads and cadences. (CED 1991:11-13, 27-30)

A lack of integration may therefore contribute towards a lack of background, with this fault being attributed to the teacher of past or present.

A related area is that of misunderstanding concepts or skills previously taught. The following example is presented in the context of sight singing, but assumes validity in the case of other aural disciplines too: The student tries to scan and interpret a melodic pattern, but can't do this fully, so sings what is in the "mind's ear". The resulting mistakes are not "instances of "unthought" - of irrational mistakes pure and simple." They are a "mix of the partially understood present and the lingering past" which results in a musical structure which is incoherent, but also coherent because the student is trying to create "congruence between past and present". (Gould, M.J. c1979:2) It is therefore essential that both student and teacher are aware of the EXACT nature of the former's understanding of all concepts in order to prevent confused ideas when confronting practical exercises.

One attitude often common to both student and teacher is focus on other priorities. Musicians are often too concerned with perfecting their practical repertoire, therefore neglect their aural development, sight reading and technical work (scales and arpeggios). This may result in apathy with regard to acquisition of aural skills and failure to realise their value in accelerating learning in other areas of study, for example practical repertoire.

The role of 'plateaus' versus performance objectives should be recognised as a contributory factor to anxiety and therefore a more important reason for non-performance than apathy or a long history of failure. 'Plateaus' are areas of seeming non-improvement, for example, a section of a piece or exercise which seems to defy practice. As a means of improvement Davidson points out that students need to be informed of the existence of plateaus and proposes the use of performance objectives to correct these problems, (Davidson, G.F. 1984:133-136) a method to be applied in later chapters of this dissertation. This would ensure that the student maintains a positive overall attitude towards aural development.

All of these situations may be directly or indirectly attributed to the teacher of past or present, his/her methods and materials used as well as misuse of available time.
THE TIME FACTOR

This aspect of aural development may determine the methods and materials used. From the perspective of the school teacher the number of periods available to a student per week are restricted by the need to accommodate ever increasing numbers of students due to staff cutbacks. The time available is usually devoted to Practical Work, Theory and History of Music (in order of importance). Sports days, guest speakers, Founders day, excursions, public holidays etc. also erode available time, usually resulting in aural development taking a low priority and/or the exploration of new methods being severely limited. The teacher must endeavour to inspire the student to use his/her initiative, create time to practise outside the classroom environment and must ensure that time within the class is effectively utilised.

TEACHING METHODS

"Tradition and habit seem to dictate many of our aural training methods, some of which might well be inefficient, superfluous or inadequate." (van Zuilenburg, P.L. 1975:23)

Pedagogues such as van Zuilenburg have long been aware of problems in this area of aural development. Methods chosen will depend largely on the attitude of the teacher according to his/her perception of the necessary development of the student and time available. Unfortunately, the chosen methods may actually waste time due to the teacher's failure to realise their ineffectiveness. 'Tried and tested methods' are often merely habitual and need to be replaced by more effective ones. The above situation will most likely result in negative attitudes on the part of the teacher and student, caused by frustration on the part of the former and frustration combined with boredom on the part of the latter. Varied methods should be presented as different students may have a better response to certain methods rather than others and exhibit better progress as a result.

Alternately the aural development programme may be unsystematic and badly structured, characterised by an avoidance of the Maxims outlined in Chapter 1 (either through ignorance or a lack of effort). This may produce the same effect as the 'tried and tested' approach resulting in poor aural development and a negative self-image.

An extensive discussion of methods covering the full range of rhythmic, melodic, harmonic and critical ear skills has been reserved for Chapter 4.
MATERIALS

The availability of teaching materials directly effects both teacher and student attitudes and performance. Teachers who lack resources and are unable to devise their own methods and exercises will be unable to lead students through a proper aural development course. What is available to the South African music teacher?

My *modus operandi* for conducting such a search was to approach the issue from the perspective of the average music teacher who would have access to one or more of the following channels - library membership (in my case the UNISA library) and therefore inter-library loan, as well as music retailers. The resource materials uncovered in this search have been divided into two general areas, those which are examination specific according to UNISA, Royal Schools and/or Trinity College requirements and, secondly, those which are of general interest with only certain sections applicable to the examination requirements of the three examining bodies and, therefore, the context of this study.

EXAMINATION-SPECIFIC MATERIALS

Exercises for both the old and new syllabi of the Associated Board of the Royal Schools of Music aural examinations are provided in a series of manuals marketed by the Board and other publishers, some of which make use of cassettes (sold separately). The RSM manuals currently available in music outlets are numerous and of varying levels of usefulness.

The 1972 series - which is still available to a limited degree - covers the old syllabus of which only Grade 8 was valid for examinations in 1996 and is spread over three volumes - Part I Grades I-V, Part II Grades VI-VII and Part III Grades VIII. Although this entire series will no longer be examination-specific from 1997 onwards it may provide exercises useful for general aural development as well as parts of the syllabus which have remained in force, for example detection of pulse, cadences and modulations. Pitch exercises previously used for singing from memory (melodic echoes) may now be used in the context of sight singing, for example

(ABRSM VI-VII 1972:21)
Part IV (Diploma) contains exercises in identification of major, minor, augmented and diminished triads, melodic echoes (unison and two-part), rhythmic echoes, cadences, chord progressions using I, IV and V in root position and inversions, modulations to the subdominant, dominant and relative minor (ABRSM 1957) which may be used as supplementary material for advanced students.

The volume *Specimen tests in keyboard harmony* (1965) which also pertains to the old syllabus, is intended for students who choose the alternative keyboard harmony option as part of their aural tests. It contains melodies for harmonization and completion and may also be used for sight singing, therefore it remains useful although no longer current.

Teachers were prepared for the new aural syllabus implemented in 1993 (Grades 1-5) with the appearance of *Specimen aural tests Grades 1-5* (1992). A similar process was followed with the revised edition (1994) preceding the revised syllabus in force from 1995 and the new syllabus Grades 6-8 for implementation in 1995 being covered by with the arrival of *Specimen aural tests* ... (1995). *Aural training in practice* (n.d.) Bk I Grades 1-3 and Bk II Grades 4-5, both of which have companion cassettes containing recorded examples, provide extra exercises for the lower grades. Two other series of aural manuals appeared in 1993. *Aural Time! Practice tests for ABRSM and other exams* consists of five volumes for the first five grades respectively, while *The ABC of aural awakening* is housed in three volumes covering Grades 1-2, 3-4 and 5 respectively. A separate cassette is available for each grade, while each volume includes a glossary of useful terms. It should be noted, however, that due to the changes in the syllabus for 1995 the individual volumes for Grades 4-5 are no longer 100% specific as is also the case with Books II and III of *Aural training in practice*. The teacher would need to exercise discretion in conjunction with the newest syllabus to utilise these texts to their fullest potential.

Exercises for the Practical Musicianship aspect of RSM examinations are provided in the two volumes entitled *Specimen tests in practical musicianship from 1990* (1990) which cover grades 1-5 and 6-8 respectively, while *Musicianship in practice* (1991) provides extra exercises for Grades 1-3 and 4-5 in its two volumes.

The sight singing manuals for voice candidates may also prove useful for non-singers with the provision of material for extra sight singing practice or melodic echoes. The two books (n.d.) cover Grades 1-5 and 6-8 respectively. Alternative aural tests are also provided for candidates with hearing impairment in two volumes - Grades 1-5 and Grades 6-8 respectively.
Trinity College of Music's *Sample ear tests for grade examinations* (1987) is specifically intended for preparation for its examinations Grades 1-8, while UNISA has also published five Practical musicianship (aural) manuals with the grades grouped as follows: Pre-Grade 1 (which also includes sight reading), Grades I-III, Grades IV-V, Grades VI-VII and Grade VIII and Licentiate (n.d.). As was the case with RSM, the two UNISA sight singing manuals intended for vocal examination candidates, which cover Grades IV-VII and Grades VIII and Licentiate (n.d.) respectively, may provide extra practice for non-vocal candidates in the area of sight singing, dictation or melodic echoes. Teachers should be aware, however, that use is made of modulation and chromatic notes in Grade 5 and above so exercises should be carefully selected.

The following example reflects the use of chromatic notes.

![Musical notation example](image)

(UNISA Sight Singing n.d.:9)

From Grade 6 upwards separate exercises are provided for soprano/tenor and baritone/bass.

A final two texts which may be regarded as examination specific are designed to cover the requirements of a variety of examinations within the United Kingdom at the time of going to press. The first, *A Method of Aural Training* by Eric Taylor contains no publication date but the nature of its content and index suggest, amongst others, the old RSM syllabus. Part I equips the student to cope with requirements up to RSM and TCM Grade 5, Part II advances to Grade 7 of RSM and TCM and the Ordinary Level of G.C.E., while Part III concludes the development of the student up to RSM and TCL Grade VIII, Advanced G.C.E. and diplomas, for example L.R.A.M., L.R.S.M. i.e. is designed for particular use in the United Kingdom. Grade requirements and page numbers corresponding with those of the manuals provided by the examining bodies are provided in the Appendix. This would enable easy cross-referencing and utilisation of exercises where necessary.

Extensive use is made of a profusion of exercises for dictation as well as rhythmic and melodic memory in the form of echoes, with rather brief explanations of execution thereof. This
parallels the layout of syllabi and gives little extra assistance to the student. A few methods used are questionable. There is extensive use of solfa even in the study of triads, lesser known beat units are held back until Chapter 7 of Part III i.e. 2/4, 3/4, 4/4 and 6/8, 9/8, 12/8 are the only ones used up to this point, while the method of introduction of compound time is misleading. The subdivision of a beat into 3 pulses (compound time) is equated with three pulses in the time of two (a triplet in simple time) i.e.

\[ \begin{array}{c|c|c|c|c|c|c|c|c|c|c|c} & & & & & & & & & & & \\
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\end{array} \]

Annie Warburton's *Graded aural tests for all purposes* (1971) provides material to cover the requirements of every public examination at that time (including Diplomas such as L.R.S.M.) and aims to be useful to the teacher merely wishing to train the student's ear, the class music teacher and the student, for self-help. There are sufficient examples for this book to be used by both teacher and student during the aural development process. (Warburton, A. 1971:xii)

Details of examination requirements for O and A level are given as of 1971 and are therefore of limited relevance.

Elements of Aural, Theory, History of Music (General Musical Knowledge) and Formal Analysis are condensed into one volume. Theoretical and Aural aspects covered are accent and time, rhythmic and melodic echoes, sight singing and dictation (which includes the use of Somervell rhythmic shorthand), two-part melodic echoes, triads, individual chords, chord progressions, cadences and modulation. History of Music (General Musical Knowledge) and Form receive coverage under the heading of *Tests of general musical experience* (Warburton, A. 1971:Section XI) where focus falls briefly on important works for individual instruments and for orchestra, including details of voice types and particular singers, genres (for example oratorio and opera), form, structure and modulation including dance forms and compositional periods.

The main difference between this text and all the preceding ones is the final chapter, *Tests of general musical literacy* (Warburton, A. 1971:Section XII) which tests useful aural skills. These include adding tempo and expression marks to a given melody, inserting time signatures and barlines, completing dictation melodies, detection of inaccuracies of rhythm and pitch (example
below) and answering questions on a melody, part of which is given. Furthermore, in some sections the user is referred to exercises in others i.e. exercises may be used for more than one purpose.

The manuals discussed thus far will prepare the student for Grades 1-8, while Warburton will provide a broader musical education but students may need additional assistance to further develop areas not specifically examined in the RSM, TCL and UNISA syllabi Grades 1-8. Such necessary skills may, for example, be tested beyond Grade 8 or during internal school examinations therefore they should not lose prominence amidst a profusion of Grade-specific exercises. A requirement of the UNISA Licentiate examinations, for example, which is not included in the Grade 8 syllabus is dictation. Although sight singing or melodic echo exercises from the aforementioned aural manuals or the exercises provided by Warburton may be used for skill development, specific assistance for this and other elements of aural development may be found in more general texts.

**GENERAL MATERIALS WITH SOME RELEVANCE TO THE GRADE 1-8 SYLLABI**

A number of extremely comprehensive texts were uncovered through university libraries. The major disadvantage is that the vast scope of the content of certain texts may rate them as not financially viable, although small sections thereof contain many useful ideas and exercises. Certain texts were part of a series of which other volumes were not available, while others also referred to seemingly useful resources which were out of print or could not be obtained, for example Barlow and Morgenstern's *Dictionary of musical themes* in two volumes (Williams and Norgate) - instrumental and vocal - and Neil and Anna Butterworth's *400 Aural examples from the masters* (Novello), both of which could be of immense value for development of skills such as sight singing, dictation and error detection.
Each text is laid out to meet the need of a certain type of aural student, for example Arnold Fish's course *Fundamentals of sight singing and ear training* is intended for college and conservatory students who have some prior musical experience and are fairly mature and motivated to learn (1964:vi). The manuals of Benward (1987), Fish (1964), Horacek (1970), Kreter (1976), Pratt (1990) and Sherman (1972) also have a college bias, while Ottman (1991), Thackray (1978) and Winold (1971) intend their aural manuals to be used in high school as well as at college level. Thackray, for example, intends his course to be a basis for general musical studies at both tertiary and high school level and recommends it for teachers, their students and prospective teachers (1978:Preface). Furthermore all of the aforementioned texts reflect the American college perspective. The teacher will be required to draw material from each resource and apply it according to the necessities of his/her personal teaching situation.

The time span required for "completion" of each of the courses also differs vastly, varying from Hindemith's one-and-a-half to two year recommendation (1946:Introduction) to seven years - subject to constant revision - in the case of Horacek (1970:Preface). Other authors leave control of the time factor to the discretion of the teacher.

The following common factors occur in the texts to be analysed in this study and will therefore not be discussed repeatedly when each individual text is analysed: Firstly, integration with theoretical and practical lessons is a necessity, although some manuals - for example Henry (1986) - include excellent theoretical explanations for new concepts introduced. (A small number of the texts are largely theoretical and will be discussed each in its own right.) Secondly, aural texts which include both development of pitch and rhythmic skills treat the two elements separately before presenting them as a whole, for example in dictation and sight singing. Finally, exercises in the aural texts fall into two categories - either specially composed according to context or drawn from the literature, with a few exceptions: Kern (1963) makes exclusive use of examples from the literature, while Ottman (1991) and Trubitt (1979) only use exercises which are specially composed. McGaughey (1966) makes extensive use of exercises from literature while Fish (1964) uses many folk songs in conjunction with other examples from the literature, some of which are specially composed.

The individual discussion of the various texts will highlight both the positive and negative characteristics and content of various aural texts in separate two categories, firstly those which focus on the acquisition of a specific skill, for example sight singing and, secondly, those which are geared towards general aural development with a varying exercise content. Here
subdivision will occur into three further categories: those which are drill-orientated (with large exercise content), creativity-orientated (also with a large exercise content) and those which have a theoretical bias (therefore limited exercise content). This evaluation will be undertaken within the context of this study i.e. whether the text is suitable for Remedial Aural Development up to and including Grade 8. The focus is on exercise content rather than methods employed by the authors, which will be examined in Chapter 4.

PROGRAMMED INSTRUCTION

A final area which must be examined before individual texts can be evaluated is the use of Programmed Instruction (PI), a method advocated by music theorists including Benward (1983 and 1974), Henry (1986), Horacek (1970), Kraft (1967), La Porta (1970), Ottman (1991), Sherman (1972), Trubitt (1979) and Winold (1971). (The nature of their "programming" will be discussed here rather than together with each individual text.)

The ancestry of PI may be traced to 1926 when Dr. T.H. Pressey experimented with punching out answers to specific questions into a keyboard and receiving immediate feedback. B.F. Skinner continued along similar lines in 1954 with his "teaching machine". Both did not really constitute Programmed Instruction in its present sense, merely response-feedback. (Davidson, G.F. 1984:56-57)

The form of education that developed therefrom is known as Programmed Instruction (also known as Auto-instruction, Machine Teaching, Self-instruction, Programmed Instruction or automated instruction). Material is presented in small logical steps (usually known as frames) leading from the known to the unknown. Each step elicits a response from the student, whereupon immediate knowledge of accuracy is provided. (Carlsen, J.C. 1964: 139) The use of recorded teaching material was well established in the foreign languages by the 1960's, (Spohn, C.L. 1963:91) for example the Living Language courses of the 1950's which enabled the study of Spanish, French, Italian, German, Hebrew, Russian and English. (Martin, G.A. n.d.)

Programmed Instruction (PI) originally took the form of a book, mechanical means (long playing records, reel recordings and cassette tapes) or a combination thereof and could take place either in a listening laboratory situation or in the student's home environment subject to the availability of equipment. The first programming method, which presented musical materials on magnetic tape, developed from research undertaken in 1958 by C.L. Spohn. He discovered
that the use of this method decreased the number of errors made by the control group in a study based on tests of harmonic and melodic intervals between degrees of the major scale played on the piano. (Spohn, C.L. 1963:93-95) He also researched types of stimulus and response used in PI: Aural stimulus - paper and pencil responses; aural and visual stimulus - recorded vocal responses on tape; aural stimulus - recorded vocal responses on tape and aural and visual stimulus - paper and pencil responses. All four groups were given the same materials and time etc. The result showed that singing response seemed to be an excellent way to learn basic elements of music. (Spohn, C.L. 1963:97-98) On the negative side, however, a canvas of student opinion in one case revealed that students found the music "extremely dull" (Barrett-Ayres, R. 1966:301), a distinctly negative influencing factor.

Two types of programming may be distinguished: The first, Branching, involves the presentation of stimuli "in such a way that the nature of the response will determine the sequence of the steps." [for example multiple choice questions] In the case of the second, Linear programming, the steps are presented in a fixed sequence. (Carlsen, J.C. 1964:141) G.F. Davidson finds little or no difference in the results of using either method (Davidson, G.F. 1984:58-9), but in the courses reviewed within the context of this dissertation an inclination towards the second category was observed. This observation may be explained by the fact that branching is not possible with material presented on cassette or LP as the order of presentation is fixed. The natural course of events may only be altered by intervention of the student or teacher, for example if one section is easily mastered the rest of the exercises in that section may be skipped by fast-forwarding. Branching is possible when harnessing the power of the computer.

"Never before have music educators had at their disposal such a flexible tool for presenting stimuli, recording responses, controlling instrumental variables, and analysing student data, all as part of one automated process." (Hofstetter, F.T. 1981:53)

The computer, the most recent tool for PI, has been used extensively in conjunction with educational software for Language, Mathematics etc. An early example in the field of music, GUIDO (Graded Units for Interactive Dictation Operations), involved the student selecting answers from on-screen alternatives. An experiment in which this programme was compared to a traditional ear training tape laboratory, showed that the GUIDO group improved more than the control group. The results were stored in a data base. (Hofstetter, F.T. 1981:46-48) PI is therefore especially useful for controlled research and productive use of time, a view shared by Sherman. (Sherman, R.W. 1965:36)
Hofstetter used the computer at the centre of COMPETENCY-BASED EDUCATION (CBE), a mode of instructional delivery in which the student works at a level until competence is achieved, then moves on to more difficult materials. It is therefore possible for each student to receive an individualized programme. In a CBE experiment involving aural interval identification the experimental group improved more on subsequent materials than the control group (Hofstetter, F.T. 1981:51-52) and despite frustration with having to meet competencies the Students Council approved the continuation of the CBE learning model. The computer would seem to be a very powerful tool in programmed aural development.

**How effective is Programmed Instruction?**

**Empirical research**

The results of an experiment by J.C. Carlsen clearly indicated that programmed taped material is valuable for teaching melodic dictation, but the author points out that "few if any psychologists or educators contend that programmed learning will solve all our educational problems." This study evaluated programmed learning in lieu of a teacher, but indicated that it would be most effective when it is not the sole educative source. (Carlsen, J.C. 1964:147)

Another study in the 1960's (which was interval-based) concluded that students from two contrasting geographical regions could gain from the use of the same set of programmed drills adapted to the local environment, showing a significant improvement in interval learning. (Tarratus, E.A. 1967:214)

A later investigation using intervals and melodies within the tonal, tonal-atonal and atonal medium undertaken by R.W. Sherman does not support the hypothesis that students with differing musical abilities would achieve equally under condition of selected response - aural, selected response - visual, constructed response - written and constructed response - vocal. (Sherman, R.W. 1970:382) It does however prove that students with differing abilities would respond in the same way to tape-recorded self-instruction. (Sherman R.W. 1970:383)

T.B. Jefferies showed that immediate knowledge of results, a characteristic of PI, produced a lower overall error rate than delayed knowledge, although he points out that certain variables still had to be examined, for example the number of answers in a group to be confirmed. (Jeffries, T.B. 1970:402)
Computer-based instruction (CBI) was the basis of various studies, for example Canelos (1980) found CBI to be "significantly better than traditional programmed instruction or self-practice with tests for teaching intervals" however it demands a lot of time. A study based on the opinions of 75 sophomores was basically negative. They felt that it required too much time outside class, too much progress was expected in too little time and the increase in level of difficulty was not consistent throughout the programme. (Pembrook, R.G. 1986:121) Hofstetter (1979:201-213) found that 83% of students enjoyed CBI for dictation, whilst Fisher (1982:19-27) found much educational software to be simplistic. The explosion of computer technology since then, particularly in the 1990's, for example CD-Rom make computer-aided musical discovery infinitely possible and indeed most appealing to a computer-hungry generation of young musicians. Music educators should, however, be wary of too much exposure through an artificial medium rather than tactile experience on actual instruments.

**Practical applications**


Benward (1987) is accompanied by 14 reel recordings, while Sherman's course (1972) consists of thirteen stereo LP's, one stereo Pre-test/Post-test LP, a student manual, a pre-test/post-test booklet and teacher's manual. Trubitt (1979) and Winold (1971) make use of cassettes, which did not accompany the manual in either case. Ottman, the sole example making use of computer technology, may be used with or without the accompanying disks (Ottman, R.W. 1991:vii)

Some texts provide suggestions for use. Benward (1986) states that each section has examples for homework in addition to work in class, while Henry (1986) has exercises in two sets, one for class use (not recorded) and the other more flexible (i.e. recorded) for use in the home, listening laboratory, drill sessions or class.

Layout of exercises often includes printed answers due to the programmed nature of the text. Horacek (1970) provides answers for exercises on the page, while Kraft (1967) has answers given on the back of the question page (upside down in small print). Answers may be found at the end of Sherman (1972) and Trubitt (1979), while Winold (1971) employs various methods: Answers for the rhythmic dictation are given alongside the exercises (1971:107)
while melodic dictation answers appear below the example. (1971:269) Two-part dictation exercises have answers on the opposite page. (1971:270-71) Answers provided near the location of the exercises are more convenient but rely on the honesty of the student.

Steady progress on the part of the student is aided by the use of detachable pages thus ensuring no delays while the teacher marks work covered but results in many loose pieces of paper for the student to file away. Benward (1974) and (1987), Kraft (1967) and Sherman (1972) fall into this category. In most cases texts either provided answers or detachable pages as a means of correcting exercises.

The rate of student progress receives specific attention in Kraft (1967). The student must supply the starting and ending date for each unit which is accompanied by a student record sheet. This approach gives plenty of opportunity for fast learners to proceed further, but requires additional effort. Horacek (1970) is very thorough. Five copies of each lesson are presented to enable repetition if improvement of skills is necessary. Separate tests are given when the student is proficient, followed by a test record sheet on which to record results and recommend repetition if necessary. Sherman's course (1972), which consists of fifty-seven units, has a pre-test and post-test (repeat of pre-test). Few students will have the inclination to work through the entire book but exercises are available if necessary.

The great diversity within the spectrum of programmed texts makes careful choice on the part of the teacher with reference to his/her particular situation and the needs of his/her students a necessity.

Advantages of Programmed Instruction
Tarratus and Spohn found that tape drills were valuable outside the classroom setting to aid the improvement of in-class-work, make more class time available for work other than melodic ear training and exercise control over out-of-class ear training. They also found that class time was too limited to allow many students to achieve a high level of proficiency and that students usually could not provide satisfactory drills on their own. (Tarratus, E.A. 1967:214) In other words PI could be very useful for extra practice and remedial training. Furthermore Alldahl supports the use of taped take-home exercises as the most effective kind of dictation because the student may work at his/her own speed. (Alldahl, P.G. 121-22)
C.L. Spohn presents an apt summation of the advantages of PI:
Adequate controls are exercised.
All have an equal opportunity to learn.
Suitable data may be obtained [and stored in a data base].
Immediate reinforcement is given.
The whole class may be supervised while each works at his/her own pace i.e. Students can progress in an individualized programme. [Bright students receive stimulation to advance faster.]
Students do not miss work due to absence.
Material can be organized to progress to complex repertoire with the mastery of earlier materials assured.
Mistakes are recorded, therefore drills may be modified as necessary.
Students can practice on a flexible time schedule.
Consistent presentation is available, by skilful hands.
Teachers can spend more time on non-drill exercises (Spohn, C.L. 1963:96)
Student are freed from peer pressure and possible embarrassment. (Ottman, R.W. 1991:7)

Disadvantages of Programmed Instruction
Whether working with peers is a positive or negative factor depends on the aim of the individual teaching situation. Some educators may prefer student interaction, which develops social skills, in preference to computer interaction i.e. working in isolation. Furthermore, creativity and musical feeling (e.g. improvisation) is suppressed because students are required to make pre-determined responses. As Martin Lamb points out: "Through the electricity flowing along their wires computers may produce music, but they cannot hear it, they cannot really play it, and they most certainly cannot feel it emotionally." (Lamb, M.L. 1984:162) Lamb's view highlights my main objection to PI, the problem of separating the actual musical instruments the students are studying (i.e. music making) from aural discovery and development resulting in a rather academic exercise. Computer literacy is also necessary, but this is usually a part of the curriculum in privileged schools today, while courses along these lines are offered by Technikons or for self-instruction.

PI could therefore prove to be a valuable tool in Remedial Aural Development and invaluable in aural skills research, but not as the sole means of aural education due to its separation of music making and acquisition of skills as well as restriction of social development. The time consuming nature thereof could impair student motivation unless exercises are limited. The
remedial development course which follows in Chapter 4 therefore does not include specific programmed exercises but such exercises may be designed by the teacher based on methods or exercises suggested as part of the course or drawn from the aural texts analysed in this chapter. Music software may be obtained from computer outlets or music shops.

**TEXTS WITH A PARTICULAR FOCUS**

1. **ACQUISITION OF A SPECIFIC SKILL**

A number of manuals were designed with a bias towards the improvement of sight singing with focus on various tonalities. The first of these, Gould's *Paths to musical thought: an approach to ear training through sight singing* (1979) places importance on **sight singing**, but the real aim of the text is to teach students to think and reason musically. For example, the student is required to interpret rhythmically a melodic line notated in noteheads only which are grouped into measures.

\[ \text{Example of a melodic line notated in noteheads only.} \]

(Gould, M.J. c1979:17)

Linear and harmonic exercises (i.e. based on the scale and triad) are used because both form the basis of musical contexts. Intervals are therefore not isolated from **context**. (1979:Preface) Identification of triads and dictation are also excluded. Varied exercises are presented, i.e. singing the melody against sounded chords (and later figured-bass arpeggiation), singing a melody with harmony and rhythm specified (see example below) and two-part compositions.

\[ \text{Example of a melody with harmony and rhythm specified.} \]

(Gould, M.J. c1979:72)

The first three chapters introduce the student to the diatonic harmonic vocabulary and extensions thereof i.e. chromaticism, whereafter chapters IV and V are devoted exclusively to exercises. The former contains fifty tonal compositions in one and two parts, while the latter contains twentieth century music.
The student is therefore exposed to aural development through sight singing, training in rhythm, intervals, harmony and improvisation. Dictation receives indirect exposure if some of the sight singing exercises are utilised for this purpose. The value of this text lies in the excellent method used and succinct explanations, with exercises in profusion. It is perhaps rather advanced for high schoolers after Chapter I because of attention to chromatic notes and twentieth century harmony.

Samuel Adler's sight singing text, *Sight Singing; pitch-interval-rhythm* (1979) aims to equip musicians to cope with the performance of a wide range of styles. The interval is used as the basis of this method as it is "the one musical element common to all styles and creative periods". (Adler, S. 1979:10) Of necessity, therefore, Adler's introduction to intervals takes a different direction to that of Gould. Each interval is introduced out of context in rather complex atonal examples in the following order - m2, M2, A2, m3, M3, D4, P4, P5, A4/D5, m6, M6, m7, M7.

This approach makes the examples in context seem very easy, but does not suit the general focus on tonal music of this dissertation. Extracts used range from Praetorius through Mozart and Brahms to Hindemith, and include specially composed examples focusing on certain intervals. A useful selection of melodic canons is included - this being the only training in harmony within Adler's text.

The student is also drilled in basic and more complex rhythms to cope with works of the second half of the century. All possible time signatures and note values are explored with beat units ranging from minims to semiquavers. Unfortunately extremely rapid progression from easy to difficult occurs in the exercises presented, for example all beat units within simple
quadruple time are handled within 20 exercises. (No. 2 and 12 appear below.) Supplementary exercises may therefore be necessary.

2. \[ \frac{4}{4} \quad \text{ex. 1-3} \]

12. \[ \frac{6}{8} \quad \text{ex. 4 to dictate to the class} \]

(Adler, S. 1979: 144-145)

The title, *Fundamentals of sight singing and ear training* (1964) which resulted from the work of Fish and Lloyd seems to indicate a distinct parallel with the two texts discussed above. It does, however, have a strong performance base and features exercises built around pitch and rhythmic problems. A very thorough method of work is employed: The student learns various techniques through exercises which must then be illustrated in compositions. For example in Unit I (1964:1-9) the student masters pulse and begins to build a rhythmic vocabulary in Ex.1-3 then must compose 6-8 note rhythms in Ex.4 to dictate to the class. A similar procedure is used for melody in Unit II Ex.1-6. Note values and time signatures are not introduced simultaneously, therefore the student can first absorb pulse without meter. Meter is introduced in Unit IV, triplets in Unit IX Ex.6, compound meter in Unit IX Ex.8 and meter changes in Unit XII Ex.1-2. Ensemble exercises are also important, for example in Unit VI Ex.8 the students must write and perform rhythmic canons.

Contrary to Adler (1979), Fish (1964) introduces intervals according to the scale, for example major and minor 3rds (Unit II Ex.1) and Perfect 4ths and 5ths (Unit V Ex.6), while the minor scale is introduced in Unit VII Ex.1. The harmonies explored are within the tonal medium and are introduced melodically. Unit VI Ex.1 introduces primary triads, while Ex.3 introduces dominant sevenths. Unit X Ex.3 introduces chromaticism.

Fish’s text is to be recommended firstly for its excellent basic introduction which gives advice to the teacher (1964:v-ix) and student (1964:xii) and, secondly, the method of introduction of elements of pitch and rhythm. Harmonically speaking, this text is also suitable for the context of this study because atonality does not feature. A possible complication is the use of the alto clef (Unit IV Ex.10) and tenor clef (Unit IX Ex.13) but the RSM or UNISA student who has passed Grade 5 theory should be familiar with the use thereof.
Sight singing and ear training [dictation], i.e. the ability to hear a piece and commit it to paper are the two skills developed by Ottman and Dworak’s Basic ear skills (1991). In contrast to the texts discussed thus far they choose Programmed Instruction (Pl) as their method of aural development. The text may be used with or without the accompanying computer disks, which were not available for me to review. Each section begins with the discussion of a particular problem and is followed by exercises to be presented in class and through the use of a computer, followed by information on further computer-generated exercises and examinations. The course also has a separate instructor’s manual which provides pedagogical information and examinations for use in the course of study throughout the year.

The five main parts cover intervals, rhythm, melody, diatonic triads and seventh chords, as well as harmonic dictation (including sequences, secondary dominants and modulation to closely related keys). Harmonically speaking, therefore, Basic ear skills moves beyond the requirements of the Grade 8 student, but not as remotely as texts which also cover atonality.

This manual presents a different method of interval introduction - relating each to triads rather than scales e.g. All intervals are written as crotchets, while stems going upwards or downwards must be added to harmonic intervals. (Ottman, R.W. 1991:6-9)

All rhythmic dictations are presented melodically, while computer beeps indicate the meter (1991:47). Part II provides an excellent rhythmic vocabulary through setting out possible variations of a given device, for example the subdivision of the dotted crotchet (overleaf).

(Ottman, R.W. 1991:68)
The nature of Leo Kraft's *A new approach to ear training: a programmed course in melodic dictation* (1967) is expressed in its title. The author explains that his approach is based on **melodic patterns** because hearing the melody as a whole is an important goal for musicians. Some exercises are preceded by questions and cues, for example "listen for the duration of the last note", "jot down the high note" or "write in the last bar first". The student's training takes place within the tonal medium but without specific focus on individual intervals.

The final three texts which develop specific skills focus on harmony. The first, *Harmonization - transposition at the keyboard* by A.M. Kern (1963) is intended for the student and teacher of group piano, private piano, music education or general education. Kern presents "a method for **harmonizing melodies in free piano style** suitable for use in public school work, folk dancing, community singing, rhythmic activities etc." It is accessible to those who have a limited knowledge of keyboard harmony and lack of experience in playing "by ear." (1963:3)

Part I (Chapter I-VII) has a theoretical base and explains the use of I, IV and V\(^7\), use of chords in the right hand part, passing tones and changing harmonies within a measure, all in major, harmonic and natural minor keys, secondary triads in major keys, secondary dominants and modulation. Part II (Chapters VIII - XV) provides melodies to be used in harmonization and transposition exercises but which may also be used for dictation or sight singing.

Kern's text provides a good link between the theoretical and practical aspects of harmony within the tonal medium and is therefore very suited to the context of this dissertation. Although some concepts are rather advanced all devices and progressions covered will aid harmonic development and are necessary for theoretical examinations. UNISA Grade 6, for example, requires the use of the secondary dominants II, I, VII and VI. Like Fish (1964) improvisation is an important means of understanding concepts.

The second text with harmonic focus is Vol.4 part 2 in a series by Leo Horacek, *Programmed Ear Training* (1970) which moves from diatonic to chromatic harmony. The non-availability of the complete series has resulted in its placement under the heading of specific rather than general aural development. Use of all the books and cassettes should provide a complete
course in melodic and harmonic dictation, sight singing and aural harmonic analysis. Volumes are titled as follows: I. Intervals II. Melody and Rhythm III. Chords, Part I IV. Chords, Part II. The course may be used in group or individual tuition or integrated with other courses. The student need not work on sections concurrently except must do Volume III before Volume IV. This course may be used over a seven-year period and constantly used for revision.

Volume 4 deals with non-harmonic tones, modulations, added 7th chords of many descriptions and foreign chords therefore could be used with advanced harmony students. Much of the work covered is too advanced for the context of this dissertation, for example bass and chord dictation of groups of three chords using IV6, VII6 and modulation. Presumably Volume III would be more appropriate.

The first impression is one of expense involved in the purchase of four volumes, but comment must be withheld as information regarding specific content of each was limited. Furthermore, the course should be employed together with other complementary activities (for example improvisation) due to its programmed nature.

Shumway's *Harmony and ear training at the keyboard* (1980), the third and final text with an emphasis on harmony, works within a diatonic, chromatic then atonal environment, but vital basic skills are prominent in early chapters. Unit I Project 1a moves from pitch matching to the student mentally transposing to his/her vocal range (1980:4). Project 2 involves scales and triads on scale degrees. The introduction of triads and cadences is very thorough, for example I and V receive coverage from pp.18-24 with IV introduced and used on pp.25-33, first inversions on pp.34-41 and second inversions from pp.42-46. Focus falls on providing accompaniments to well-known songs, for example *Lavender's Blue*, *Yankee Doodle* and *Happy Birthday*.

Within the area of aural development of specific skills, therefore, three trends are obvious - programmed instruction, didactic training and education through improvisation. This becomes even more obvious in the various courses geared towards general aural development.
2. GENERAL AURAL DEVELOPMENT

2.1 Drill-orientated texts

The first text in this category is also the most useful as far as I am concerned. *Practical Ear Training* (McGaughey, J.M. 1966) is one of the earliest yet remains a most basic and systematic book for use in the early stages. It contains easy sections as well as difficult ones to provide challenges, while a thorough grounding in various meters is given. Introduction of time signatures in meter groups (for example 2/4, 2/2 and 2/8) avoids metric prejudice. Comparison of time signatures is therefore also important. Harmonically speaking, the book moves through two-voice counterpoint (1966:132-146) to three and four parts within the diatonic medium. The final chapter deals with altered chords, for example the augmented 6th, providing limited exposure to chromaticism.

McGaughey avoids limiting the scope of aural development to sight singing or dictation, for example "Selective Listening" and "Critical Listening" are useful for honing these most important skills for successful conducting of bands, orchestras or choral groups. These include examples along the lines of error detection in UNISA Grades 6, 7 and 8 but on a simpler level. Thereafter error detection is taken a step further than required by the examining bodies (UNISA and the new RSM syllabus) in the provision of two-part exercises.

(Edward Jones, 1966:137)

Extensive reference to music literature is made in printed exercises as well as lists for further study.
Bruce Benward has produced a number of texts geared towards aural development, two of which were available for review. *Ear Training: a technique for listening* (1987) and its sequel *Workbook in advanced ear training* (1974) provide a well-rounded education, but with the drawbacks of PI limiting creative development. The former has a bias toward error detection, multiple choice questions and dictation working from the diatonic to modal medium. Rhythm, melody and harmony exercises alternate with elements introduced including modes (MU2C), chromatic/pentatonic/whole tone scales (MU3B), two-part dictation (MU8C), harmony (MU9D), blues fragments (MU15), minim to semiquaver beat units and triplet (RU6B), major, minor and diminished chords (HU1B), non-chord notes (HU2E), augmented triad (HU4D), chord V\(^7\) (HU10C), the secondary dominant (HU13A), modulations (HU12B), various types of seventh chords (HU16) and added seventh and ninth chords (HU14D). Benward introduces Binary and Rounded Binary form and three-part melodies in Unit 16B.

Although *Workbook in advanced ear training* is not particularly useful in this context it places emphasis on micro and macro listening, i.e. individual elements (for example intervals in MU7A) and their interaction within context whilst moving from tonal to atonal media in order to give students experience in all aspects of music. Units 1-4 feature music from about 1700-1875, Units 4-8 from 1875-1920, Units 9-12 from 1900-1950 and Units 13-16 from 1910 to the present. Common musical patterns are used, for example sequences and rhythmic repetition. MELODY then HARMONY are separate sections i.e. not alternating as was the case in *Ear training* (1987).

The final sections are at a very high level, for example tone groups as used by Schoenberg (MU16C), Impressionistic devices (MU10A) and recognition of errors in contemporary harmony (HU14C).

M.A. Ghezzo's *Solfege, ear training, rhythm, dictation, and music theory: a comprehensive course* (1980) is extremely systematic, obviously an important requirement for a successful Remedial Aural Development course and covers elements of rhythm, intervals, sight singing and dictation. Rhythm and pitch (single pitches, intervals, then triads) are introduced separately then the two are combined, followed by the addition of tempo indications and dynamics. Gradual introduction of new note values and rhythms serves to broaden rhythmic vocabulary. The introduction of compound time is confusing, however, for example 6/8 is regarded as having 6 beats and 12/16 twelve beats, despite the correct classification of duple, triple or quadruple time provided.
Intervals are always sung, identified then used in solfège exercises (which may be sung without solfège) and dictation i.e. much reinforcement used. New keys are introduced through solfège then dictation which begins with C major then adds a sharp or flat to the key signature each time until all possible keys have been covered. Revision is important, for example interval recognition occurs repeatedly (probably due to its importance in sight singing). Bass clef exercises to be sung an octave higher are provided thus improving reading in this clef.

This text includes the tonal, chromatic, modal and atonal system, serial and aleatoric music. (Unit IV: 48-51) i.e. only Part I is entirely relevant for this study. The minor tonality always includes the natural minor (also known as the aeolian mode/simple minor/modal minor/pure minor) which is not part of the RSM. TCL or UNISA theory syllabus.

Musical examples given for further reference cover all of the aforementioned tonalities, however tonality is applied to a single melodic line. Harmonic elements and detection of inaccuracies are not included therefore when judged against present syllabus requirements it is not comprehensive.

Hindemith's *Elementary training for musicians* (1946), which mirrors the didactic approach of Ghezzo, provides a systematic introduction to rhythm, pitch, sight singing and dictation within a tonal, then atonal environment. Part One contains drills which develop the rhythmic and melodic vocabulary. Elements of rhythm and pitch are introduced separately, then combined in each chapter. Sight singing exercises include rhythms to clap i.e. material for ensemble work is provided. Part Two focuses on dictation, whereafter a comprehensive index concludes the volume. The first 2 chapters are simple, but further ones contain exercises which become very difficult very quickly and move far beyond Grade 8 requirements, for example

\[ \text{(Hindemith, P. 1946:33)} \]

\[ \text{(Hindemith, P. 1946:80)} \]
Hindemith's text may therefore be more useful at licentiate level than in the context of this study.

*Musicianship, ear training, rhythmic reading and sight reading* (1986) by Henry and Mobberley moves from elementary to advanced work in two volumes, using a three-fold approach - ear training, rhythmic reading and sight singing. This includes harmony and detection of rhythmic and melodic inaccuracies as required by UNISA and the new RSM syllabus. The latter is made easier by the course being programmed.

The "ear training" section introduces rhythm, pitch and harmony separately. The pitch section includes the identification of scales and intervals (also to be written), while the harmony section includes identification of non-chord notes (1986:135) and chords (1986:157). Basic rhythmic elements as well as more complex ones such as triplets, quadruplets and hemiola are introduced under rhythm.

"Rhythmic reading" progresses from crotchets and quavers to mixed meters and irregular rhythms, for example beat divisions used in modern music with metronome taps used to indicate meter changes. Patterns are drilled which are then used in solo and ensemble exercises (1986:168).

"Sight singing" is approached both from the standpoint of implied scale and harmonic structure and, at the same time, through the study of individual intervals, while moving through twentieth century music. There is a gradual shift throughout the 2 volumes from the tonal medium to patterns and materials of the twentieth century. Volume 2 was not available for review, but the first volume is to be recommended for its thoroughness. The missing element, once again, is improvisation.

The following text has an altered focus which includes musical elements such as dynamics, timbre, tempo and pitch both as entities and interacting in a musical context (for example decrescendo and descending pitch at the same time) and is therefore very useful for the development of a critical ear. Kliewer's *Aural training: a comprehensive approach* (1974) develops specific skills systematically which are then employed in exercises (mainly for dictation) using examples arranged alphabetically according to composer, rather than in order of difficulty. The author mentions that the teacher may play them as many times as necessary, an approach which may ultimately not benefit the student if continued over a long period of
time because thought processes are not speeded up. Another point of interest is that exercises provided are reused to foster familiarity. This may have negative connotations for the student with an excellent musical memory, however such problems should not seldom arise.

Appendix I contains musical examples from Bach to Webern and beyond, while Appendix II contains musical sources [used in compilation of examples for Part I]. These resources should be useful for the History of Music teacher/lecturer because of the wide scope of style and period. The text is well laid out so it should be easy for student and teacher to move through each unit, but the level of difficulty of the final exercises (especially those in three parts in Unit 3) moves beyond that required for this context. Only Unit 1 is really useful.

John LaPorta's *Ear training, phase I* (1970) is the first in a series (others not available) which provides an extremely systematic programmed method - moving from the tonal to atonal medium - with a step-by-step approach for individual study, using a pitch instrument. Each lesson has two sections namely rhythm and melody, with harmony not included. The level of difficulty is low especially in the area of rhythm where 2/4, 3/4 and 4/4 are the only time signatures introduced. The pitches used in the exercises are usually rather low, possibly to allow singing with ease. Later volumes would possibly use higher pitches and include development of competence in harmony.

*Sight singing and ear training through literature* (Levin, R.D. 1988) is yet another example of systematic aural development with focus on rhythm, intervals, harmony, sight singing and dictation used within a tonal and atonal environment. Selected musical examples from Monteverdi to Stravinsky (composed for various instruments) are used, all in their original keys in order to preserve the colours thereof. Useful skills are practised for example transposing melodies from the literature at sight, a skill necessary for the RSM Practical Musicianship syllabus. Transposition exercises could also be used in conjunction with sight singing and dictation.

This manual emphasizes very correct continual conducting and clapping right from the start and systematically introduces all time signatures - even such rare examples as 15/8 and 15/16 (1988: lesson 21) - varied rhythms, all keys, chords including the augmented sixth and altered supertonic, clefs and transposition. Modes such as the gypsy minor also feature. (1988: lesson 23) As is the case with other such texts creative expression, for example
improvisation, is once again missing and part of the text develops skills beyond those required within the context of this dissertation. A further objection which must be raised is the use of all pitches in reference to A 440. This attempt at developing perfect pitch is not necessary, in my opinion. (A detailed discussion of this issue follows in Chapter 4)

Sherman's *Student workbook for aural comprehension in music* (1972), a detailed course from tonal to atonal based on programmed instruction, contains many exercises and demands much time for its completion. Its usefulness will depend on the attitude of the student and teacher, but as was pointed out in the discussion of PI earlier in this chapter extensive use of drills may not be the best method of aural development. This text does, however, expose the student to a far wider range of musical skills than many similar manuals and is very relevant to the overall needs of the musician.

All problems are aural-to-aural (hear and mark answer with x) or aural-to-visual (notation used on answer sheet) and are presented using fourteen different instruments and many styles and idioms, thus providing exposure to a broader timbral environment than that provided by drills using a piano within a classroom. Problems presented require the same type of aural and visual musical judgement used regularly, for example identification of instruments used (1972:Unit 1), identification of whether an interval as played by two different instruments is the same in both cases (1972:Unit 2) and identification of the correct rhythm as played by two instruments. (1972:Unit 10) The text progresses through problems of instrumentation, intervals, melody, tonal memory, rhythmic context and score reading from simple to complex. Instrumentation and score reading follow traditional orchestral arrangements, not soprano on top and bass at the bottom as is usually required. Very thorough instructions and a glossary of terms are included in front of the text with answers at the back. Gradually more notational than non-notational exercises are included. Very good training is therefore provided for development of the critical ear, even though it is far beyond what is required for examination purposes. Volume 1 was the only one available for review. No clue was given as to the nature of further volumes.

*Ear training and sight singing : an integrated approach Book I* (Trubitt, A.R. 1979) is also programmed but the recorded examples were not included with this book. The recordings are said to use a variety of instruments and voices as was the case with Sherman, but restricted to tonal and modal media. Trubitt also makes use of rehearsed melodies before sight singing, an excellent method of improving both melodic and rhythmic vocabulary before testing
them. Ensemble sight singing is also used, with either two parts in the treble clef and two in the bass or one per clef. (1979:74-75) The student is lead to build a progressive pitch memory: three pitches, then four, then five etc, a skill which forms the basis of building concentration and memory.

Discussions of theory and methodology are presented under the title "conferences" and form an integral part of the book as a whole. Trubitt stresses working with a metronome to maintain tempo and speed up responses, for example the student should give an answer within four pulses. Useful features include a chart of relative note values (Trubitt, A. 1979:283), for example

A variety of exercises are provided in addition to the usual sight singing and dictation (including two-part dictation), for example error detection. Sight singing exercises include "scanning" in which only the top and bottom lines of the stave are given. (1979:91)

The final drill-orientated text, *Introduction to music theory: an integrated approach to notation, music reading and ear training* (Winold, A. 1971) aims to provide a solid foundation in basic skills and concepts of music over its twenty chapters moving from tonal to atonal examples. The focus is on an integrated approach to theory and aural teaching, which should be the aim of every teacher. The first chapter discusses the nature of music, the value of music, its effects on the listener etc, while Chapter 2 discusses different categories of instruments, timbre and dynamics. Thereafter, however, some questionable methods are used.

Rhythm is explained mathematically and melodic contour in a rather scientific way, one of little practical relevance (Winold, A. 1971:Chapter 5) i.e.

Scales and modes are only introduced in Chapter 14 of the twenty chapters and key signatures in Chapter 15. Up until this point the student has had to think in terms of exact pitches and intervals even though examples from the literature with key signatures are included.
Two-part work is important, for example in sight singing duets (1971:268) and two-part dictation (1971:270). Sight singing in three parts is included (accompanied and a cappella), for example Purcell's *To All Lovers of Music* in three parts, (1971:290-91), the chorus from Handel's *Israel in Egypt* for SATB and piano (1971:324-330) and Gesualdo's *Non é, questa la mano* which has five parts.

Points in favour of Winold's text are the list of books for further study concluding Chapter 1 (assuming these are obtainable) and the extremely useful list of musical terms in four languages - English, Italian, French and German.

2.2 Creativity-orientated texts

*Ear training for teacher and student* was published in 1904, before the era of atonality and serialism etc. therefore has a tonal base with scales and chords forming the basis of instruction. Alchin intends students to be able to sing, name, write and play what they hear, harmonize melodies at sight, improvise accompaniments and recognize the melodic, harmonic and rhythmic effects of music. (Alchin, C. 1904:3) The early chapters are good for young beginners because they are very slow and systematic, but Alchin relies heavily on solfège (including hand signals) in pitch sections, a method not favoured by some educators. Chapter 6 introduces melody writing while Chapter 7 onwards provides an excellent introduction to harmony, for example the four types of triads (Chapter 7) and augmented chords (Chapter 9).

*Kreter's* *Sight and Sound: a manual of aural musicianship* (1976), which consists of two volumes, has a tonal base with limited exploration of chromaticism. The focus is on rhythm, melody, counterpoint and harmony moving from easy to difficult including dictation and error detection. This text aims to improve the recognition of the relationship of various elements of music in an unfamiliar piece, so that the student will be better able to discuss and perform all music literature. (1976:xii)

Volume 1 introduces time signatures in meter groups (i.e. 2/2, 2/4 and 2/8) in a like manner to McGaughey (1966), for example Unit 1 introduces all simple time signatures. All chapters have examples of critical ear training (listening) and performing, therefore making the text suitable for UNISA aural students.
Volume 2 has an excellent introduction to harmony with a thorough aural and written training. Overall, this text is too advanced within the context of this study as it moves through passing and cadential 6/4's, secondary dominants etc. to augmented sixths, but will serve advanced theory purposes, for example UNISA Grades 6-7.

The final text, Herder's *Tonal/atonal: progressive ear training, singing and dictation studies in diatonic, chromatic and atonal music* (1973), provides a systematic programme which moves from diatonicism through chromaticism to atonality using chromatically altered variations, hereby bridging the gap between tonal and atonal. Focus therefore falls on pitch elements especially intervals beginning with the major and minor 2nd and ending with the octave and compound intervals. Atonal melodies must be composed once various melodic studies have been sung.

The texts which fall into this category therefore offer a well-rounded approach to aural development as skills and creativity may be developed i.e. the personal development of the student assumes importance alongside curriculum requirements.

2.3 Texts with a theoretical bias

The nature of the following manuals results in presentation of limited practical examples, but they are extremely useful in providing the teacher with new insights and avenues to pursue. *Aural Awakening: a course in aural training and general musicianship for students and teachers* (Thackray, R.M. c1978) aims to provide an aural and practical musicianship course to be used as a basis for general musical studies.

Some suggestions involve the class situation while others must be implemented outside the class by the individual student, or in pairs or groups. Exercises are intended to be practised rather than used as one-off drills, a method similar to that of Trubitt (1979). In his introduction the author stresses that anyone can improve his/her ear - the only prerequisite is a workable method and practice. He uses a four-fold approach - perception, singing and body percussion, playing and writing; without neglecting tempo, phrasing, timbre, form, style and idiom, dynamics and articulation - for example staccato on p.244 and use of pedal on p.241) Interesting questions are posed but examples are not plentiful, so the onus is on the teacher for practical application of the suggestions given. The few examples provided are handwritten and not always easily legible. Thackray's method involves use of orchestral instruments and
stresses the importance of keyboard experience for all.

He introduces pulse, rhythm, syncopation, scales, intervals, harmony etc. using creative methods, for example discussion of rhythms in life such as breathing, walking and the ringing of telephones. (1978:74-80) Dance rhythms, for example the Allemande, Courante, Waltz and Tarantella are introduced. (1978:222-25) The distinct theoretical bias is reflected in various charts, for example a table of all possible intervals within the major scale over the compass of an octave (1978:107) then major scale with a range of eleven notes (p.108) and chromatic scale. (p.109) All possible triads with the same top, middle and bottom note are also tabulated - ten in each case. (1978:118)

Aural analysis is included, for example Farandole from Bizet's L'Arlesienne Suite No.2 (1978:260-63) as well as interpretation and criticism of dynamics, tempo and phrasing. The author's postscript aptly sums up his ideals: "This book has tried to make aural training exciting." (1978:271-76)

George Pratt feels that too much emphasis is laid on conventional elements i.e. perceiving, identifying and naming elements of pitch and duration, therefore his book, Aural Awareness: principles and practice (Pratt, G. 1990) focuses on elements such as texture, timbre, dynamics and intonation. This text is therefore not geared towards basic remedial drills, but should prove very useful for broadening the training students receive to improve their own playing aside from merely perfecting pitches and rhythms. For example, "Imaging" (Chapter 9) which involves converting symbols to imagined sounds in the head before playing them (1990:83), playing by ear (Chapter 10), improvisation (Chapter 11) and playing from memory (Chapter 12). A useful RESOURCES appendix is included.

G.F. Davidson's An investigation into the systematic application of performance objectives to ear training (1984) is a largely theoretical examination of the setting of performance objectives with relation to dictation. Much methodological detail is given, excellent justification is provided for methods used and various points of view are examined i.e. emphasis is placed on aural pedagogics. He also postulates various ideas, including the importance of the phantom eye and ear (1984:32) and reasons for failure of students. (1984:133-136)
The preceding information reflects a wide range of educational materials available for aural development, therefore the educator will need to select texts according to his/her situation, time available; the number, age and developmental stage of the student(s). Furthermore, the use of more than one text is advised so that the deficiencies of one may be remedied by another.

It should also be borne in mind that exercises need not always be used within their given context. For example exercises for visualisation are required by UNISA in Grade 2-5 may be covered by use of sight singing or dictation exercises. No exercises for melodic echoes (remembering and reproducing the correct pitch) are provided in general aural manuals. This skill may be tested by the educator playing examples originally intended for sight singing or dictation.

Appendix B provides a summary of materials reviewed in this study, which, in the case of non-examination specific manuals, includes a brief description of content to aid selection.

The most important aspects governing the aural development programme - teacher attitudes, student attitudes, methods, the time factor and choice of materials - may therefore lead to steady or retarded development and negative attitudes towards the subject or sections thereof. How may these influences be engineered to achieve a positive result (or remedial development following negative results)?
CHAPTER 4
A REMEDIAL AURAL DEVELOPMENT PROGRAMME

INDIVIDUAL LESSON FOCUS

All lessons, aural or otherwise, should begin by excluding outside influences on the pupil's concentration (for example musical sounds from a neighbouring room) in order to ensure maximum utilization of available time. In pedagogical terms this process is known as inducing set, which, in an aural context, involves focusing attention on "sound discrimination, selective listening and aural perception" (Kaplan, D. 1977,22) whilst activating the seeing ear and hearing eye. The training of selective listening, i.e. focus on specific sounds, is also supported by George Pratt. (1987:10) This may involve discernment of such diverse sound events as a barking dog, the interval produced by an ambulance siren or the solo instrument in a concerto.

The nature of exercises used to induce set will depend on the aural skills already mastered as well as teacher creativity. Suggestions for focusing attention are as follows:

1. The teacher may ring a bell, play a note on an instrument or make any resonant non-instrumental sound. The student must listen to the number of variations after the initial attack, then hear how long it takes to decay. The third time he/she must visualize the shape and possibly the colour of the sound.

2. All students close their eyes and walk around slowly humming a unison tone. The teacher touches a student who chooses a new tone to which the others must adjust. Several repetitions will aid more rapid adjustment and discrimination of smaller intervallic changes. (Kaplan, D. 1977:22)

3. Sing a familiar tune then stop and restart i.e. maintain concentration.

4. Each student thinks of a pitch then all sing simultaneously whilst trying not to lose the individual pitches. After a silent break the exercise should be repeated (record to check the pitch if desired).

5. Start as for 4. then converge to a unison. (Thackray, R.M. c1978:87)
These exercises will also serve to extend the student's perception of aural development beyond hearing, assimilating and regurgitating, thereby beginning to stimulate intellectual and musical development.

Once the student has acclimatized to the listening environment the teacher should aim to develop specific aural skills as well as creativity within the lesson time available.

The situation outlined in the previous chapter, when applied to the more advanced musician clearly indicates the need for a programme which will attempt to overcome negative aspects created by teacher and student attitudes and time erosion, using progressive methods and suitable resources. Such a programme should make the creation of a positive learning atmosphere a priority and, in the light of all previous discussion, meet the following criteria:

1. Achieve a balance between curriculum (syllabus) requirements, necessary musical skills and personal development.
2. Include basic and structural elements.
3. Work from specific to general (and vice versa when necessary).
4. Exercises should work with the relationship between symbol and sound.
5. Aural, visual, intellectual and muscular/kinaesthetic elements should all present.
6. Each student should be catered for on an individual level.
7. Set specific objectives for each aural activity.
8. Practice tests should be included in order to familiarize the student with examination conditions.
9. Planned development should proceed from the known to the unknown.
10. Planned development should proceed from easy to difficult.
11. Activities should be relevant and relate to other disciplines.
12. Examples from the literature should be used on a regular basis.
13. Practical instrument use should be included - keyboard and others.
14. Activities should maintain interest and inspire further study i.e. provide intrinsic motivation. Examples: Creative and ensemble work and improvisation.
15. Homework should be set in order to reinforce skills and concepts learnt in class.
16. Sufficient time should be allowed for repetition of exercises where necessary, particularly in the early stages of developing new skills. (Use of rehearsed exercises.) Exercises should used in more than one context.
17. The student should be taught to reason in order to apply aural principles when the teacher is not present.
NB: In order to follow every step of the programme with maximum benefit the student should at all times be in possession of a manuscript book, pencil, eraser and his/her instrument (if possible) or at least a keyboard, as well as the desire to concentrate in order to improve. Furthermore, both teacher and student must realise that all may improve their aural ability despite the visible level of talent. (Taylor, E. n.d.:5)

SPECIFIC AREAS OF DEVELOPMENT
Aural development may be divided into four general areas of study - Rhythm, Pitch, Harmony and the Development of a Critical Ear (which deals with analysis and/or comparison of elements of rhythm, pitch and harmony as well as dynamics, timbre, compositional devices and improvisation). Each area will be dealt with in turn. Specific skills will be tabulated followed by a methodological study which results in a suggested Remedial Development Programme for each skill in order to prepare the student for various examination syllabi as well as equip him/her for mastery of other areas of musical development, for example sight reading and interpretation of repertoire.

Useful exercises as well as suggested homework drawn from the Development Programme are included. The educator may find it valuable to allocate a drill partner with which the student may work both within and outside of the classroom as a means of improvement of aural and interactional skills. Homework exercises are therefore provided for use with a drill partner and for the student working alone.

The disadvantage of a drill partner giving exercises is that weaker students may not accurately reproduce from the score. This, however, may serve as a sight reading drill and error detection practice for both drill partners.
A. RHYTHM

Rhythmic skills to be developed
Discernment of pulse and tactile reaction to pulse.
Discernment of character of pulse (meter) and tactile reaction (i.e. beat/conduct).
Reproduction of a rhythmic pattern heard aurally (i.e. echo) through vocal and tactile means.
Reproduction of a notational rhythmic pattern at sight (i.e. rhythmic reading).
Tactile reproduction of an ostinato whilst echoing a rhythmic pattern.
Reproduction of note values in notational form (i.e. dictation).
Verbal identification of note values.

Certain information must be clear before embarking on a rhythmic Aural Development Programme:

What is rhythm?
"Music is an art directly dependent upon the dimension of time. Like drama and dance, music is a time art; it exists in time. Music is also organized in time, and the organizing phenomenon is called "rhythm," which comes from the Greek rhythms meaning "continuity" or "flow." (Fish, A. 1964:1) For example, the movement aspect of rhythm formed the basis of the method of Eurhythmics devised by Emile Jacques-Dalcroze and first presented in 1906 which involves "the experience and study of music and musical rhythm by means of body movement". (Rosenstrauch, H. 1973:9, 11)

There are two basic elements of rhythm - rhythmic patterns and meter/beat. Rhythmic patterns are groupings of note values. A few such patterns usually form the basis for rhythmic activity in a piece. Meter/beat is the grouping of rhythmic patterns according to accents/stresses and involves the use of a time signature and barlines, for example

\[ \begin{array}{c|c}
\text{Beat} & 3 & 2 & 1 \\
\end{array} \]

Beat forms the basis of most Western Music, with the exception of plainsong, certain recitatives and twentieth century genres, for example Musique Concrete, Serialism and Aleatoric ("Chance") music, which involves random "organisation" of sound materials. In the early stages rhythm and meter/beat must be separated to give each proper focus and simplify what is required of the student.
Order of introduction of meter

The discussion which follows refers to simple time signatures with a crotchet beat unit e.g. 2/4 and compound time signatures with a dotted crotchet beat e.g. 6/8 because they are most commonly used, but examples using other time signatures should also be introduced once rhythmic fluency in simpler examples has been achieved.

In what order should the different meters (character of pulse) be introduced? Should this order remain constant in all rhythmic areas or differ for discernment of character of pulse and when working with patterns, for example in sight singing and dictation?

Various aural manuals seem to indicate the introduction of simple duple, triple and quadruple, then compound time (Warburton, A.O. 1971:18-33) (Kreter, L. 1976:Unit I, III) (Taylor, E. n.d.:13-15, 21-23) whereas the order of the various examination requirements seem to favour meter distinctions over distinctions between simple or compound.

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TCM therefore has no requirement for the recognition of quadruple time.

It is important to note that S.D. (most often 2/4), S.T. (most often 3/4) and S.Q. (most often 4/4) will usually all have been introduced to the student by the end of his/her beginner tutor, therefore simple quadruple (e.g. 4/4) should not be relegated to the latter part of the aural development process even though it is often regarded as difficult to identify. The introduction of meter in several standard tutors is as follows:

Books from the Learn as you play as well as the Tune a day series all introduce repertoire in 4/4 time before any other time signature, for example clarinet (Herfurth, C. 1952:1) (Wastall, P. 1989:6), cello (Herfurth, C. 1937:1), flute (Wastall, P. 1989:6), oboe (Wastall, P. 1990:6), saxophone (Herfurth, C. 1945:1), trumpet and violin (Herfurth, C. 1933:1). Most tutors introduce 2/4 and 3/4 within Book I, for example Tune a day for classical guitar (1970) introduces grouping in 4/4 time (pp.1-5) and repertoire (p.6), followed by 3/4 (p.12) and 2/4 (p.16). The Goodyear recorder tutor (1956), on the other hand, introduces 4/4 on p.5 followed by 3/4 (p.14) and 6/8 (p.37) whereas 2/4 is only introduced in Book II. (p.4)
In some cases 2/4, 3/4, and 4/4 are all introduced theoretically before the student has any practical experience, for example *A beginners book for the flute*, Part I (Wye, T. 1984) introduces all three time signatures theoretically on p.6 followed by 4/4 (p.8), 2/4 (p.11) and 3/4 (p.13). Thompson’s piano tutor follows in a similar vein. (1955:7, 8, 16, 17)

One exception uncovered during the course of this study was *Ministeps to music* which introduces 2/4 before 4/4 (Burnham, E-M 1959:13, 14)

Although difficulty in establishing whether the meter is duple or quadruple may be experienced in recorded examples, the teacher may guide the student towards accurate identification in self-performed exercises by stressing accents. Furthermore, dictation and sight singing exercises in 4/4 are essential to reinforce those encountered in practical repertoire. The order of introduction when working with rhythmic patterns (i.e. sight singing and dictation) should therefore be as follows: simple duple (2/4), simple triple (3/4) and simple quadruple (4/4), compound duple (6/8), compound triple (9/8) and compound quadruple (12/8).

When discerning meter, however, it should be noted that the student is not required to identify the actual time signature therefore simple or compound examples may be used with focus falling on meter - first duple, triple then quadruple.

**Methods of reaction**
There are various available options for response to beat/pulse and rhythm.

The student may clap, tap with hands or feet, intone or use percussion or other instruments. Rhythms may even be reproduced on a typewriter. (van Zuilenburg, P.L. n.d.:4) In the case of beat/pulse tapping is often recommended to help with rhythmic problems, but conducting has the added advantage of a different location for each beat. (Henry, E. 1986:170-171)

Response to rhythm may take the form of clapping, tapping with hands or feet, intoning (for example using the syllable *ta* or *du*) or use of percussion or other instruments. Which is preferable?

Annie Warburton finds that clapping is the worst alternative because the student cannot differentiate between a crotchet, minim or semibreve at a phrase end. Tapping is preferable because the student is able to tap short notes more rhythmically, however singing is the best
choice because it enables the student to show accents and exact note lengths, whether long or short. Many students, particularly boys and adolescents of both sexes, go through a phase where they are shy about singing alone, but must be encouraged to do so from an early age. Reminders should be given where necessary that voice quality is not important. (Warburton, A.O. 1971:14)

Thostensen also supports the singing of rhythmic phrases (1967:16) for which one pitch may be used. Van Zuilenburg, on the other hand, recommends singing in a "cluster" rather than in unison in a class situation. (van Zuilenburg, P.L. n.d.:4) The educator may, for example, allocate pitches forming a triad/chord to members of a class so that maintenance of the correct pitch also becomes part of the exercise.

Students should also be given the opportunity to reproduce rhythms in different media because a lack of variety may result in waning interest and a shortened attention span. For example the student may alternately clap (keeping the hands together for long notes), tap with hands or feet or sing, while rhythmic percussion instruments or melodic instruments (with each student playing a separate pitch) may provide diversions from endless clapping/tapping. In the case of melodic instruments harmony will be created.

When reacting to pulse/beat and rhythm simultaneously two methods of reaction which may be executed simultaneously must be chosen, for example singing and clapping/tapping feet. An added advantage of singing the rhythm is that both hands may be free to mark the pulse, which is easier and less clumsy than using the foot. (Warburton, A.O. 1971:14) Denegar suggests a multiple tactile response, imitating rhythms whilst seated and tapping the feet L-R-L-R. The student should also sway the body and arms in time to show the physical experience. (Denegar, D. 1983:30) Those with the necessary coordination may tap the rhythm with one hand and the beat with the other, a skill which should not prove problematic for pianists.

The educator should select according to his/her personal preference depending on the coordination of the individual student in the early stages. I would choose to make use of intoning rhythms and tapping with the hand/conducting the beat, thereby leaving the feet free to mark the first beat of the bar and thus reinforce the strong downbeat. Students who have problems may need to count aloud and therefore would need to clap/tap the rhythm with the hand, whilst using the foot to mark the first beat. Counting mentally is preferable.
One method of reaction to rhythm which has been omitted thus far is the use of French time names, a method supported by theorists including Warburton (1971:15), which is often used in conjunction with solfa. The essence of its usefulness is the interpretation of rhythm without regard to meter. I object to its use, however, on the grounds that the student must master another set of technical names with no concrete link to the requirements of the theory syllabus therefore. As can be seen in the table below breves, note values smaller than a semiquaver or double dotted notes are not accommodated while the only time signatures used are 2/4, 3/4, 4/4, 6/8, 9/8 and 12/8.

This form of rhythmic nomenclature therefore has limited usefulness and will not receive emphasis within the context of this study. The individual teacher may adapt exercises to include the use of French time names if he/she believes strongly in their use thereof.
1. PULSE/BEAT AND DISCERNMENT OF METER

Performance objectives
Discern the pulse/beat then tap it. Discern the character of pulse (i.e. meter).

Prior knowledge required
Theoretical - Time signatures: simple duple, triple and quadruple. Compound duple, triple and quadruple for "Compound" section of Development Programme.
Aural - None.

Pedagogical basis
Once the student has discerned, clapped and tapped or intoned the pulse the character of pulse should be discerned by counting the pulses/beats to the next strong beat to see if 2, 3 or 4 may be fitted in and/or conducted as follows:

1. Duple meter
(2/2, 2/4, 2/8, 6/4, 6/8, 6/16)
Character of pulse: strong-weak.
Down - up

2. Triple meter
(3/2, 3/4, 3/8, 9/4, 9/8, 9/16)
Character of pulse: strong-weak-weak.
Down - out - up

3. Quadruple meter: (4/2, 4/4, 4/8, 12/4, 12/8, 12/16)
Character of pulse: strong-weak-medium-weak.
Down - in - out - up

The student may be required to conduct an anacrusis (upbeat). The type of response will depend on the speed of the example and teacher/student preferences. It may be preceded by a normal beat, sweep of the hand, or full beat before the anacrusis (often a faster beat). (Kreter, L. 1976:166-167)

What factors may cause difficulties in discernment of pulse?
At very slow speeds the meter may be masked because the accents are less pronounced. Furthermore, the subdivision of beats may cause confusion. (Thackray, R.M. c1978:38) For example the student should be aware that \( \text{\textcopyright} \) reinforces the pulse while \( \text{\textcopyright} \) obscures it. (Kreter, L. 1976:5) The same applies to \( \text{\textcopyright} \) and \( \text{\textcopyright} \).

Students are also confused by syncopation, which may result from tying over the strong beat, for example \( \text{\textcopyright} \) placing a rest on the strong beat.
or placing an accent on a weak beat \( \begin{array}{c} \text{ or } \end{array} \) \( \begin{array}{c} \text{ or } \end{array} \) (Adler, S. 1979:145-146)

In order to be aurally meaningful the accent must be felt in relation to the anticipated pulse. (Kreter, L. 1976:100) A less common device yet one which also may cause rhythmic confusion is hemiola (Adler, S. 1979:158)

\[ \text{ } \]

Student responses whilst using the GUIDO system showed that basic notes are confused only with others, never dotted notes, duplets or triplets but the latter three are confused only with basic notes. There was no difference between simple and compound time as expected. (Hofstetter, F.T. 1981:49-50)

**Development programme**

1. What is pulse/beat? In order to facilitate an understanding of rhythm an analogy may be drawn with everyday life, for example the ticking of a watch or clock, footfalls on concrete, the beating of a heart or chopping wood. Choose familiar examples illustrating i) very strong steady pulse, for example a march or dance movement such as a waltz or tango. ii) clear but fluctuating tempo, for example a nocturne. iii) pulse which is difficult to feel, for example *La Mer* by Debussy or iv) with no obvious pulse, for example *Threnody for the Victims of Hiroshima*.

   After hearing the examples discuss a) What features obscure a feeling of pulse in music? b) What types of music have strong pulse/lack pulse? c) Is pulse essential to music? (Thackray, R.M. c1978:9-10)

2. What is the purpose of the exercise? It is important to be able to maintain a steady pulse both when reacting to rhythmic aural exercises and in the performance of repertoire. This is an important preliminary to dictation.

3. Tap the pulse and identify the strong and weak beats and therefore deduce simple duple or simple triple, then conduct the meter.

4. Include quadruple time.

5. Distinguish between simple and compound time as follows:
   
   4.1 Tap the beat with a foot.
   
   4.2 Continue, and simultaneously tap the subdivisions with a hand.
   
   4.3 Deduce that 2 subdivisions = simple, 3 = compound.

6. Include compound duple, triple and quadruple.
Useful exercises

1. Musical chairs: Various examples with different meters are presented following on from each other. When the meter changes, the student must sit down. (Johnson, J.M. 1980:28)

2. Sing well-known songs and keep the beat whilst singing. Conducting whilst singing is supported by Kreter (1976:1)

3. Listen to recordings of dances, for example allemandes and marches (simple quadruple), gigues (compound quadruple), minuets, mazurkas and polonaises (simple triple) and note how the pulses differ.

4. One student improvises a four-bar rhythm with clear accents. Another must discern the pulse. (Thackray, R.M. c1978:73-74)

Suggested homework

With drill partner - Ex.2, 3, 4.

Alone - Ex.2, 3, 4. Listen to music performed by a local choir/orchestra or on recordings. Focus on discernment and reproduction of the meter.

Tempo maintenance

A related skill is the student's ability to gauge tempo as well as maintain it in the context of his/her practical and aural work. It is often easy to hear others deviate, but not oneself, either due to not listening carefully or because of nerves. (Thackray, R.M. c1978:10) Tempo may be maintained by tapping the foot whilst performing, a practice which should be abandoned once the beat is secure. This will prevent the somewhat percussive accompaniment which punctuates some performances. A useful exercise in a class situation is to give a pulse which the class must maintain by each student clapping once in turn. It is important to resist the urge to speed up. (Dew, C. 1984:4)

The metronome is an important aid and may be used in exercises as follows:

The educator gives a speed after which the student must tap or conduct the beat. Secondly, the metronome may be set at a certain speed which the student must try to gauge. (The exercise may be repeated with a silent metronome i.e. flashing light.) Thirdly, the student should try to gauge the speed of an actual musical composition. (Thackray, R.M. c1978:10)

Setting and maintaining tempos without the aid of a metronome is also a useful skill as some students may not have access to one. Gould suggests the use of a watch with a second hand
because $\frac{3}{4} = 60$ is 5 beats per 5 seconds. Consult the watch then beat from two to twelve beats in this timespan ($6 \times 5 = 72$ because $12 \times 6 = 72$). The next step is to beat at some arbitrary rate of speed and try to determine the speed. (Gould, M.J. c1979:6-7) This, however, is a rather clumsy procedure. The student may derive more benefit from Thackray's method. It is assumed that advanced musicians possess their own metronomes or at least have access to one.

George Pratt offers another alternative. In order to set a speed of $\frac{3}{4} = 60, \frac{3}{2} = 120, \frac{3}{1} = 240$ say Kodak-1, Kodak-2, Kodak-3 fairly briskly. Each beat amounts to one second. To divide the seconds into groups of three say one thousand, two thousand. (Pratt, G. 1990:43-44)

A metronome may also be used to speed up responses in melodic exercises, for example the student must identify examples of intervals, one at a time, and give the answer within four pulses. For the purpose of this exercise the metronome should be set at $\frac{3}{4} = 60$. (Trubitt, A.R. 1979:17-18,43)

Discernment of and reaction to pulse and meter are therefore primary rhythmic skills. Other skills include the maintenance of a steady pulse and estimation of tempo. Whilst developing these skills the teacher may work concurrently on Section 2.

2. RHYTHMIC ECHOES
Oral dictation (Levin, R.D. 1988:7) aptly describes this preliminary step to written dictation.

Performance objectives
Reproduce (echo) a rhythmic pattern heard aurally after it has been played by intoning/tapping/clapping. Identify the meter as simple or compound and duple, triple or quadruple.

The exercises are usually played twice. In other words rhythmic memory is being tested.

Prior knowledge required
Theoretical - Names of note values and rests, dots and ties. Time signatures: Simple and compound duple, triple and quadruple as required for exercises.
Aural - Skills mastered in Section 1. i.e. discernment and reproduction of meter.
Pedagogical basis

Rhythmic perception and reproduction are necessary skills, the purpose of which should become clear to the student as he/she realises their application outside the aural classroom, for example memorizing themes from television or famous compositions. Most teenagers frequently apply this skill when singing their chart-topping favourites, so it should not be unfamiliar.

When the student becomes fairly adept at executing rhythmic echoes perception of meter should be included in the exercises given as a precursor to dealing with rhythmic reading, dictation and naming of note values.

Development programme

1. What is a rhythmic pattern? It consists of note values which are arranged in various combinations. Rhythmic patterns often recur within a musical work. Discern and reproduce (echo) repeated rhythmic patterns, for example the opening of Beethoven’s 5th Symphony $\overline{z} \overline{y} \overline{\overline{\mid \mid \mid}} \overline{\overline{\mid \mid}}$ or $\overline{\overline{\mid \mid \mid \mid}}$ or $\overline{\overline{\mid \mid \mid \mid}}$

2. The teacher taps a rhythm which the student must echo by clapping or intoning.

3. The teacher plays a melody of which the student must echo the rhythm.

4. The teacher plays fragments of recordings from the literature from which the student must isolate and reproduce rhythms of not more than eight bars from the melody or accompaniment.

Examples: Vivaldi - opening of Spring from The Four Seasons (melody)  
Ravel - percussion ostinato from Bolero (accompaniment)  
Tchaikovsky - Waltz of the Flowers from Nutcracker (melody)

5. Combine rhythmic echoes with identification of meter i.e. simple/compound and duple/triple/quadruple.

The student should be aware of the interaction of the elements of beat and rhythm, which may be illustrated as follows: "Use a pulse of $\overline{\mid \mid \mid \mid} = 90$ have someone clap a rhythmic pattern of two or four bars whilst thinking of the pulse. Keep the pulse going whilst imitating the rhythm then clap the crotchet pulse whilst thinking of the rhythm. Finally clap the crotchet pulses whilst verbalising the rhythm. Gradually expand this exercise to a greater number of bars or more than one rhythmic line." (Pratt, G. 1990:39)
Useful exercises

1. The teachers taps the rhythm of folk tunes, famous melodies from the literature or repertoire the student is studying. The student must try to identify the tune as well as the meter, for example \( \text{Jan Pierewiet} \)

2. Echo rhythms from TV, radio, orchestra or choir rehearsal etc.

Suggested homework

With drill partner - Step 2, 3. Ex.1, 2.

Alone - Ex.1, 2 using pre-recorded material.

3. RHYTHMIC READING
(sight singing without the element of pitch)

Performance objectives

Skills mastered in Sections 1 and 2 are related to notation i.e. sound and symbol are linked. Firstly, the student is required to clap a rhythmic pattern at sight. Secondly, he/she should tap an ostinato whilst reproducing a melodic pattern.

Prior knowledge required

Theoretical - Names of note values and rests, dots and ties. Time signatures: Simple and compound duple, triple and quadruple as required for examples given. Major and minor triads for Exercises.

Aural - Discern pulse/beat and character of pulse and identify as simple/compound duple etc. Beat/conduct time. Rhythmic echoes. Major and minor triads for Exercises.

Pedagogical basis

Earl Henry uses five parallel approaches, a method which is most suitable for general rhythmic development and should be applied to each step of the development programme:

1. PATTERNS: Rhythmic problems are isolated and presented as patterns. (Henry, E. 1986:168)

2. EXERCISES: Patterns are incorporated in a variety of meters.

3. STUDIES: Dynamic and expression marks are included, but not tempo so the student may choose a speed suitable to his/her level. [Exercises may be repeated to increase speed.]

4. EXCERPTS FROM THE LITERATURE: Limits are imposed by the sequence
of material, but longer examples may be used at a later stage.

5. ENSEMBLES: Examples are designed to increase the awareness of part independence, whilst at the same time playing more than one line simultaneously. Parts should be practised separately and then combined. (Henry, E. 1986:168) Use may be made of Orff percussion instruments, for example melodic percussion instruments (e.g. xylophone) may be used to play repeated chords according to a given rhythm, while rhythmic instruments (e.g. tambourines) mark the beats.

The *Orff-Schulwerk* series is useful for ensemble ostinati which are often employed together with melodic elements (some to be played, some to be sung). Traditional nursery rhymes and children’s songs are scored for body percussion. Clapping, knee slapping and stamping are used together with melodic and rhythmic percussion instruments - glasses, soprano and alto xylophone, soprano and alto glockenspiel and triangle, cymbals, sleighbells, tambourine, drums, woodblocks, sand rattles, castanets, small hand drums, kettle drums and a "big drum" (presumably bass drum). Time signatures used are 2/4, 3/4, 4/4, 6/8 and 6/4. (Orff, C. I n.d.:no page numbers) Any instrument with a suitable range may be used for the bass part, for example a cello, piano or electronic keyboard. Although ostinati (mostly continuous quavers in this case) are rather monotonous they are useful to develop the maintenance of a steady pulse.

Part 2 includes speech patterns, for example

(Orff, C. n.d.:50) then exercises are given for the student to fit his/her own rhythmic patterns to words; rhythms are given for imitation, melody making and clapping, fitting to words, to use as ostinato accompaniments and to be used over ostinato accompaniments; rhythms to be completed, rhythmic rondos, songs with rhythmic accompaniment, canons, exercises for knee slapping etc. (Orff, C. n.d.:52-78) Later melodic exercises receive prominence, for example ostinati for tuned percussion, rondos and canons. (Orff, C. n.d.:82-92) Part 3 consists of instrumental pieces. (Orff, C. n.d.:94-137)

The rhythms in Part 2 may be used in Parts 1 and 3, while rhythmic patterns may be used in Books II-V which are orientated toward melody with melodic percussion ostinati. The content of the other books in the series is as follows:

- II Major - Drone bass and triads
- III Major - triads IV and V
- IV minor - Drone bass and triads
- V Minor - Triads IV and V
Henry's five-fold approach combined with Orff's exercises will provide a thorough grounding in rhythmic work, however they should be employed together with a systematic introduction of note values and time signatures to avoid confusion or neglect of certain rhythmic patterns or time signatures.

An important point with regard to the introduction of meter is the necessity to avoid "metric prejudice" (Karpinski, G. 1989:35), i.e. rigid use of 2/4 without attention to 2/2 and 2/8, until much later in the students development, an idea supported by McGaughey (1966) and Kreter (1976). Kreter, for example makes use of 2/2, 3/8 and 3/4 (1976:12).

An experiment conducted by Hofstetter showed that significantly more exercises are identified correctly when the time signature has a 4 for its lower number in simple time and 8 in compound time, (Hofstetter, F.T. 1981:52) therefore the other time signatures should be introduced as soon as possible. One should not, however, follow the example of Adler who introduces all simple quadruple beat units within twenty short exercises. (1970:144-145) Examples may be given in 2/4 then written in 2/8 as a preliminary to reproducing exercises in this time signature. The student may prefer to use this method whenever dealing with uncommon meters but should be aware that under normal circumstances rhythmic reading does not allow for transcription before performance.

Syncopation is introduced in Chapter 7 (1976:100) before ties and other complex elements. Hindemith, by contrast, introduces time signatures with a beat unit other than a crotchet in Chapter 6 of his course (1976:62) after ties and rests, therefore the first exercises in these new time signatures are more complex than those in Kreter's book. Less common time signatures should therefore be introduced prior to more complex note values patterns to enable the student to be comfortable within the new metric environment before additional rhythmic complications occur.

Compound time may be introduced when the teacher feels the student is ready, but not until he/she is comfortable working with simple time.
Various rhythmic permutations may be encountered. Drills which include as many combinations as possible of the basic note values presented below should be devised by the teacher. The order of introduction of note values should include Hofstetter's research which showed that dictation of basic note values is easiest then in compound time and in simple time with dotted notes most difficult. (Hofstetter, F.T. 1981:51)

Development programme

Simple time 1. Time signatures 4/4 (2 bars) and 2/4 (4 bars)
   Note values i.e. 8 crotchets. Include
2. Include Increase 4/4 to 4 bars.
3. 4 bars of 3/4 time. Use = 12 crotchets. Include
Include
4. Include 5/4, 7/4 and . Include
Include
5. Include
6. Include and 2/2, 3/2 and 4/2 i.e. double note values.
7. Include and 2/8, 3/8 and 4/8 i.e. halve note values.
8. Include 5/8, 7/8 and Include
9. Include and Include
10. Include and Include
Dotted notes do not always receive their correct length. When beating pulses with dotted notes exaggerate the beat that has the dot to aid time keeping. (Kreter, L. 1976:3)
11. Include syncopation and ties
12. Include double dots

Compound time 1. 6/8 time. Note values forming patterns
2. Include
3. Include
4. Include
5. Include
6. Include note value and 9/8 time
7. Include note value and 12/8 time
8. Include note values i.e. double note values
9. Include note value i.e. halve note values
10. Include ties
Useful exercises

1. A rhythm is played from a group of two/three/four notational examples. The student must identify the correct rhythm from the choices given.
2. Use common dance rhythms in improvisations in order to build a rhythmic vocabulary. (van Zuilenburg, P.L. n.d.:3-4)

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<th>Adagio/Andante</th>
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<tr>
<td>Sarabande ( \frac{3}{4} )</td>
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<td>Siciliano ( \frac{6}{8} )</td>
<td>Seguidillas ( \frac{3}{8} )</td>
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(van Zuilenburg, P.L. n.d.:3-4)

Others not mentioned by van Zuilenburg include the Tango \( \frac{6}{8} \) and Polka \( \frac{6}{8} \)

3. Compose rhythmic patterns to words, for example "I love geography".
4. Shuffle and deal flashcards on which are printed rhythmic patterns. Each student performs his/her card(s).
5. Conduct and intone only certain bars, for example only odd or even. (Kreter, L. 1976:4)

Furthermore, a useful aid to show the relationship between rhythm and beat is to sing alternate bars of the beat and its subdivisions in an exercise. (Fish, A. 1964:Unit I:Exercise 7)

6. One person performs two parts - one hand per part - then exchanges hands. (Kreter, L. 1976:13)

7. Try to reproduce silent rhythms, for example hand gestures or an unseen tap on hand or shoulder - a rhythmical version of the childhood game "broken down telephones" in which a whispered message is passed from one child to another in a group seated in a line or circle. The last child reproduces the message as
given to him/her which is then compared to the original. (Thackray, R.M. c1978:15) This provides a useful test of rhythmic memory.

8. Clap rhythmic patterns according to "clocks". (Thackray, R.M. c1978:67-68) The ostinato in the centre is combined with rhythms for example the student may play 3 o'clock followed by 10 o'clock. Ensemble exercises may also be designed with students following different "time patterns" simultaneously.

9. Ostinati and canon are valuable ensemble exercises. The student may tap an ostinato stipulated by the teacher whilst reproducing the rhythm i.e. two rhythms simultaneously. This ostinato may be the pulse/beat. In a class one student may tap the ostinato and another the rhythm as a preliminary exercise. (Thackray, R. 1978:152) Many examples of ostinati may be found in Orff-Schulwerk as previously discussed.
10. Ensemble ideas which create rhythmic counterpoint:

10.1 One student claps and one taps then swap parts.
10.2 Intone the upper and lower part each on one pitch then exchange parts. A three-part example should be performed two or three times. Try to exchange parts without interrupting the beat.

Hints: Parts may be intoned separately before putting them together.

Sing rhythms in a four-part chord. This provides the added problem of intonation. Ascending and descending scales may be used. (Kreter, L. 1976:12-13)

Alternate dynamics of parts between forte and piano.

Rupert Thackray also supports the use of rhythmic counterpoint. (Thackray, R.M. c1978:34)

11. Refer to examples from the literature. Some students may tap the beat, others the rhythm.

12. The creative teacher may wish to make use of typing exercises, for example those by Jos van Amelsfoort, 40 Solféges en 60 Ritmische Tikoefeningen (n.d.:23-32)

Suggested homework

With drill partner - Ex.1-6, 8-11.

Alone - Ex.2-6, 9.

4. DICTATION and NAMING OF NOTE VALUES

Performance objectives

1. Discern the meter and time signature. 2. Discern and write rhythmic patterns. 3. Verbally identify the note values contained in the rhythms. In other words this section is the written and verbal equivalent of Section 3. Skills in Sections 1-3 must therefore have been understood and mastered. It is not necessary, however, to complete the entire Development Programme of the previous three sections before beginning Section 4. For example, once Section 1 DP3, Section 2 DP2 and Section 3 DP1 have been completed the skills and concepts mastered may be used in elementary dictation.

Prior knowledge required

Theoretical and Aural - As for section 3.
Pedagogical basis

Firstly, rhythmic examples should be written down i.e. dictation, and secondly verbalised i.e. identification of note values. The latter will need to be visualised so dictation is an important intermediate stage, even though it is not required by any of the examining bodies prior to Licentiate level. Rhythmic dictation also acts as preparation for melodic dictation.

Secondly, it is more musical to give rhythmic tests as a melody rather than on one pitch (Warburton, A.O. 1971:18) or on a rhythmic instrument. The teacher is advised to use an instrument other than the piano particularly to show the duration of long notes and rests, without the sound decaying (getting softer) as is the case with the piano. The voice is often the most convenient instrument.

Sound decay also influences the use of rests because the student may have difficulty in distinguishing the difference between rhythmic patterns such as \( \frac{3}{4} \) and \( \frac{1}{2} \) or \( \frac{3}{4} \) and \( \frac{1}{2} \). Rests should be included in rhythmic reading (and later sight singing) because the student will confront them in performance of repertoire, but they may be omitted from dictation. Only one exercise given for UNISA Licentiate dictation, for example, includes a rest and it occurs at the end of the bar. (UNISA 8 Licentiate n.d.:35-36)

The student must discern both meter and rhythm. Which should come first? Furthermore, should the student write whilst listening or listen then write? A full discussion is included under PITCH DICTATION but these issues demand clarity with regard to rhythmic dictation:

Both Levin (1988:7) and Henry (1986:5) require the student to discern meter before rhythm, while Warburton advises writing the rhythm then adding barlines (according to the accents) and finally adding a time signature. (Warburton, A.O. 1971:17-18) The latter method has merit. If, for example, the student should discern the incorrect meter incorrect rhythmic notation may result due to the expected number of beats per bar differing from the correct version. If, on the other hand, the time signature is left until the end of the process this may not be the case.

It is questionable, however, that rhythms reflecting a certain character of pulse should be separated therefrom in initial perception. Should each individual interval in a melodic dictation be worked out before a key is inferred? It therefore seems preferable to discern meter before rhythm.
Secondly, what method should the student use to discern meter and rhythm? Theorists agree that the rhythms must be memorised before notating them, but their methods differ. Levin requires the student to imitate the pattern whilst conducting and saying the rhythm, for example to the syllable "ta". (Levin, R.D. 1988:7) Annie Warburton, on the other hand, advises the student to listen whilst trying to say the rhythm names mentally then reproduce it (sing, clap or tap). The student should then write shorthand on the stave between the 2nd and 4th lines in time with the performance before translating into the actual notes. (Warburton, A.O. 1971:17-18) The student may use Somervell shorthand, for example which Warburton has adapted for her own use. (Warburton, A.O. 1971:16-17)

Henry's method involves listening to and memorizing the pattern before writing. The student should write in rough then add improvements. (Henry, E. 1986:5) Finally, Ottman suggests the memorizing the exercise, either by singing aloud or reviewing it silently in the mind. This will be especially useful later when the melody of a dictation must also be notated. The student may memorize the first two bars then the latter two (i.e. selective listening) and should look out for repeated rhythms. He also advocates beating time with the use of an upbeat. (Ottman, R.W. 1991:45-47)

The necessity of listening before writing as well as beating time seems to be clearly indicated. The teacher may prefer to use counting instead of conducting as the latter involves use of the hands. The student may, for example, count whilst tapping the notes values. An analysis of rhythm such as this one shows the precise location of each "tap" in relation to the meter, particularly if it is slowed down.

The student should therefore discern meter before rhythm and listen before notating rhythms. Whilst listening selected sections may be committed to memory.

**Development programme**

Follow the steps of the Development Programme for the introduction of note values in Section 3, with the difference in this case being that the rhythms must be notated rather than reproduced in tactile form. In the early stages of the dictation process the teacher may specify the time signature in order to allow total concentration on the note values and play the examples many times. Variations in dynamics and timbre should be included in the exercises presented
to maintain interest. Finally, when working with less common time signatures such as 6/16 the student may wish to write an example in a more common one such as 6/8 then "translate" it.

**Useful exercises**

1. Let students compose musical units for the class to echo then notate. This aids weaker students as they must notate then clap/tap a rhythm correctly thereby linking sound and symbol.

2. Compile a list of rhythmic clichés in order to build a rhythmic vocabulary. These may range from folk tunes to symphonic themes, for example

   - Debussy - *Golliwog's Cakewalk*  
   - Handel - *Beautiful are the Feet*  

   (Thackray, R.M. c1978:34)

This idea is supported by van Zuilenburg (n.d.:4). He recommends van der Horst's *Maat en ritme* Vol I and II which contain approximately 150 extracts per book specially composed to include almost all possible rhythmic combinations.

3. Practise conducting with a recording of a familiar piece, especially whilst watching the score.  

   (Ottman, R.W. 1991:45-47)

**Suggested homework**

- **With drill partner** - Ex.2, 3.  
- **Alone** - Ex.1, 2, 3.
B. PITCH

Pitch skills to be developed

Matching of individual pitches.

Establishment of a reference pitch.

Distinguishing between the higher and lower of two pitches of an aural stimulus.

Vocal reproduction of melodies heard aurally (i.e. echo).

Selective listening (i.e. extracting sections from melodic material heard).

Identification of tonality (i.e. major, harmonic and melodic minor, whole-tone and pentatonic).

Vocal reproduction of the individual pitches comprising melodic then harmonic intervals and identification thereof. [Harmonic intervals may be included under HARMONY, but have been included under PITCH because of the natural progression from melodic to harmonic intervals.]

Identification of letter names in a given key and vocal reproduction of pitches in given key.

Determining the tonal centre [tonic] of a group of pitches.

Vocal reproduction of melodies at sight (i.e. sight singing).

Reproduction of note values and pitches in notational form (i.e. dictation).

Reproduction of a melody from an aural source from memory on an instrument (later including harmonies when played the first time).

Transposition of a melodic pattern at sight.

A viewpoint on three important issues must be established before pitch methods and exercises may be devised. Firstly, how should exercises be presented and what response should follow? Secondly, how important is perfect pitch and thirdly, what method should be used to define the relationship between individual pitches?

Presentation and response

Exercises are usually presented almost exclusively on the pianoforte, however other timbres should be included. For example, students of instruments with high pitches (flute/violin etc.) and low pitches (violoncello/trombone etc.) may be included in the presentation of and response to aural stimuli where appropriate.

The vocal response may be as follows: The student should sing on any vowel, for example la, lo, ma or mo, or using solfa or notenames. (van Zuilenburg, P.L. n.d.:6) Humming is not good as it obscures both the articulation of the melody and rhythm. (Adler, S. 1979:x)
Exercises should include varied dynamics (as required by RSM) in each step of each section in the Development Programme once the student is comfortable with the skills presented in that step.

**Perfect versus relative pitch**

Perfect pitch is a special form of memory which involves not only the recognition and identification of pitches but in its more developed form also being able to recall pitches at will. Although it is often regarded as a gift theorists such as Kenneth Simpson argue that perfect pitch may be acquired to some degree. People begin with different aptitudes for acquiring it and with varying manifestations thereof. String players may remember the note A. Others may try to find Middle C whenever they are near the piano, but this memory may fade or fluctuate depending on the circumstances, for example tiredness. (Simpson, K. 1961:309)

The second form of pitch recognition, an alternative to perfect pitch, is relative pitch i.e. "a reference of the required pitch to a pitch heard earlier which can be designated as a "cue". These "cues" may be a sense of key or tonality, a melodic or harmonic chord configuration, melodic movement tendencies (leading note to tonic, sub-dominant to mediant, melodic direction - up or down), non-harmonic tones (upper or lower neighbours), an anticipated chord or melodic direction, dissonance resolution, chord completion or an imitative entrance (canon). (Ihrke, W. 1972:10-11)

Which of the above two methods is preferable? Annie Warburton finds that the relationship between pitches is more important than perfect pitch. Musicians with perfect pitch do not necessarily have a good sense of relative pitch. She feels that teachers need to teach absolute pitch (names such as A, B, C) and relative pitch (i.e. intervals), first the former then both side by side, but not perfect pitch as such. (Warburton, A. 1971:34-35) Spohn also supports training in relative rather than perfect pitch. (Spohn, C.L. 1963:92)

According to George Pratt, perfect pitch usually must be developed early. Furthermore, all may have ‘approximate pitch’. He recommends focus on A [440] either before tuning an instrument or singing this pitch when passing the instrument then checking for correct intonation, or anticipating the note on which a piece in a certain key will begin. (Pratt, G. 1990:49-50)
Gary Karpinski, on the other hand, questions the need for this type of training, sentiments with which I agree. For example, to compare pitches in D flat major to this pitch seems pointless. He feels that musicians with true absolute pitch can recognize all pitches in this way, while others should concentrate on developing "true relative pitch - the ability to hear the relationships between the actual pitches they hear - rather than try to compare them to some point of reference they may or may not remember." (Karpinski, G.S. 1989:142)

How should these relationships be defined?

**Pitch relationships**

One of the following methods may be used: **Numbers in relation to a tonic, letter names, technical names** or **solfa**. In each case it is essential that the key first be established in order for the student to ascertain the tonic/doh/first pitch and thereafter other pitches within the key by relating them to the tonic.

![Musical notation of pitch relationships]

Many theorists advocate the use of solfa, for example the texts by Adler (1979:x) Alchin, Ghezzo, Taylor and Warburton. Use of this system, which was introduced by Guido d'Arezzo (Ghezzo, M. A. 1980: 19), would result in the C scale being labelled as follows:

![Musical notation of C scale in solfa]

(Warburton, A. 1971:36)

Solfa is used to varying degrees in the methods of aural theorists. Rodger (Roger, J. n.d.) presents solfa as a complete method of theory. All rhythmic and pitch details, including intervals and writing of scales are taught without reference to the stave except the "Student Modulator" (Rodger, J. n.d.:viii-ix) which presents the key signatures and tonic notes of all sharp and flat keys.
Although solfa is important in a South African context as a means of score reading used by indigenous choirs and is taught within the school system this approach will not be of benefit within the context of this dissertation. TCL, RSM and UNISA practical examinations rely exclusively on staff notation for the performance of repertoire. Musicians educated using solfa notation would need to convert to staff notation before undertaking the above examinations. Texts such as From tonic solfa to staff notation (Gruber, G. 1990) would be useful in this regard.

Curwen, who teaches French time names in conjunction with solfa (Curwen, J. n.d.:17-18) finds that the use of solfa before staff notation is beneficial. Through solfa singing is taught from notation without the aid of an instrument, i.e. students use the "unaided judgement of their ears". He finds that the transition from one to the other does not present the student with problems. (Curwen, J. n.d.:15) The student may use all concepts that have been learnt, but has to adapt to a new nomenclature and symbolism" (i.e. the signs of staff notation), which are taught through writing. When the student has reached the point that he/she can write staff notation it is used in sight singing with the two types of notation now being concurrent. (Curwen, J. n.d.:26-27) Taylor finds one of the most important factors in favour of solfa to be the fact that scale degrees remain constant through all keys and the relationship of intervals in the scale can be shown without reference to staff notation. (Taylor, E. n.d.:11-12) Exercises are given to sing without the staff then translated onto the staff. (Taylor, E. n.d.:19)

Other theorists focus on staff notation with solfa as a secondary aid. In my opinion, this remains unnecessary.

Warburton prefers solfa to expressing pitch relationships in numbers or technical names (Warburton, A.O. 1971:35-36) and advocates its use to find the first note of a dictation exercise and as much as possible of the rest even when the student can reproduce the correct pitches immediately. (Warburton, A.O. 1971:49) Leo Kreter suggests that various syllables should be used when singing - neutral vowels (la, ah etc.), syllables (do, re, mi), scale degree numbers and letter names (C, D, E) - but feels that singing with letter names is the only way that relates to the actual notation. (Kreter, L. 1976:19) Carrie Alchin recommends the use of solfa as well as numbers, but says that both should be discontinued when students can think and sing as required. (Alchin, C.A. 1904:iii)

It seems, however, that the learning of another complete set of technical names and nomenclature prior to staff notation squanders time and does not reinforce theoretical
principles. What method of defining pitch relationships should therefore be used?

Numbers in relation to the tonic, letter or technical names may be sung instead of la etc. in the early stages of pitch development to reinforce the pitch relationships, however technical names (e.g. dominant) are rather lengthy for singing purposes and are therefore not suitable. Numbers (1, 2, 3 etc.) are of a suitable length for singing. The use of letter names is arguably the best method as it refers to the actual pitches. It may, however, be used in conjunction with numbers because both are necessary for theoretical work. The eventual aim of the student, however, is to use syllables and/or words so, in my opinion, this method should be employed as soon as possible.

1. PITCH MATCHING AND ESTABLISHMENT OF A REFERENCE PITCH

Performance objectives
Sing individual pitches in tune and relate each to a pitch on the piano as well as the staff and recognize individual pitches as each occurs in a group.

Prior knowledge necessary

Theoretical - Pitch names. Rudimentary keyboard training for non-pianists i.e. location of pitches.

Aural -

Pedagogical basis

Singing [or playing] on pitch consists of two inter-related phases: producing the correct pitch in the key and producing it in tune. (Ihrke, W. 1972:9)

As matching individual pitches is the first step in development of accurate intonation when producing intervals, it is important to master correct intonation from the start. It will therefore be necessary to train the inner ear to prehear sounds before they are produced.

*The inner ear is that wholly interior mechanism of our mind that deals in silent sound. Through this little-understood function of our psychic processes, we can mentally recreate any sound in the repertory of our listening experience; we can mentally combine familiar sounds, synthesizing new ones; and, with perceptive training and creative imagination, we can draw from its deep well sounds previously unheard in any form. As musicians, we rely on the accuracy of the inner ear - for, purely physical achievements aside, it is our single greatest possession.* (Herder R. 1973:39)
The vital importance of intonation in an instrumental context is highlighted by John Kuzmich (Kuzmich, J. Jnr. 1986:4) and Rakowski. It is particularly important to develop a student's ability to produce musical intervals if he/she plays an instrument without fixed tuning (Rakowski, A. 1985:175), when tuning a stringed instrument or detecting incorrect intonation on a non-keyboard instrument.

Vocal intonation may be a problem. Many very young children cannot sing small intervals accurately but this perception improves with age (East, J.M. 1965:313) and training beginning with individual pitches. Furthermore, pitches outside the students vocal range may present intonational problems. Whilst trying to improve intonation the student may become frustrated so he/she should be aware that as perception of intonation improves it may seem to deteriorate as a result of the improved aural acuity.

Development programme

The following exercises should all use semibreves to eliminate the perception of rhythm as an added problem. This is also the quickest note value to draw.
1. The teacher plays single pitches within vocal range of the student which should be matched (echoes by him/her).
2. The student identifies pitches on the stave then presses the correct key for each on the piano i.e. sound and symbol are related.
3. The student presses keys on the keyboard, names then sings each, then writes each on the stave. In steps 1-3 the student has associated sound and symbol and made a vocal and tactile response to a pitch stimulus.
4. Play a series of pitches (5 increasing to 10). The student must identify the recurrence of the first pitch. At first he/she may wish to sustain it as a memory aid. This is a good practice in the use of a "cue" or reference pitch which will be essential in sight singing, dictation and error detection. (In this case the reference pitch should be the tonic.) Identification may take the form of giving the number of the pitch, for example "the fifth one", raising a hand or finger etc.
5. Repeat 4. whilst following a written score. This time the student must sing the pitch at the correct place. This exercises is a preliminary to sight singing.
6. The student plays the pitches on the keyboard and sings the reference pitch when it recurs.
7. Extend the range of pitch matching to very low and very high pitches. The student will therefore have to mentally transpose higher or lower notes to his/her
own vocal range. (Shumway, S. 1980:4) This also serves as training in producing correct intonation. The student is in effect transposing at the octave, but as the concept of intervals has not yet been introduced simply refer to pitch names, for example the higher C.

7.1 Play the pitches an 8ve higher.

7.2 Play the pitches an 8ve lower.

Suggested homework

Some students may have difficulty producing pitches in tune, despite a clear understanding of notation and playing of the pitch. They will need to repeat step 1 - either with a drill partner or by playing the pitches themselves - until correct intonation can be produced.

With drill partner - Step 1, 4, 5, 7.

Alone - Step 2, 3, 6, 7.

2. DIRECTION OF MOVEMENT

Performance objectives

Identify which of a pair of pitches is higher/lower. Distinguish between upward and downward movement and repetition of pitches in a larger group of pitches. This skill must be used when discerning dictation.

Prior knowledge necessary

Theoretical - Pitch names.

Aural -

Pedagogical basis

The student should indicate the direction of movement of a group of pitches through verbal or tactile means (hand signals). Variations in dynamics, note length and articulation may occur, for example

![Musical notation example]

Similar examples are included in the UNISA Pre-Grade 1 aural syllabus. (UNISA Pre-1 n.d.:23)
Development programme

1. Identify the higher or lower of 2 pitches.
2. Direction of movement of more than 2 pitches.

Useful exercises

1. Use recorded examples from the literature. The teacher may require indications of general movement rather than specific intervals, particularly when the tempo is fast.

Suggested homework

With drill partner - Step 1, 2. Ex. 1.
Alone - Ex. 1.

3. MELODIC ECHOES (and development of a selective memory)

Performance objectives
Reproduce a melodic pattern given aurally through singing/humming/whistling i.e. echo. (This skill follows on from rhythmic echoes.) Reproduce selected sections of a melody heard aurally.

Prior knowledge necessary

Theoretical - Pitch names.
Aural - Pitch matching, direction of movement, rhythmic echoes.

Pedagogical basis

This extension of pitch matching amounts to parrot work, but later will be related to notation and tonality etc. to enable playing from memory. The length of the extract should increase as the students ability develops. [The aspect of pitch memory will discussed under DICTATION.] The student should also develop the ability to select from the aural information presented i.e. selective listening. This skill may be developed in two ways within the context of echoes.

Firstly, the student should echo a melody, which may include accompaniment. The aural stimulus may be presented accompanied then unaccompanied to aid perception. Aural examples should consist of folk tunes, for example Three Blind Mice, London's Burning etc. as well as melodies from the literature, for example Ode to Joy from Beethoven's Ninth Symphony. If the latter example is played from a recording it will also test the skill of mental transposition at the octave when the melody is played by the cello. The student may also
identify the instrument/section playing the melody.

Secondly, the student must sing the first of a group of pitches, then compare it when the pitch is played once again. This exercise serves to develop selective memory in addition to correct intonation whilst matching the pitch and will be valuable in the context of dictation. Gradually increase the total number of pitches in the exercise as the students ability develops. [The importance of selective tonal memory will be discussed in more detail at a later stage.]

Development programme

1. A short melodic extract
   1.1 5-8 pitches
   1.2 1 phrase
   1.3 2 phrases
2. Melody with accompaniment.
3. Selective memory i.e. echoing a number of pitches, but not all pitches in a group.
   3.1 Echo the first pitch.
   3.2 The student must echo the first and last, then first 2 and last 2.
   3.3 Increase the number of pitches to be sung to 2, 3 etc.
   3.4 First phrase/second phrase

Hints: Examiners experiences have revealed that minimis and long rests were not always counted, but the melodic contour was maintained even if there were pitch problems. (Examiners Comments 1993:2) The student should therefore be aware of these rhythmic problems in order to give them special attention and aim to maintain the contour even if the exact pitches are uncertain. The student is further advised to maintain rhythmic movement even if the pitches are uncertain, rather than stop and lose all tonal coherence.

Useful exercises

1. Echo skills may be practised using melodies in repertoire currently being studied, for example by singing whilst practising.
2. Most students will practise echo skills on a regular basis when humming or singing along with tunes on the radio, television, compact disc etc. The value thereof should be pointed out.
Suggested homework

With drill partner - Step 1, 2, 3. Ex 1, 2.
Alone - Step 1, 2, 3. Ex 1, 2.

4. IDENTIFICATION OF TONALITY

Performance objectives
Establishment of the tonality "cue" from both aural and written examples through singing, playing, writing and identification.

Prior knowledge necessary
Theoretical - Pitch names, major and harmonic minor scales and key signatures. Melodic minor for step 2. Pentatonic scale for step 3 and whole-tone scale for step 4.
Aural - Pitch matching and direction of movement.

Pedagogical basis
The ability to discern tonality is essential, for example when recognising modulations from the major to relative minor key or vice versa. Practical and theoretical aspects require the student to play and write scales and arpeggios (triads), therefore by Grade 5 level he/she should already be familiar with both sound and symbol. The various tonalities may be reinforced using a method which links practical and theoretical aspects.

This method should progress from the use of scales to broken chords and arpeggios, followed by single melodic lines and at a later stage harmonized melodic lines which ensures progression from easy to more difficult examples.

1. The teacher names the tonic and plays the scale whereafter the student identifies it.
2. Repeat 1. The student must write the scale instead of verbalising the response.
3. Repeat 1. The student has to identify the scale from written examples given.

The singing of scales has not been included as this skill will be introduced in stages under INTERVALS.

Scale manuals are available for various instruments. Teachers may utilize these instead of writing out scales but will need to cover up the labels of the scales e.g. E major.
Development programme

1. Major scale

2. Major versus minor. This may include the natural minor but it is not often used.

3. Distinguish between harmonic and melodic minor scales.

4. Include the chromatic scale.

5. Include the pentatonic scale.

6. Include the whole tone scale.

Useful exercises

1. Identify the tonality of folk songs and themes from famous compositions. Also be aware of the tonality of pieces heard outside the aural classroom, whether they are currently being studied, sight reading, choir and band/orchestra repertoire or snatches of melody heard in shopping malls etc. This should include rudimentary awareness of changes of tonality within a piece from major to minor or vice versa, a skill which will be developed at a later stage when studying modulations.

Suggested homework

With drill partner or alone - Students usually experience little difficulty with this section so work outside class should be confined to Ex.1. This aural skill is being exercised when practising scales or arpeggios.
5. INTERVALS (The simplest combination of pitches)

Performance objectives
Sing, play, identify and write all intervals individually and in a tonal context.
Establish interval "cues" to assist with sight singing and dictation.

Prior knowledge necessary

Theoretical - pitch names, major scale and key signatures. Harmonic minor and key signatures for step 4.
Aural - Pitch matching, the use of reference pitches or "cues", direction of movement and the major scale. Harmonic minor scale for step 4.

What are intervals?
"The ancient Romans combined their words for "between" and "walls" to express in a single term the idea of space between fortification fences. From *inter* (between) and *vallum* (walls) came *intervallum*, and from this the general idea of "space between" - between things, objects, points of time and time elapsed between events. In a musical context the word interval (the English derivative) also denotes "space between": specifically, the distance separating any two tones - that is, their pitch position relative to one another." (Herder, R. 1973:1)

The aural student requires a working knowledge of intervals from the minor 2nd to the perfect octave in both harmonic and melodic form.

The student may also require specific information about the following intervals:
The tritone (augmented 4th/diminished 5th) is the *diabolus in musica*, so called because of its comparative performance difficulty.
It was regarded by medieval theoreticians as "dangerous", thus the tag "the devil in music".
It either resolves outwards or inwards. (Herder R. 1973:81)

Semitones may be divided into two types. A diatonic semitone occurs between two steps of different names,
while a chromatic semitone occurs on the same step with alteration.
The semitones and tritones may be classified as **enharmonic intervals** i.e. different notations of the same pitch. Enharmonic intervals are most prevalent in atonal music, which is not within the scope of this dissertation, however the student will encounter such intervals in the context of sight singing as well as his/her practical repertoire. "While aural perception is the heart of the musical experience, the musician as reader-performer, working from the written page, is aware of the fact that **intervals may be notated in different ways without altering their characteristic sound.** (Herder, R. 1973:2)

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**Pedagogical basis**

Recognition and singing of individual intervals is often taught by the use of "cues" from famous compositions, for example the opening interval of *Sarie Marais* is a perfect 4th, while a major 6th may be linked with *My Bonnie Lies over the Ocean*. This may provide a speedy short cut to mastery thereof, but what is the student to do when sight singing a group of intervals? Should each be stressed as a separate entity, thus involving a myriad of folk tunes and other melodies during the course of the exercise, or is there a more suitable method?

Intervals may be categorized by means of "subjective reactions" A4/D5, M7, m7, M2 and m2 are dissonant. P4 and P5 are hollow. M3, m3, M6 and m6 are harmonious, but the minor intervals are sad whereas the major ones are bright. Although this may help the student to identify the interval this will not aid production of correct intonation when singing. Taylor also opposes this method. (Taylor, E. n.d.:30)

Ottman (1991:1-20) relates intervals to triads, for example

The tritone is related to V7 as either an augmented 4th or diminished 5th.

The purpose of interval study is usually made out to be an end in itself, to relate interval identification skills to the performance of melodies, chords etc. and to provide well-defined, tangible sounds which are very testable i.e. always right or wrong. (Rogers, M.R. 1983:19)
Furthermore, justification for the study of individual intervals is based on the premise that intervals are common to all types of music - tonal, modal, pantonal and atonal.

"Interval recognition is actually accomplished with the aid of a kind of internal, diatonic ruler; we construct, or map, heard intervals by "placing" our diatonic ruler over them and noting which and how many divisions of the ruler they span." A "special, temporary ruler, made of inferred structural components of the composition" is "used to partition the musical data into coherent, comparable segments." (Gould, M.J. c1979:1)

Marquis suggested that isolated intervals functioned differently from those in context in melodic sight singing, but reaffirmed that the ability to sight sing was substantially correlated with the ability to sing isolated intervals. (Marquis, J.H. 1963) As Merton Shatzkin points out many sight-singing and dictation textbooks (for example McGaughey 1966) make extensive use of drill exercises organized around single intervals, or intervals removed from any context, presuming that singing "single out-of-context intervals will generalize to recognition and singing of whole phrases of melody." (Shatzkin, M. 1984:5)

Adler's method illustrates this point of view. He introduces one interval per chapter with the aim of being able to work with this intervallic unit within the environment of various tonalities. For example, he warns the teacher not to use the octave minus a semitone as a crutch for learning the major 7th (Adler, S. 1979:82)

which should learnt as an interval in its own right. Each theorist has his/her own order of introduction, often progressing from the 2nd to the 7th. Adler, for example, introduces m2, M2, A2, m3, M3, D4, P4, P5, A4/D5, m6, M6, m7 then M7.

Rogers, however, emphasizes the importance of stressing larger units such as the phrase or group of phrases, rather than note-to-note playing or singing. Attempting to "imagine the two pitches of an interval exclusive of any context beyond themselves is like trying to imagine two points in vision without a spatial reference." He points out that achieving a smooth musical line often requires "long-range step-wise mental and aural connections between non-adjacent pitches", which is undermined by emphasis on individual notes or intervals. "Intervallic emphasis in tonal and many non-tonal contexts reduces the hearing process to a chain of localized hops from event to event--all somehow equivalent like undifferentiated ticks on a
Ilse Wunsch has a similar condemnation of interval recognition through tunes. "Not being cognizant of the musical substance, they [students] are forever trying to identify individual intervals or chords. They cannot see the forest for the trees and therefore miss all tonal coherence." (Wunsch, I.G. 1973:55)

In what context should the study of intervals therefore take place? The simplest form of pitch relationship is in the major scale, built above a tonic or keynote ("the home base toward which most sounds in a composition gravitate"). This tendency towards home is tonality or key feeling. (Fish, A. 1964:10) A study of intervals should therefore begin with the major scale [used by the various examining bodies] with the tonic as reference pitch. This view is supported by Levin who works with the intervals of the C major scale then moves through G major, D major etc. All intervals are used i.e. CD, CE, CF, CG etc. then downwards from the upper C. (Levin, R.E. 1988:16) Gould also supports the use of the diatonic scale for the teaching of intervals. (Gould, M.J. c1979)

Focus on context as opposed to the intervallic approach was first used in a method proposed by Fétis in 1844 and centred on the scale. Fétis' definition of tonality: "the sum of relationships and attractions, within the structure of the diatonic scale, that projects the centricity of its tonic pitch." (Fétis, J. 1844:n.p.) Rogers points out the validity of this approach in that we need more than mere knowledge of intervals to recognize only the patterns the composer intended us to hear. (Rogers, M.R. 1983:23)

Intervals have different degrees of tension depending on the context, so study in context is important. (van Zuilenburg, P.L. n.d.:10) For example, the minor 3rd from the third to the fifth degree of the scale is different to that from the sixth to the eighth. (Alchin, C.A. 1904:iv) When hearing within a tonal context pitches have certain melodic and harmonic tendencies. All tones have either repose or progression and some tend strongly towards others. 1 and 3 are the "magnets". The former attracts 5, 6, 7 and 2, while the latter attracts 2 and 4 therefore all notes resolve on 1 or 3. 5 has repose when combined with 1 and 3 in chord I. (Alchin, C.A. 1904:12) Alldahl also stresses that understanding the degree functions in a scale is more important than drilling separate intervals. Although this drill is necessary it must not become an end in itself. (Alldahl, P.G. 1974:114)

The study of intervals presents certain difficulties of which the teacher should be aware. A study by Rakowski established that within the octave there is a tendency to diminish smaller
intervals and expand larger ones, (Rakowski, A. 1985:183) while Jeffries finds that the ascending interval of a major 3rd, major 6th and augmented 4th are particularly difficult. (Jeffries, T.B. 1970:406)

Shatzkin points out that interval difficulty is not merely related to width, degree of consonance, or any other property of a single interval. His 1981 study showed that a major third "distracter interval" preceding the target interval led to overestimating the size of the following interval, while a major third following led to underestimating the target. (Shatzkin, M. 1981:111-123)

A further study using the major second and perfect fourth as distracter intervals followed similar lines. The distracter before the interval to be identified led to overestimation, and underestimation if played thereafter. (Shatzkin, M. 1984:7) Shatzkin's results support his "tonic hypothesis" i.e. the influence of the tonic. He therefore advises drilling patterns which are not tonic-related if the tonic pull becomes too strong. (Shatzkin, M. 1984:13) and concludes that particular combinations and aspects of melodic content seem to affect interval recognition difficulties, not just placement within context or tonality. (Shatzkin, M. 1984:13)

Context is therefore an integral part of the study of intervals. "If this larger "aural window" can be opened, tones are no longer heard in relation to each other in a note-to-note way, but are heard instead as part of a functional panorama that is constantly present and imagined as a background tonal canvas, even as we are actually performing or listening to single notes within that given background. We move through this tonal universe and find the right notes because we can "feel" where they are; we have acquired tonal bearings and no musical ruler is needed. We have learned the sound of this tonal world, not the sound of its intervals, in the same way that a blind person learns to find his way in a familiar house by imagining the entire layout of rooms, hallways, doorways, and patterns of furniture placement rather than by counting steps from point "X" to point "Y"." (Rogers, M.R. 1983:32-33)

The development of interval skills within a tonal context should proceed as follows, with exclusive use of the semibreve in the early stages to eliminate the problem of rhythm. Examples which the student is required to play may be given in easy keys to avoid performance difficulties.

Once each of the steps has been mastered using melodic intervals harmonic intervals should be used. The lower note of a harmonic interval is often difficult to hear so the student is advised to sing the top note then let the bottom note 'loom up'. The teacher may play the
bottom note louder in the early stages. (Warburton, A.O. 1971:71) Ottman advises writing harmonic intervals using note values which require stems to be added. (Ottman, R.W. 1971:13) This is an important preliminary to the use of soprano and alto, tenor and bass in four-part harmony.

Attention is usually drawn to the treble because the main melody of a composition is often within the treble range of the piano. Bass clef exercises should therefore be presented as soon as the treble has gained familiarity so that the student will learn to pay more attention to the bass. (Shinn, F.G. 1899:17)

A study by Jeffries indicated that certain ascending melodic intervals are more difficult to identify aurally than others, especially the minor 3rd and 6th and augmented 4th. (Jeffries, T.B. 1970:406) These intervals would therefore need extra attention.

Finally the teacher may wish to link intervals with the technical names of the scale degrees which will be used in the context of triads and harmony:

1. Tonic
2. Supertonic
3. Mediant
4. Subdominant
5. Dominant
6. Submediant
7. Leading note
8. Octave

Development programme

1. The student should sing, identify, write and play the first 5 notes of a major scale from the lower tonic i.e. M2, M3, P4 and P5. Levin's "Self training" is a good method. For example, play a 3rd then match the pitches both up and down. Play a 3rd and sing lower pitch. Play a 3rd and include the passing tone, first downwards then upwards. (Levin, R.E. 1988:54).

The teacher plays the first 5 notes of the C major scale. The student sings, writes and plays all 5, then selected ones after the tonic. The following questions (using the interval of a 3rd) may test understanding of the above:

1.1 Here is the first note (tonic) of the C major scale, sing the 3rd note (mediant) then write both on the stave.
1.2 Here is C, the tonic of the scale. [Play mediant] Which is this note? Write both pitches on the stave.
1.3 In the key of D major sing an F#. Identify, then write and play the interval the
2 pitches form. Write down the technical names of the scale degrees.

1.4 In the key of D major which note is this? Identify the interval the 2 pitches form and write then play it.

Repeat 1.1 - 1.4 for each degree of the scale and adapt for steps 3-7.

2. Include the 6th, 7th and 8th notes i.e. M6, M7 and P8.

3. Intervals from the upper tonic i.e. include m2 and m7. Two methods may be used here.
   3.1 Think down an octave then up the required interval.
   3.2 Think straight down from the 8th note.

4. First 5 notes of a harmonic minor i.e. M2, m3, P4 and P5.

5. Add the 6th, 7th and 8th notes of the harmonic minor i.e. m6, M7 and P8.

6. Intervals contained in the harmonic minor from the upper tonic i.e. include m2 and m7.

7. The remaining intervals
   7.1 A4/D5 are introduced.
   [A4/D5 is a semitone high/lower than P4/P5.]
   7.1 m7 as appearing in V7.

8. Compound intervals. Compound intervals are good to focus attention on the interval between the soprano and bass, but rather difficult to sing. The student may have to sing the lower pitch up an 8ve or vice versa, a skill mastered previously under PITCH MATCHING. This parallels the process of identification used in theory i.e.

Throughout this programme the tonic may be used as a reference pitch.

Useful exercises

1. After a major/harmonic minor scale has been played and the tonality identified repeat one degree which the student must identify (either the pitch name or
degree name/number may be given). At first the teacher may only use 1, 3, 5 and 8. Later more than one pitch should be given.

2. Play two intervals, with one pitch common to both, then ask which is smaller. (Shinn, F.G. 1899:5) This may lead to the identification of intervals as either larger, smaller or the same size. Variants may include saying which of two intervals heard (both played on the same instrument) is correctly notated, or which of two of three intervals are identical.

3. If a break from tonality is required the teacher may sing an interval, whereafter a student sings one above it etc.

4. Sing in groups: Some students may sustain the tonic as a reference pitch while other sing a required interval above it. This may be used as an introduction to triads when, for example, the students must sing the 1st, 3rd and 5th or 1st, 4th and 6th degrees of the scale.

5. Identify notated examples of intervals, exposing one bar at a time. Set the metronome to $J = 60$ and allow only 4 beats for each bar. (Trubitt, A.R. 1979:3,17-18)

6. Sing and identify intervals extracted from folk songs, famous melodies and repertoire. For example the student may identify the first and last interval or first 2 and last 2.

7. "Strike and sing". The student must play certain pitches whereafter the required interval must be sung above and/or below the given pitch, then checked by playing the second pitch. Pitches outside the vocal range should not be neglected. (Adler, S. 1979:16-17)

8. The perfect 5th may be emphasized as the interval needed to tune the violin, viola and cello, while the perfect 4th is used to tune the double bass. Untune such an instrument and allow a student to retune it.

9. Murray Gould suggests exercises which make use of large and small noteheads. After the student has sung the whole exercise he/she must sing only the large ones and hear the small ones.

\[ \text{\includegraphics[width=\textwidth]{image.png}} \]
Variant: Sing the whole exercise then only the marked pitches and identify the intervals.

(Gould, M.J. c1979:16)

Suggested homework

Alone - Step 1 [self training]. Ex. 5, 6, 7, 8, 9.

The study of intervals leads to other disciplines as illustrated by 1.1 - 1.5 in the development programme. For example, writing the 2 pitches of an interval played by the teacher leads to writing groups of pitches i.e. dictation, while singing a written interval develops into sight singing. Harmonic intervals lead to triads and harmony, as do the degrees of the scale 1 4 5 1 which form the basis of perfect, plagal and imperfect cadences and various progressions. If the intention of the educator is to move towards a study of atonal music then individual interval drills should receive extra attention.

6. SIGHT SINGING

Performance objectives
Conversion of symbol to sound. Sing a melody at sight with correct pitch, rhythm, and later dynamics, modulations and tempo indications.

Prior knowledge necessary

Theoretical - pitch names, major scale and key signatures, intervals, time signatures 2/4 and 4/4 and note values o d j j and their corresponding rests. Harmonic minor scale and minor key signatures for step 5.
Aural - pitch matching, the use of reference pitches or "cues", direction of movement and major tonality, intervals, detection of pulse 2/4 and 4/4 and rhythmic patterns incorporating o d j j j and their corresponding rests. Harmonic minor scale for step 5. Melodic minor for step 7.
Origins
Pope Gregory I (540-604) established the first important singing schools in Western Europe from which trained singers were sent throughout Europe to teach the liturgy. He aimed to establish Gregorian Chant as the most important in the Roman Catholic church (as opposed to other types of chant practised outside Rome) and as a means of unifying the church service. (Henry, E. 1986:245)

What is sight singing?
The following definition is an apt summation of the essence of sight singing. It refers to "sight reading" but the only difference between the two is the instrument on which sound is produced (obviously not in the case of singers):

"The technique of sight reading - intelligent musical analysis on the practical level of performance - is an essential ingredient of musicianship." (Fish, A. 1964:vii) It provides an important link between sound and symbol and shows the extent of the student's understanding of the elements of pitch and rhythm, aural and theoretical knowledge. "With ear training there is a big difference between knowledge and performance. To know that a particular melodic figure outlines an augmented triad and is triplet rhythmically is one thing; to conceive it mentally and perform it at sight in an ongoing musical context is another." Students must hear mentally what they see, reproduce it with their voices, understand what they see and hear etc. (Fish, A. 1964:vi)

Pedagogical basis
As was the case with intervals, it should be assumed that the development of sight singing should take place within the context of tonality. Within this limit the initial focus may fall on stepwise motion or the triad. Which is preferable? Annie Warburton points out that using notes of the triad in the initial stages may give problems when using the first, second and third notes of the scale by step but notes that both approaches are good and must be combined at some stage. (Warburton, A.O. 1971:37-38)

In my opinion the development of sight singing should begin with stepwise motion, but working with the triad is necessary for the establishment of reference pitches. Those which I have found to be most effective are the tonic and other notes of the tonic triad in the pattern given below, which is to be sung before each sight singing exercise. This will enable the student to recall the pitches in the mind's ear and thereby have a framework on which to place other
pitches in the exercise.

This pattern may vary depending on the range of the particular key chosen, for example

Before singing an exercise it is important to study all obvious features, for example the key, dynamics, phrasing notes of the triad, scale passages, repeated notes, motifs and sequences (may be tonal). The student should note that sequences and scale passages that may be obscured by other pitches. The student must be trained to "hear" the music mentally and respond instantly to recognised patterns. (Thackray, R. M. 1978:183-4) i.e. activate the seeing ear and hearing eye. Reading ahead is also important in order to anticipate problem areas and train the eyes for rapid movement which will lessen faltering or stopping whilst working out difficult rhythmic patterns. Levin and Fish also emphasize the importance of not stopping whilst singing. Levin advises checking with the piano after singing the whole exercise, conducting all the time and improvising rather than stopping altogether if something goes wrong until back on track. (Levin, R. D. 1988:18)

RSM Practical Musicianship candidates are required to interpret an extract at sight which includes dynamics, marks of expression and ornamentation (not for singers). The student must therefore look beyond the pitches in order to create a musical performance. Exercises should be played on the student's instrument with the specific aim of achieving a musical execution. Words provide an added difficulty especially when melismas are used. Students who are accustomed to choral work may have fewer problems with words or indeed sight singing as a whole as their experience of singing encompasses words. Nancy Telfer's Successful sight singing. A creative step-by-step approach (1992) introduces sight reading with words in the first exercise. Although the student's manual is very systematic, colourful and well laid out it begins with use of the perfect fifth. I have found that students experience pitching problems with this interval, a situation which does not arise when students work progressively using 2nds, then 3rds, 4ths and 5ths.
Obviously it is not advisable to "perform" every exercise as a whole. Drills and "rehearsals" (repetitions) are necessary in order to develop a pitch and rhythmic vocabulary. It is important to drill stereotyped melodic fragments and cadences to acquaint students with clichés. Bach's *Little preludes and fugues*, Beethoven's Sonatinas and Schumann's *Album for the young* are good resources.

Theorists provide numerous hints for presentation of drills. Trubitt feels that during class sight singing passages should be practised stopping for everything that goes wrong then performed as a completed whole without stopping. (Trubitt, A.R. 1979:20-21) Adler requires the student to try to sing the whole exercise slowly after the first note has been played and increase speed with each repetition. He makes use of dashes above or below the notes indicating that they are to be held a little longer. (Adler, S. 1979:15) Arnold Fish advises the student to practise weak spots after reading the exercise once, then perform each exercise several times before moving on. He stresses that students should read groups of notes as patterns rather than individual notes, an approach which parallels the one used in the study of intervals. "Reading music note by note is like reading a story letter by letter." (Fish, A. 1964:xii)

The student may therefore work as follows: 1. Establish the key.
   2. Establish the pulse and time signature.
   3. Look for sequences, dynamic changes and other features. Repeated notes, for example, are often sung in stepwise motion, so the student should identify them before beginning the exercise.
   4. Sing the reference pitches then identify them in the exercise.
   5. Sing the whole exercise.
6. Repeat problem sections.
7. Sing the "improved version".

RSM students are required to perform accompanied sight singing. In some cases this may assist the student, for example when notes of the chord being used are prominent in the accompaniment. Non-chord notes may cause confusion as well as secondary triads (i.e. II, III, VI or VII). The student should practise sight singing accompanied exercises without accompaniment at first to check rhythm and intonation.

Exercises should be presented in many different keys at an early stage to avoid fear of sharps and flats. So-called "difficult" keys may provide problems when the student checks on the piano or his/her instrument, but not if he/she is of a sufficiently advanced grade or if the teacher plays. Transposition at the octave is also a useful exercise, in other words sopranos and contraltos should sing bass melodies in their own range while basses sing treble melodies in theirs. (Fish, A. 1964:xii)

In addition to correct methods suitable resources will be necessary to provide exercises. The advantage of collections of melodies is that they may also be used for dictation. Useful resources are as follows:

**The Folk Song Series** (Crowe, E. n.d.) consists of 12 books. It begins with short and simple examples and progresses to semiquaver rhythms and 6/8 time and provides a systematic and thorough grounding in sight singing.

**The Treasury Sight Reader** (Jacobsen, M. n.d.) consists of five books progressing through all major and minor keys, chromatic intervals and modulation along the same lines as the folk song series. Exercises include works of great composers, both opera and oratorio, folk songs and instrumental pieces (singable tunes). A useful feature is the use of bar numbers.

**400 Aural Training Exercises** (Butterworth, N. n.d.) consists of selected themes of well-known composers. From No.251 exercises are in two parts and from No.301 in three parts, thus providing extensive examples for ensemble work.
Development programme

For each step the pitch element(s) should first be introduced without rhythm i.e. use semibreves. Thereafter exercises should consist of 2, 4, then 8 bars. Dynamics and accompaniment should be introduced in each step when new material becomes familiar.

1. Sing intervals in a major key within the compass of a 5th. Only use 2nds in groups of 5-10 pitches.
2. Repeat 1. within the compass of an 8ve.
3. Use the triad I, combine with other intervals, then include IV then V i.e. 3rds, 4ths and 5ths.
4. Include other intervals in the major scale e.g. m7 and P4 and V⁷
5. Minor key within the compass of a 5th. Only use 2nds.
6. Repeat 5. within the compass of an 8ve.
7. Melodic minor.
8. Use the triad I, combine with other intervals then include IV then V.

9. Other intervals in the minor scale and V⁷
10. Major and minor - range to upper and lower 5th i.e.

   Work within this extensive intervallic range should equip the aural student to deal with pitches outside this range if necessary.

11. Include sequences and repetition.
12. Include sharpened and flattened chromatic notes.
13. Include modulations to IV, V and the relative key.

Useful exercises

1. Sight sing self-composed melodies and those composed by other students. These melodies may also be used for dictation. Some examples may be badly composed therefore may also serve the purpose of testing critical analysis.
2. Use exercises with varied pitches and constant rhythm, then varied rhythm and constant pitch. (Thostenson, M.S. 1967:17) This will serve to drill each element in turn and provide practice in error detection skills.
3. Play/sing well-known folk tunes or tunes from the literature from memory and with music in various keys. This will aid the development of a vocal pattern memory.

4. "Silent reading" i.e. students stop singing at the signal "stop" and read silently until asked to resume singing. The same procedure is useful for rhythmic exercises. (Fish, A. 1964:ix)

5. "Scanning": Only the top and bottom lines of the stave and rhythms are given. The student must scan and sing and try to end on suitable pitches to create a cadence. (Trubitt, A.R. 1979:15-16) This will provide an introduction to improvisation.

6. Ensembles have an added degree of difficulty.
   6.1 Alldahl composes obbligatos for well-known tunes to be played on an instrument from memory. Someone plays the tune from memory and another can play the roots of the chords (or whole chords), resulting in a three-part arrangement. The exercise should then be transposed. (Alldahl, P.G. 1974:114) Four skills are tested i.e. playing from memory, sight singing, playing chords from analytical symbols and transposition.
   6.2 Melodies with rhythmic ostinati - the class is divided in half to perform the exercise, then each person sings whilst tapping. (Fish, A. 1964:20)
   6.3 Sing in parts. Try to read the other parts simultaneously. For example, appropriate parts of chorales may be used i.e. soprano and contralto or tenor and bass etc.

Suggested homework

With drill partner - Step 1 - 10 [partner checks]. Ex. 4, 7. Other exercises may use drill partner to check.

Alone - Step 1 - 8. Ex. 2, 3, 5, 6.
7. DICTATION

Performance objectives
Conversion of sound to symbol. To reproduce a melody heard, in written form i.e. on the staff.

Prior knowledge necessary

Theoretical - pitch names, major scale and key signatures, intervals, time signatures 2/4 and 4/4 and note values and their corresponding rests. Harmonic minor scale and minor key signatures for step 5.
Aural - pitch matching, the use of reference pitches or "cues", direction of movement and major tonality, intervals detection of pulse 2/4 and 4/4 and rhythmic patterns incorporating and their corresponding rests. Harmonic and melodic minor scale for step 8.

What is dictation?
Dictation and sight singing are exercises in 'translation only'. (van Zuilenburg, P.L. 1975:24)
As previously stated, however, this translation is a vital part of relating sight and sound and reveals the students understanding of basic elements.

Pedagogical basis

"Dictation ... is one of the most important aspects of musical training. It begins with the abstract perception of tones and results in concrete, graphic representation." (Ghezzo, M.A. 1980:4)

A study by Gary Karpinski explored the process between perception of an aural stimulus and notating it, a process which he divides into 4 phases - hearing, memory, understanding and notation - each of which must be performed in turn. (Karpinski, G.S. 1990:194-5) Hearing is influenced by physical or neural hearing deficiencies, attention problems and nervousness, (Karpinski, G.S. 1990:196) therefore can not be directly influenced by an Aural Development Programme such as this one, however the other three phases may be improved subject to effort and concentration.

Three types of memory may be identified. The sensory register has temporary storage for about 0.5 seconds during which time the mind selects information for further storage. The short-term memory (STM) retains information for about 20 seconds. A longer retention time is possible if selections are "rehearsed" (repeated) and used, but they are soon forgotten after "rehearsal" ceases. Long-term memory retains a permanently encoded image of selective
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features of a stimulus. Anything remembered without active rehearsal for more than a few minutes is part of long-term memory. (Woodfolk, A.E. 1984)

Within a musical context, Wickelgren (1966, 1969) identified a possible two-stage immediate memory storage: "short-term trace" of up to 9 seconds and an "immediate trace" of approximately 40 seconds. A single pitch in STM is lost due to time (time decay) and/or interference from another pitch (item decay). Wickelgren (1969), Massaro (1970, 1971) D.B. Williams' research, which focused on "short-term memory (STM) and the extent to which pitch sequence length and pitch position within the sequence affect the amount of pitch information lost between offset of the stimulus and the time of perceptual report," (Williams, D.B. 1975:53) concluded that increased "time delay before recall (time decay), the position of a pitch within a sequence - recency>primacy>centre - and the increased length of the sequence (item decay) affected pitch information loss in STM i.e. "item decay for pitch is a selective function of time decay depending upon the pitch position within a sequence." (Williams, D.B. 1975:62) These findings are consistent with STM characteristics identified in visual and verbal auditory research by other researchers, for example Murdock (1962), Peterson and Peterson (1959) and Sperling (1960).

Within the context of dictation students will need to perform the processes of understanding and notation before reaching the limits of memory.

What are these limits with regard to pitch? George Miller defined the limits of short term memory as "seven plus or minus two bits (5-9 bits) (Miller, G. 1956:81-92), while Marple found that "the retention of new musical materials for most children and adults falls within the expected limits for short term memory as defined by Miller" after a study testing Miller's limits in a musical context. (Marple, H.D. n.d.:78) Furthermore, pitch memory increases as the number of pitches decreases. Pembrok points out that there is a noticeable decrease in memory from 6 (62.16%) - 10 notes (53.77%) and a dramatic decrease from 10-16 (33.79%) notes even after two hearings i.e. the limit is somewhere between 10 and 16 pitches. (Pembrok, R.G. 1986:254, 260) This correlates with research undertaken by Long, following Miller's idea of memory channel capacity which suggests that the memory's processing peak is between 11 and 15 pitches. (Long, P.A. 1977:280) The interference factor of length was also investigated by Deutsch (1970). Pembrok concludes that perception "and/or memory of an unfamiliar melody will not be accurate for anything longer than a ten-note melody. Furthermore, it still may not be accurate unless the stimulant is of a nature that can be easily
codified (for example a tonal setting)." (Pembrook, R.G. 1986:256) Obviously it will be necessary for the student to deal with melodies longer than 10-16 pitches so strategies to aid the student must be developed when this stage is reached. In early training the teacher should consider the amount of information to be given to the student to encode, store and report, i.e. stay within memory limits. Placing is also important because there is least accuracy for pitches in the centre of the exercise. (Williams, D.B. 1975:64) (Taylor 1971) Williams feels that Programmed Instruction (PI) is important for implementing these findings in melodic dictation. Use of this method ensures that exercises may be structured to deal with the problem of length and serial position and that the teacher may exercise precise control over time delay before recall to ensure equal retention in all cases. (Williams, D.B. 1975:64-65) Teachers who do not favour PI will need to structure their own exercises carefully, particularly when new concepts are being introduced.

Presentation of longer exercises in a classroom situation may involve one of the following: The exercise may be divided into sections or presented as a whole with the student listening selectively and extracting parts therefrom to decode and notate. While both methods have received support, the approach of Gary Karpinski seems to have the most logical base and ultimate usefulness. He criticises the popular method in which dictation is presented in fragments, for example playing the whole exercise, then two-bar fragments three times each then the whole dictation once again. Levin, for example, advocates playing the melody once then fragments of two bars, ending with "link" (the first note of the next two bars). (1988:17) McGaughey instructs the teacher to play one or two bars, then wait for a number of beats to elapse and replay it adding the second pattern, then the third etc. until the whole exercise has been completed. (1966:99) Karpinski feels that if every exercise is broken into small fragments students will never learn to focus on developing attention and memory. He suggests that the only good reason for working with fragments is if selective listening is not a goal or to diagnose students who have a problem with selective listening. (Karpinski, G.S. 1989: 140-142)

Karpinski points out that sometimes remembering an entire passage will not be possible within the limits of STM, so students should develop skills to "focus on and remember portions of a heard event" (i.e. selective listening). (Karpinski, G.S. 1989:130) For example, use may be made of recorded examples to listen, stop, sing back what was heard then replay to check. The student may find it useful to slow down the exercise in his/her mind whilst counting or the teacher may play the example at a slower speed to aid understanding.
Short-term memory is burdened by trying to remember two sets of information, therefore pitch and rhythm should be remembered as a whole. It would appear that rhythm added to a musical phrase enables retention of one additional melodic bit in short term memory. (Marple, H.D. n.d.:78) Furthermore, trying to remember them separately is unmusical. Miller suggested "chunking" as an apt description for the selective grouping of meaningful material. (Miller, G. 1956:81-97)

An example of selective grouping is as follows:

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\[ f^\flat a^\flat \quad b^\flat c^\flat \quad d^\flat e\]
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Broken chord to dominant followed by descending scale to tonic instead of M3, m3, unison etc.

The educator should find the number of pitches a student is capable of remembering then build thereupon. A study undertaken by Pembrook in 1987 established that melodies sung correctly were mostly short (7 notes), tonal and conjunct, providing a good starting point for this aspect of aural development. Pembrook suggests that as triadic structures are easy to perceive and remember educators should encourage the use of inherent memory for triadic structures. (Pembrook, R.G. 1987:166-167) Ottman advises reference to the triad for intervals larger than a second, as well as attention to repetition and sequence. (Ottman, R. 1991:99, 102)

The development of selective listening ability requires a dictation longer than Miller's 5-7 bits and must be played more than once. (Karpinski, G.S. 1990:200-201) He defines long and short melodies as follows: Short pitch patterns consist of 3-5 notes, short melodies 5-9 notes, short sections of longer melodies (10-18 notes) consist of 5-9 notes. (Karpinski, G.S. 1990:219) An examples consisting of 5-9 notes should be played once and 10-18 notes twice or three times. Poor students will be challenged by 10 notes, good ones who find 18 notes easy, whilst those who have a good chunking ability will require longer ones for a challenge. (Karpinski, G.S. 1990:200-201)

A further issue which arises in the area of dictation strategies is that of "cues". To what extent should the student receive information regarding the content of the exercise?

Gary Karpinski feels that dictation develops attentive hearing, short-term memory, focused concentration on certain passages, an understanding of the basics of pulse, meter and tonality as well as traditional ideas of rhythm and pitch discrimination and notation. By making
presentations more realistic students can develop listening skills which may be used beyond the aural classroom. This realism involves not making use of cues such as sounding the starting pitch, scale or tonic before playing, not singing the scale beforehand or counting whilst playing. (Karpinski, G.S. 1989:136-137 and 1990:221-222)

A "basic skill in aural perception is the identification of all pitches in a passage, even (perhaps especially) the starting pitch." (Karpinski, G.S. 1989:130-131) It is important, therefore, to encourage discernment of the tonic from the first day of training. Karpinski makes the point that the tonic is never played before an actual performance, so why should this be the case in the aural class. If the reason is to ensure that students can recognize the tonic, then that is the skill which should be developed. If the starting pitch is given or written on the staff before giving the exercise poor students may guess leaps or work them out using intervals rather than internalizing the relationship between pitches and the tonic. (Karpinski, G.S. 1990:205)

As far as meter is concerned, the most important aspect of rhythm is the perception of pulse (as shown in the new RSM syllabus). Thereafter perception of meter occurs. Duple or triple meter should be determined by listening. By revealing meter we are opting out of developing the ability to discern this feature. Aural manuals often provide an open staff with open bars marked, meter sign and starting pitch, however we should only reveal the facts that are not audible. The beat unit (bottom number) should always be given as well as meters which are hard to distinguish (duple or quadruple and simple triple or compound duple). Cues are sometimes given whilst playing i.e. tapping the pulse with the foot or accenting certain notes. (Karpinski, G.S. 1990:202-204)

Are Karpinski's assumptions correct? If the student receives no "cues", even in the early stages of development, how should a he/she know the sound of the tonic, the signature and name of the key used and the staff location of the first note having never done so before? No clues whilst working within an unfamiliar discipline may prove frightening and lead to the development of metal blocks. The use of some form of cue seems necessary but may decrease as the skill of the student increases. These cues may take various forms. The educator should not the following:

Henry's method (1986) involves the playing of the relevant scale before giving melodic dictation exercises. (Karpinski, G.S. 1989:136-137) Wunsch precedes exercises by establishing the
key on the piano whereafter the tonic triad is sung by the class. The tonic is used as a reference pitch thereafter. (Wunsch, I.G. 1973:55-56) McGaughey gives the first note and key in the early stages of development, but later only the first note. The time signature and number of bars are also given and the tempo is established, (1966:99) while the key, meter and starting pitch are given by Levin. (1988:17) Benward (1987) advocates singing the scale beforehand in order to have it in mind throughout the exercise. He gives the starting pitch as well as the duration and number of bars. Karpinski also objects to the instructor and/or student counting the meter while preparatory measures are heard, tapping the meter during the exercise or drastically accenting the meter beats. Some programmed texts make use of electronic beeps, for example that of Ottman. (1991:47) Kraft makes use of less specific cues, for example "write last bar first". (Kraft, L. 1967:3-4) It is essential that the student avoid working religiously from beginning to end each time. He/she may also rely on the cues reinforced by theoretical knowledge. For example, the first and last pitches are often the same. The student should expect melodic patterns to be based on scales or triads and that the anacrusis should have dominant function. Harmonic and melodic idioms should be anticipated, for example a leap to the fourth scale degree is often followed by the third. (Henry, E. 1986:69)

Once the student has noted cues given by the teacher and selected information to remember how should he/she act upon it to ensure that it remains in memory and for understanding to take place?

Simpson's explanation of the three specific skills involved in the dictation process parallels the ideas of Karpinski. He refers to memory as either immediate recall memory (rote or "parrot" memory) or ideational memory i.e. a pattern is apparent. Understanding is explained as summoning up memories of tonal and rhythmic relationships to analyze the passage - tonal and rhythmic recognition. (Simpson, K. 1961:309) He suggests that more success is likely if in early training immediate recall is minimized or eliminated in order to concentrate on recognizing tonal and rhythmic relationships. Recall can be emphasized later on and strengthened through other areas of the student's training. (Simpson, K. 1961:321) Understanding and notation can therefore be strengthened through working with patterns.

One important expression of rote ("parrot") memory is the singback method often employed in the context of dictation, in other words singing back the melody before writing it down. In the light of Simpson's ideas, should it be implemented or avoided?
A number of theorists support the singback method, for example Houlahan and Tacka, their main reason being the teacher testing the accuracy of the students hearing. (Houlahan, M. 1990:262) Ottman supports singing back, but prefers it to be accomplished mentally. (Ottman, R.W. 1991:90) Kraft favours singing back whilst beating time after hearing the whole melody, writing down as much as possible in 30 seconds, hearing the preliminary note again then writing the melody down while it is played again. In later lessons the example is played three times. (Kraft, L. 1967:3-4) Trubitt requires listening without writing, then trying to sing whilst tapping the pulses, determining the meter and trying to visualize the rhythm, followed by singing again, finding the tonic and other reference pitches. (Trubitt, A.R. 1979:24)

G.R. Weale notes that although the singback method is recommended by the majority of writers experimental literature shows no studies substantiating this practice. After a study which measured the effectiveness of using a sing-back method for teaching and learning harmonic and melodic dictation (using college level freshmen), however, he concluded that it can be effective and at least competes with traditional forms of instruction for dictation. (Weale, G.R. 1986).

By contrast a study undertaken by Ralph Pembrook established that after two melodic presentations both writing while listening and listening before writing provided a more accurate response than singing before writing. (Pembrook, R.G. 1986:253) His 1987 study further explored aspects of singing. It aimed to establish whether difficulty in recall was as a result of singing or not singing (after only one hearing). (Pembrook, R.G. 1987:161, 167) He recommends singing as a memory aid only where the original melody can be remembered because singing interferes with the student's ability to remember the original stimuli. (Pembrook, R.G. 1987:167) Karpinski points out that notating after singing back is a good idea but questions how that musical memory may be translated into notation? (Karpinski, G.S. 1989:136) He does point out, however, that singing is important for diagnosis of problems.

Further to Pembrook's 1986 study, writing whilst listening also receives criticism. Karpinski, for example, objects to students writing whilst listening on philosophical and empirical grounds: He questions whether the goal of dictation training is to get the right answer or obtain broad training in the 4 phases - hearing, memory, understanding and notation. Writing whilst listening develops shorthand takers but unskilled in "focused attention, selective memory and increased memory capacity". (Karpinski, G.S. 1990:199)
Hints offered for listening then writing include observing aurally and making a rough sketch before attempting the completed version (Thackray, R.M. c1978:201-205) and using the tonic as a reference pitch. (Henry, E. 1986:69) Ottman advises the student to beat time in order to determine the rhythm, memorize the melody before writing it down, then write the rhythms first. (Ottman, R.W. 1991:99) Wunsch emphasizes the importance of melodic contour and suggests that the student should trace it prior to writing down the actual dictation, rather than aiming to first recognize the pitches and their intervallic relationship. (Wunsch, I. 1973:55-56)

For example

\[
\begin{align*}
&\text{No fire, no coal can burn as bright.}
\end{align*}
\]

(Wunsch, I. 1973:56)

A similar view is expressed by Thackray (1978:201)

A final method, that of Gould, involves the student duplicating the passage played. (It may be played many times if necessary.) After writing, the student plays what he has written to check for notational discrepancies. This demanding approach separates the problem of pitch matching from notation, but the student can work at each. The student may approach the problem in a concrete way i.e. using the keyboard, but then it requires retention in his imagination and notation from that source alone. It therefore becomes apparent that the student is teaching himself! (Gould, M.J. c1979:5)

Regardless of the point of view regarding a sung vocal response it is important to note that students should make use of a verbal response (Alldahl. P.G. 1974:122) which is a useful method for the isolation and correction of perception problems and may be applicable throughout the complete spectrum of aural development.

The educator must choose between the previously outlined approaches (singing back, writing whilst listening or listening then writing, with or without checking on the piano). Theoretically speaking, various points of view are offered, so the educator is advised to remember that students are individuals, some of whom may suit one approach rather than another. I find listening then writing the most suitable approach. Even though the student may only manage to notate outstanding features whilst listening the first time, whereafter the exercise should be completed using selective listening and may be checked on the piano.
Should the student deal with pitches or rhythms first? Theorists are divided on the issue of pitch vs rhythm but recommend the use of shorthand before complete notation.

Levin advises the student to write the pitches whilst listening, then add note heads, stems and barlines but no note values. On the second hearing he/she should conduct and think about barlines, correct the pitch and add note values. (Levin, R.E. 1988:17) Thackray, on the other hand, feels that as little time as necessary should be spent on separate pitch and rhythm. The student may use shorthand for pitch or rhythm or may imagine playing it on the piano. (Thackray, R.M. c1978:201-205)

Warburton supports working with pitch before rhythm using solfa. Tiny note heads should be used at first followed by barlines, note lengths and finally the time signature. If the rhythm is recognized before the pitch then the student may write it above the staff in shorthand. (Warburton, A.O. 1971:49)

Karpinski introduces the method I find most suitable. He feels that "taking pitch dictation without first sketching down rhythms is like trying to hang up flesh without a skeleton - the result is amorphous and can not stand on its own." (Karpinski, G.S. 1989:141) He stresses the importance of first establishing a rhythmic framework then placing pitches in that framework from beginning to end or vice versa or according to fragments as they are mastered. Without a rhythmic framework the student has to work out the pitches sequentially from the beginning. A sketch should be made using shorthand, for example rhythmic and solmization syllables or horizontal lines representing relative durations of the rhythm and numbers for the scale degrees. (Karpinski, G.S. 1989:141-142) This is necessary because "a student hears the functions of the pitches in a melody without regard to their appearance in a particular key" and hears rhythms without regard to meter. (Karpinski, G.S. 1990:201-202)

The student should therefore work out the rhythm before the pitch. The use of graphic notation such as Somervell shorthand is at the discretion of the teacher according to the student's needs but merely provides another set of characters to be mastered.

Correct notation, which is usually taught in the theory class, completes the dictation process of hearing, memory and understanding, all of which must be integrated in order to be able to form an immediate mental image of the notation, the "ultimate goal of aural-skills training". Other drills may be used when this stage has been reached, ranging from the identification of
pitches and/or rhythms [included in the UNISA and old RSM 6-8 requirements] to performing while the music is sounding. [See section 8 - PLAYING FROM MEMORY] Such skills are dependant on the speed at which students can accomplish memory, understanding and notation. (Karpinski, G.S. 1990:207)

Randall Pembrook investigated variations in dictation scores after using different transcription procedures in order to establish whether or not dictation errors are due to perception problems or notational errors. (Pembrook, R.G. 1986:240) He cites the theory of Otto Ortmann, namely that most mistakes in dictation were caused by improper interpretation or manipulation of the notational symbols. Only 13% were caused by improper perception. (Ortmann, O. 1934:n.p.) For example, a descending broken chord

\[
\text{may be notated as } \begin{array}{c}
\text{} \\
\end{array} \begin{array}{c}
\text{rather than } \begin{array}{c}
\text{} \\
\end{array}
\end{array}
\]
due to the student remembering the intervallic relationship of thirds contained therein. Another common error is omission of note stems, beams or dots resulting in incorrect note values, for example \( \) instead of \( \), \( \) instead of \( \), or \( \) instead of \( \).

Interference caused by previously heard melodies or other parts of the given melody may also result in incorrect notation. (Pembrook, R.G. 1986:239) Pembrook observed that the correct rhythm seemed to be preserved, regardless of whether or not the pitches and intervals were correct. (Pembrook, R.G. 1986:253)

**Problem areas:**

Karpinski offers specific solutions to problems which may arise during the dictation process. He points out that difficulty in remembering a passage is remedied through drills rather than many complete dictation exercises. (Karpinski, G. 1980:212) Teachers should not, however, resort to endless interval drills.

**Pitch aids:**

Karpinski suggests the following general method:

Firstly, the student should infer the tonic. It may help to sing either up or down to the tonic but he finds that singing downwards works better.

Secondly, he/she should find the first pitch. The interval identification approach may be used but this requires stepping outside the tonal system, so the author recommends connecting the two by step or triad using diatonic pitches. (Karpinski, G.S. 1990:215)
Thirdly, solfège syllables should be applied to melodic pitches, this being particularly useful in
the diagnosis of problems to reinforce the link between sound and syllable. Students who
cannot do so must first be tested on recognition of melodic contour by singing whilst following
the contour in the air with a hand or drawing it on paper. Very few students cannot distinguish
contour. Now the teacher must make sure that the student can distinguish between steps and
leaps. The author recommends tracing the shapes with the hand, small motions to indicate
small intervals and large motions to indicate large intervals. The student should practise the
above using short melodies (5-9 notes) in various keys and clefs. (Karpinski, G.S. 1990:216,
219) The process of dissecting and analysing an unfamiliar pattern is one of the most
important aural skills to be acquired. (Karpinski, G.S. 1990:217)

If the student is able to recall the first note but not enough of the others he/she should learn
to sing the first few notes immediately after hearing, or the last few, even while the rest of the
exercise is sounding to develop extractive (selective) listening skills. A related skill is to put
earlier phrases out of the mind whilst working on later ones. This skill may be tested by asking
students to sing successive portions of a melody [primacy/recency/centre as referred to by D.B.
Williams (1975:62)] upon repeated hearings. (Karpinski, G.S. 1990:211) Students will thereby
develop skills to cope with larger melodies. When singing back a few students may unwittingly
sing the incorrect version of what is heard. Supervised memory drills may remedy this
problem. (Karpinski, G.S. 1990:211-212)

Interference may occur during the process from memory to understanding, as musical activities
in the understanding stage erode the initial memory of a passage, despite the ability to echo
after hearing. Alternately musical sounds from another room may intrude on concentration.
The best way to keep the passage in memory is to focus listening and repeat the entire
passage before attempting each new task of understanding. (Karpinksi, G.S. 1990:212-213)

Rhythmic aids:
If problems in the perception of pulse are experienced the student may clap or tap the meter,
rather than conducting or counting because these activities are meter orientated. (Karpinski,
G.S. 1990:213-214) Karpinski recommends testing the metric sense by counting aloud,
conducting, clapping or tapping with varying degrees of loudness. Conducting may be applied
whilst listening (concurrently) or retrospectively (whilst remembering). In the latter case the
student should sing whilst conducting to see and hear if the pulse and meter are correct. If
the student can isolate the pulse but not the meter he/she should choose a slower pulse.
He/she needs to be able to switch back and forth between pulse and meter, using one hand for each. This technique may be abandoned once the feeling of meter is internalized. (Karpinski, G.S. 1990:214) The student may also indicate the rhythmic proportions of short melodies (5-9 notes) using proportional notation. (Karpinski, G.S. 1990:219)

**Notation aids:**
Two type of problem may occur: The student may suffer from a lack of understanding of symbols or slowness in translating understanding into notation. The former must be corrected by theoretical concept training while the latter requires drilling through providing pitch and rhythm information to translate into notation, for example graphic representations to be translated into proper notation within a limited time. (Karpinski, G.S. 1990:217)

Karpinski offers a succinct summary of the essence of dictation methodology which he entitles "Proposals for more effective aural-skills pedagogy". Compose melodies for dictation considering the restrictions of short-term memory, chunking, the number of playings and time between and after playings. Use techniques that achieve pedological goals in particular dictations. Break the process into stages to diagnose the reason for errors (memory, understanding or notation). Perform diagnosis on students not performing well. Start with basics but know what they are. Only remedy areas that need remedying, for example orientation towards the tonic, pulse and meter rather than intervals and quarter notes. (Karpinski, G.S. 1990:220-221)

**Structuring development:**
The Development Programme should begin with three parallel tracks. Firstly the student should work with notation in which certain notes have been omitted rather than starting from a blank sheet. (Alldahl. P.G. 1974:121) Similar views are expressed by Julie Mackintosh Johnson. (1980:28) Blake (1963:25) provides four-bar stepwise exercises with missing pitches for elementary dictation training.

Secondly, the tonic should be established as a reference pitch. Ottman suggests a four-step method in which the student should listen to the melody, sing the tonic triad then sing the tonic throughout the exercise whilst it is replayed. The student is provided with a one-line staff with the correct rhythm and must circle each tonic once it is heard. (Ottman, R.W. 1991:91-92) The same may be applied to other notes of the scale.
Thirdly, the student should receive training in pattern memory before beginning with formal dictation, because student memory is an essential skill for dictation. (Houlahan, M. 1990:262) This may include prepared dictation which the student may study beforehand to take note of patterns etc. Particular features of the drill, such as a sequence, scale or triad may then be included in a full-length dictation.

**Development programme**

1. Fill in the missing pitches in the given exercise.
   1.2 Circle the required reference pitch.
   1.3 Pattern notation.
2. Four bars using 2nds over the compass of a 5th in major keys only.
3. Compass of an 8ve.
4. Leaps between notes of the tonic chord, then IV and V.
5. Include the leap of a 3rd.
6. Include larger intervals.
7. Include sequence and repetition.
8. Include the minor key in steps 2 - 7 in harmonic and melodic form.
9. Include chromatic notes.
10. Include modulations to IV, V and the relative key. Although this skill is not required up to and including Grade 8 aural it is necessary for melody writing in theoretical examinations such as RSM Grade 5, UNISA Grade 6 and for UNISA Licentiate aural.

**Useful exercises**

1. Dictate familiar examples like folk songs, television themes or hymns. Such examples seem relevant to the student, eliminate memory problems and give him/her something to puzzle out away from the music classroom. (Simpson, K. 1961:321) With so much recorded music so freely available dictation may be rehearsed at home or at the library utilizing music of repute, which is far more interesting than that of Boards of Examiners. If possible a score may be consulted to check for the correct answer. (Pratt, G. 1990:3)
2. Multiple choice - the student must select the example played from a group of four melodies given. (Thackray, R.M. c1978:198-201)
3. Give the student a paper with melodies on the left and rhythms on the right. The teacher plays a melody with a rhythm and the student must match them.
4. Determine which of a group of pitches is the tonal centre (tonic). Notation of the first note is given after which the student must write the tonic. (Benward, B. 1974:n.p.) More than four pitches may be used.

Suggested homework

With drill partner - all.
Alone - Ex. 1.

8. PLAYING A MELODY FROM MEMORY

Performance objectives
Playing a melody from an aural rather than a written source.

Prior knowledge necessary

Theoretical - pitch names, major scale and key signatures, intervals, time signatures 2/4 and 4/4 and note values $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ and their corresponding rests. Harmonic minor scale and minor key signatures for step 5.
Aural - pitch matching, the use of reference pitches or "cues", direction of movement and major tonality, intervals, detection of pulse 2/4 and 4/4 and rhythmic patterns incorporating $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ and their corresponding rests.

Pedagogical basis
This area develops the students ability to reproduce a melodic pattern from an aural stimulus on his/her instrument or the keyboard (i.e. symbol to sound) and therefore may be linked to melodic echoes and dictation which require a vocal and notational response respectively. Gauldin refers to direct dictation - an extract is played by one person and repeated by another. (Gauldin, R. 1974:78) This is a valuable alternative because hearing, memory and understanding are related to performance, but according to Karpinski three caveats apply: Firstly, human memory replaces pencil and paper, so if a phrase is too long for short-term memory successive portions must be committed to longer-term memory. Secondly, asking vocalists to sing does not require understanding, because pitches and rhythms need not be understood in order to mimic a phrase vocally. They may be asked to sing on syllables or letter names. Thirdly, instrumentalists must use hearing, memory and understanding of pitches, but not rhythm, so rhythmic syllables should be used. It is important to remember
these three warnings so that skills in extractive listening, understanding and notation do not remain underdeveloped (Karpinski, G.S. 1990:207-208)

Pitch consolidation should involve sound and symbol, for example singing/playing a phrase then giving letter names. Sight singing should precede singing from memory. (Lowe, S. 1963:344)

Winold offers the following six-fold programme:
1. Play each pattern then sing immediately, using names or neutral syllables
2. Sound the first pitch, sing each then play each to check.
3. Sound, then sing in random order and play to check.
4. The teacher or drill partner sings on a neutral syllable while the student sings on pitch names.
5. The teacher or drill partner plays a pattern on the piano whereafter the student must play it back.
6. The teacher or drill partner plays on an instrument then the student writes it down. (Winold, A. 1971:143)

Development programme
Bearing in mind the close link between this section and dictation it is therefore logical to follow the development programme of dictation but playing the exercises after each has been written. Later the written stage should be omitted with the notation being visualised prior to performance. Accompanied melodies should be introduced when possible as this is required for RSM Practical Musicianship Grade 7.

Useful exercises
1. Reproduce folk tunes, themes from literature or TV etc.

Suggested homework
With drill partner or alone - Ex. 1.
9. TRANSPOSITION OF A MELODIC PATTERN AT SIGHT

(This is offered as an alternative to sight singing in the RSM Practical Musicianship syllabus, but is of value to all who may play transposing instruments or accompany singers.)

Performance objectives
Transpose a melodic pattern at sight higher or lower up to and including the interval of a major 3rd.

Prior knowledge necessary
**Theoretical** - pitch names, major scale and key signatures, intervals, time signatures 2/4 and 4/4 and note values $\mathcal{C} \mathcal{C} \mathcal{C} \mathcal{C}$ and their corresponding rests. Harmonic minor scale and minor key signatures for step 5.

**Aural** - pitch matching, the use of reference pitches or "cues", direction of movement and major tonality, intervals, detection of pulse 2/4 and 4/4 and rhythmic patterns incorporating $\mathcal{C} \mathcal{C} \mathcal{C} \mathcal{C}$ and their corresponding rests.

Pedagogical basis
The student should work as follows: The tonality should be established whereafter the extract should be analysed to find triads, sequences etc. in relation to the tonic. Thereafter the new key should be visualised, the tonic triad of the new key played and the exercise performed.

An electronic keyboard is a useful asset. Many electronic keyboards have a transpose feature which, in conjunction with the memory feature, may be used to perform and check examples. This will also serve to develop the critical ability of the student when comparing the exercise with the written score in the original key.

Development programme
The programme for sight singing may be used in conjunction with the following progression of intervals: 1. minor 2nd higher then lower.
2. major 2nd higher then lower.
3. minor 3rd higher then lower.
4. major 3rd higher then lower.
5. perfect 4th higher then lower.
6. perfect 5th higher then lower.
Steps and 5. and 6. are not required for RSM Practical Musicianship but may prove useful, for example players of the French Horn in F whose parts are written a perfect 5th above concert pitch.

**Useful exercises**

1. Exercises from the other sections e.g. dictation or sight singing exercises may be transposed as well as parts of repertoire being studied, sight reading exercises or other melodies from the literature.

**Suggested homework**

- **With drill partner** - all. While the student transposes at sight his/her drill partner may write the transposition then check his/her partner or check by watching, listening etc. Theoretical skills are therefore also rehearsed.

- **Alone** - all.

The aural student therefore learns to relate sound and symbol in the area of Pitch in a similar way to that of Rhythm.
Harmonic skills to be developed
Reproduction of the upper then lower part of a two-part phrase vocally and instrumentally (i.e. echo).
Reproduction of the upper then middle and lowest part of a three-part phrase vocally and instrumentally (i.e. echo).
Vocal and notational reproduction and identification of harmonic intervals. [covered under pitch]
Vocal and notational reproduction and identification of triads in closed then extended position.
Identification of four-part chords.
Identification of cadences and other chord progressions.
Identification of modulations.
Performance of harmonic elements on the keyboard, i.e. chords, cadences and progressions.

1. SING/PLAY THE UPPER THEN LOWER PART IN A TWO-PART TEXTURE
   (i.e. melodic echo)

Performance objectives
1. Distinguish and reproduce the higher/lower of two melodies vocally or instrumentally.
2. Sing/play one while the other is played. 3. Apply these skills to the middle and lower part of a three-part exercise [NB: Exercises in a three-part texture must only be sung at sight.] 4. Work using the alto clef (viola players) and tenor clef (cello players). [RSM Practical Musicianship Grade 8 requires use of the alto clef.]

Prior knowledge necessary
Theoretical - pitch names, major scale and key signatures, intervals, time signatures 2/4 and 4/4 and note values \( \cdot \), \( \cdot \cdot \cdot \) and their corresponding rests. Harmonic minor and key signatures for step 5.
Aural - pitch matching, the use of reference pitches or "cues", direction of movement and major and minor tonality, intervals, detection of pulse and rhythmic patterns incorporating \( \cdot \), \( \cdot \cdot \cdot \) and their corresponding rests.
Pedagogical basis

The reproduction of a melodic line which is presented together with one or more other parts is an extension of melodic echoes, sight singing and performance of a single melodic line from memory. It is important to hear each part as a separate melody, therefore problems arise when rhythms or pitches from one part interfere those in the other part(s). In order to overcome this problem the student will require training in dealing with a variety of examples - one part with more rhythmic activity than the others, both/all parts close together, both/all parts far apart and parts not beginning simultaneously.

Sophie Lowe suggests an excellent self-instruction method for the improvement of singing the lower part, which may be adapted for use with the upper part too, or in a three-part context. This method stresses the individuality of each part. The student should sing the lower part at sight then play the exercise with both hands but with the LH prominent. With closed eyes he/she should sing this part from memory whilst feeling the LH notes, then play them from memory. This makes the student familiar with singing the lower part before he/she is tested by the teacher. For difficult tests the teacher may require performance of one bar at a time before attempting the whole test. The student may play instead of singing. (Lowe, S. 1963:304, 344) A non-pianist may need to work with a piano-specialist drill partner if his/her skills are not sufficiently developed.

Development programme

Annie Warburton suggests the following progression of exercises for two-part work, which may also be applied to three-part work:

1. 3-6 intervals in major then minor keys.
2. 2-3 bar phrases in major then minor keys.
3. 4-bar phrases (2 in treble and 1 in treble 1 in bass).
4. 5-6 bars in two parts (Warburton, A.O. 1971:82-99).
5. 6. and 7. Repeat 2. 3. and 4. in three parts.

Useful exercises

Ensemble: Students may perform the exercises and swop parts.

Suggested homework

With drill partner - All steps. Ex.1.
Alone - All steps.
Performance objectives
Sing, identify and write major, minor, augmented and diminished triads in root position, first and second inversion on one then two staves, first out of then within a tonal context.

Prior knowledge necessary
Theoretical - Pitch names, intervals, four types of triad.
Aural - pitch matching, the use of reference pitches or "cues", direction of movement and major and minor tonality, intervals, singing the lower part.

What is a triad?
It is important to understand the triad which is the basis of most music. It features in art music from 1600 to the twentieth century as well as in most show music, dance music, rock music and popular ballads etc., but excluding certain twentieth century "Classical" genres such as Musique Concrete and music from the Renaissance.

Each chord [or triad] is an aural experience that must be learnt so that its sonority can be recognized when it is heard. Students of certain instruments have an advantage in certain areas. Pianists are better able to identify chords than flautists, while bass players, for example trombone players, are better able to identify inversions. (Trubitt, A.R. 1979:192) The three pitches of a triad are labelled as follows:

Furthermore, triads may occur in close or open position e.g.

Pedagogical basis
The student will be required to identify both the quality and inversion of the triad. As the lowest pitch determines the inversion of the triad the student must focus on this pitch which may be "located" by singing down from the highest pitch. If the lowest pitch completes the triad the root is at the bottom i.e. the triad is in root position. If a further pitch must be added to form root position the third is at the bottom i.e. the triad is in first inversion. If two pitches must be added the fifth is at the bottom i.e. the triad is in second inversion.

The example opposite is therefore in first inversion.
An alternate method of triad recognition is to distinguish between root position and inversions by analysing each interval specifically and thus deriving the figuring as follows:

```
\begin{tikzpicture}
\node at (0,0) {
\begin{tabular}{c}
\textbf{\large Major - } M3 and P5 \\
\textbf{\large Minor - } m3 and P5 \\
\textbf{\large Augmented - } M3 and A5 \\
\textbf{\large Diminished - } m3 and D5 \\
\end{tabular}
};
\end{tikzpicture}
```

Alternately root position and inversion may be figured a, b and c but this method has no connection with the intervals and therefore the nature of the triad so should not receive any prominence.

The method of triad identification through interval recognition isolates the intervals from their context within the triad and should therefore not be used exclusively. Interval construction may be necessary, however, when the student is required to sing a triad above a given note. Major and minor triads may be related to arpeggios and diminished triads to diminished sevenths but augmented triads must be worked out according to interval.

The student should internalise the intervals within a triad as follows:

```
\begin{tikzpicture}
\node at (0,0) {
\begin{tabular}{c}
\textbf{\large Major - } M3 and P5 \\
\textbf{\large Minor - } m3 and P5 \\
\textbf{\large Augmented - } M3 and A5 \\
\textbf{\large Diminished - } m3 and D5 \\
\end{tabular}
};
\end{tikzpicture}
```

Educators should note the results of a study conducted by Hofstetter with regard to triads (major, minor, augmented and diminished in open and close position) using the GUIDO system. Generally major is confused only with major inversions and minor with minor inversions, but augmented and diminished triads are confused with each other. (Hofstetter, F.T. 1980:83-91) Contrary to popular belief, the major is not the easiest chord (or triad) to perceive BUT data showed that in both open and close root position the minor, then augmented chord (or triad) then major second inversion were easiest to perceive. Root position major ranked fourth in open position and sixth in closed position. (Hofstetter, F.T. 1981:50-51)
The figuring of triads should also be included as this is a necessity for the theory syllabus, particularly when triads become chords. The student may, for example, also state the figuring when identifying the triads i.e.

![Triad Figure Example]

The triad to be identified may be spread over two staves as required by UNISA Grade 6, which may necessitate vocal transposition at the octave when singing some of the pitches. Much work within context is not necessary because once the student can identify, sing and write triads in root position and inversions it is necessary to begin four-part work, most of which will take place within context i.e. chord progressions.

The student should, however, be aware of the nature (quality) of triads within the scale as this relates to the theoretical syllabus.

**Major key:**

![Major Key Example]

**Minor key:**

![Minor Key Example]

**Development programme**

Each step should include melodic then harmonic triads in the treble clef using semibreves in order to eliminate the problem of rhythm.

1.1 The teacher plays an arpeggiated major triad in close position and the student sings the root, 3rd and 5th ascending then descending then one of the three on request.

1.2 The teacher gives the root and the student must write the triad then sing it from the written example.

Repeat 1.1 - 1.2 for each of the following steps:

2. Triads I IV V in context in a major key.

3. Include minor triads. To distinguish between major and minor the student should sing down all three then take bottom as tonic and sing up the first five notes to discern whether the scale is "happy" or "sad." (Warburton, A.O. 1971:103)
4. Triads I IV V in context in a minor key. [Note that V is a major triad.]
5. Progressions using I IV V and VI in a major key.
6. Progressions using I IV V and VI in a minor key.
7. V7
8. Include first inversion.
9. Include second inversion.
10. Include extended position.
11. Move one of the three pitches to the bass stave.
12. Include augmented triads. (individual triads in root position only)
13. Include diminished triads. (individual triads in root position only)

Useful exercises
1. Ensemble: Three students sing the three pitches of the triad, then alter their pitches as required, for example alter major root to minor root then major first inversion.
2. Three students sight sing a three-part exercise. The other students must identify each chord in turn without referring to the notation, for example:

```
I   II   V7

I   IV   V
```

The exercise may be repeated with the chords identified from the notation.
Part singing provides a good means for improving intonation, for example a major and minor 3rd.
3. Each student receives a set of flashcards of triads and inversions. The teacher plays a triad or chord in root position or inversion, whereafter the student must hold up the correct flashcard. As a further step the teacher may play a series of chords and student must put the flashcards in order. (McIntosh Johnson, J. 1980:28)

Suggested homework

With drill partner - All steps
Alone - Sing, play, write and identify triads introduced in steps 1-13.
3. INDIVIDUAL CHORDS, CHORD PROGRESSIONS AND CADENCES

Performance objectives
Identification of individual chords as major or minor, in root position, first or second inversion. Identify perfect, plagal, imperfect and interrupted cadences. Identify chord progressions using I, II, IV, V, VI and their inversion i.e. I6, I6, II6, IV6, IV6, V6, V6, VI6 as well as VII6 [VII is never used in root position because it is diminished].

Prior knowledge necessary
Theoretical - Pitch names, intervals, 4 types of triad.
Aural - pitch matching, the use of reference pitches or "cues", direction of movement and major and minor tonality, intervals, singing of triads, rhythmic patterns incorporating \( \text{\textbullet} \) \( \text{\textbullet} \) \( \text{\textbullet} \) and their corresponding rests.

What is a chord?
The basic difference between a chord and a triad is that the former consists of four notes, while the latter consists of three. This means that one of the notes must be repeated, or doubled as this procedure is known in theoretical terms, to form a chord. The precise rules of doubling and their various exceptions are not necessary within the context of this dissertation, except that the student should realise that the root or fifth is usually doubled, in a second inversion the fifth is always doubled and the third is usually doubled in VI in the progression V VI as well as in VII6.

Pedagogical basis
Chord understanding involves focus on the lowest pitch (in this case the bass note), which the student must sing within his/her vocal range, a skill mastered in "Pitch matching", but which may prove easier for players of low instrument (e.g. trombone) and men. When progressions are introduced longer bass "melodies" must be sung. Thackray suggests that the student try to follow the bass line in a score to focus attention on it. It is easiest to start with hymn tunes. (Thackray, R.M. c1978:166)
Eric Taylor recommends the use of melodic cues if the student has difficulty identifying the bass movement. (Taylor, E. n.d.:19) For example:

![Perfect Plagal](image)

Focus on the bass is preferable, however, as this pitch indicates the inversion used.

The development programme should move from individual chords to progressions, using a vocal, notational and instrumental response and make use of the minor key once the major is secure. In order to make the study of chords relevant the essential link between exercises and actual examples should be reinforced. *Music for study: A source book of excerpts* (Murphy, H. 1973), for example, is "designed to parallel the harmonic vocabulary of college theory courses" using exercises ranging from four bars to whole compositions to specifically illustrate one or more points of musical composition. Many composers, styles periods and media, harmonic, melodic, rhythmic and formal elements are represented. The harmonic vocabulary moves from the tonic chord and non-chord tones to modulation to closely related keys, the Neapolitan chord, augmented 6th chords, the whole-tone scale, quartal harmony, polychords and polytonality and the twelve-tone technique. Sixteen Bach chorales are included. This text should prove useful for sight singing, sight reading, transposition, score reading and ear training (Murphy, H.A. 1973:xvi) and will provide material for use beyond immediate requirements, for example in UNISA Grade y theory.

An important practical application of concepts is keyboard harmony. It aids the development of skills in improvisation, accompaniment to church singing etc. It is important to sight read examples and study harmonizations, (van Zuilenburg, P.L. n.d.:13) for example Bach-Riemenschneider *371 harmonized chorales and 69 chorale melodies* (1941) which illustrates Baroque-style harmony. The chorales may be used for analytical purposes or dictation of cadences and the figured bass used for keyboard harmony. Additional information is provided in the alphabetical index of the 371 chorales, which is followed by notes on the chorales containing information such as its text and scoring in the cantata of origin. Figured bass examples such as the 69 chorale melodies are useful in training realisation of figured bass.
Van Zuilenburg stresses the importance of playing slowly at first, but without pauses. He supports the view that students often find it easier to play in close than extended position i.e. one note in the bass (played by the left hand) and three in the treble (played by the right hand) than two per clef (and per hand). Van Zuilenburg concludes that excellent textbooks like *Harmony at the keyboard* (Hunt, R. 1970) and *Harmony and ear training at the keyboard* (Shumway, S. 1987) mix the two systems with confusing results. The student should first be secure in one before embarking on the other. Van Zuilenburg also recommends *Honderd Harmonieopgaven* (Schouten, H. n.d.), *Harmonization at the keyboard* (Proctor, C. 1961) and *100 Tunes for sight singing* (Lang, n.d.) (van Zuilenburg, P.L. n.d.:13-14).

**Development programme**

1. Individual chords (major and minor). Augmented and diminished chords may be included, but these are not necessary up to and including Grade 8 aural.
   1.1 The teacher plays a chord, which the student must identify as major or minor, then sing the bass note and soprano note and identify each as either the root, 3rd or 5th of the triad.
   1.2 The teacher plays a chord then repeats one of the pitches, which the student must identify as the root, 3rd or 5th. The student thereby learns to locate these pitches when not in close position and including doubling.

2. Repeated chords. 2.1 The teacher plays a chord. The student sing the bass note and sustains it while the teacher re-arranges the position of the pitches above it or moves the bass an 8ve lower, for example

The student therefore learns to disregard changes in other parts when focusing on the bass part.

2.2 An adaptation of an exercise by Shumway. The student plays major and minor chords in various arrangements above the root. Use two roots, a 3rd and a 5th with correct spacing, in closed then open structure in four parts. He/she should analyze while playing, then sing the chord after playing the bass note to see if it is major or minor. (Shumway, S. 1980:11-13)
2.3 The teacher plays groups of two then three chords and the student must identify whether the bass note changes.

3. The student must distinguish between the tonic and dominant chords.
3.1 The teacher plays $1 \ 5 \ 1$ of a scale within the student's vocal range. The student sings the pitches and those between them to enable him/her to work with the intervals of either a 4th down or 5th up between the tonic and dominant, i.e.

This tonic and dominant orientation is the basis of harmonic study. The tune *Clementine* may be used as a practical example. For example, the student should chant using the tonic or dominant notes, the given rhythmic pattern and hand signals to indicate harmonic changes. (Hewson, A.T. 1966:298)

3.2 Perfect cadence (V-I) and imperfect cadence (I-V). The teacher plays the tonic chord (I) then V I. This is a complete ending i.e. perfect cadence. Thereafter the teacher plays I I V i.e. the incomplete ending which signifies an imperfect cadence. The student should echo the bass notes and sing the interval between them before identifying the chord.

3.3 The teacher plays a melodic phrase followed by two chords forming a cadence which the student must identify.

3.4 The teacher plays a harmonized phrase ending in one of the two cadences.

3.5 Keyboard harmony using chords I and V. This may include improvisation of a melodic phrase ending in a cadence which the student must play.
3.6 Vocal harmony. The student must learn to produce harmonies with his own voice ASAP. Each chord should be sung melodically in close position but with time between chords to organise the pitches melodically. After the student can sing the chord being studied in various progressions he/she should sing dictated material (either a whole chord or bass note).

The class may be divided into three or four groups with one to sing the bass and others to sing the other notes when signalled. The student should imagine the sound of a chord or the sound of a passage after it has been announced. The teacher may then play it with variations which the students must identify. If student numbers are limited, vocal harmonisation may be limited to the soprano and the bass part. (Chittum, D. 1969:66)

4. Repeat 3.1-3.6 but include the Plagal cadence.
5. Repeat 3.1-3.6 but include the Interrupted cadence.

6. Chord progressions. (After 6.2 has been completed the teacher may introduce various chord progressions depending on the requirements of the syllabus he/she is using.)

6.1 The student must identify the recurrence of I, i.e. establish a reference chord.

6.2.1 Root position chords - I IV V I | I IV V VI | I VI IV V I which mainly involves the use of roots a 2nd apart. Phrases using I, IV, V (outer parts given in both cases). Accompaniment patterns may be improvised for Lavender's Blue, Good Night Ladies, On Top of Old Smokey, Comin' Round the Mountain, Swing Low Sweet Chariot, Yankee Doodle, Pop Goes the Weasel, O Susanna, Blue Tail Fly, When the Saints Go Marchin' In and This Land is My Land. (Shumway, S. 1980:29-33)

6.2.2 Roots a Third Apart. Play typical settings i.e. I VI IV (or II) V I first with 2 parts given then melody. Complete accompaniment patterns for Swing Low Sweet Chariot and Auld Lang Syne. (Shumway, S. 1980:55-59)

6.3 Include 1st inversions - I6, IV6, V6

6.4 Include 2nd inversions - I IV6 I | V6 I - accompaniment patterns for Happy Birthday, Drink to Me Only with Thine Eyes, O Worship the King. (Shumway, S. 1980:42-46)
6.5 Include other chords necessary for chord identification i.e. II and II6, V7 and VI6 as well as chords used in UNISA Grade V theory i.e. III and VII6.

Useful exercises

1. Improvise accompaniments to melodies. Analyse each melody and select chords for each bar then improvise an accompaniment whilst singing. The class may be divided with half singing the root of each chord and the other half singing the exercise.

   (Fish, A. 1964:93-96). The chords patterns may be improvised in different styles. Melodies are suggested in 3.1, 6.2 and 6.4.

2. George Pratt suggests singing the pitches of a chord (one student per pitch), which should be held for about 15 seconds while the students concentrate on the nature of the chord (for example which note is doubled). A student conductor should control the dynamic levels of the different pitches or even request some to drop out. The class should listen to the resulting effects. (Pratt, G. 1990:50-51) This exercise would be beneficial when discussing rules of doubling in harmonic progressions.

Suggested homework

   With drill partner - All steps. Ex. 1.
   Alone - Ex.1 and written exercises as well as keyboard harmony using all chords and progressions studied.

4. HARMONIC DICTATION

Performance objectives

Notation of the soprano and bass part of individual chords as major or minor, in root position, first or second inversion, perfect, plagal, imperfect and interrupted cadences as well as chord progressions using I, IV, V, VI. Identification of the 3rd, 5th and the root may also be required.

Prior knowledge necessary

Theoretical - Pitch names, intervals, 4 types of triad.

Aural - pitch matching (root), the use of reference pitches or "cues", direction of movement and major and minor tonality, intervals, detection of pulse and rhythmic patterns incorporating o, d, d, d and their corresponding rests.
Pedagogical basis

Although this skill is not required up to and including Grade 8 aural it is valuable to reinforce the link between sound and symbol, synthesis of elements such as rhythm, melody, functional harmony, cadences etc. (Henry, E. 1986:157) and (Shumway, S. 1980:55-59) In the early stages of harmonic dictation development the student should work with a key signature on treble and bass staves without the complication of rhythm.

Ottman suggests the following methods for notating progressions: The key signature should be given to the student and used to identify the tonality as major or minor using upper case letters to indicate the major and lower case to indicate the minor mode. The correct number of barlines should be drawn if rhythm is to be included and the rhythmic framework (if any) notated before commencing chord recognition. In order to gain skills in analytical listening - "selective listening" (Karpinski, G. 1989:130) - the student should listen without writing then determine the tonic by singing mentally and identify the final cadence or cadences at the end of each phrase. If the progression is too long then the tonic chord should first be identified followed by the chords between them. (Ottman, R.W. 1991:157)

Firstly, when notating cadences the student should listen, identify the cadence, write the appropriate Roman numerals below the stave, then identify and notate the bass then soprano notes. Secondly, when notating longer progressions listen to and echo the tonic then identify the final cadence or cadence at the end of each phrase. While the exercise is played again the student should sing the roots as played then sing them using the correct scale degree number or syllable. Finally, Roman numerals indicating the chords used should be written when the exercise is played once again. (Ottman, R.W. 1991:155-158) The same procedure may be used for notating longer progressions.

Useful progressions include I I6 IV V I V I I6 V I IV IV6 V I IV6 V6 I I IV I6 V6 I I V6 I6 IV V I6 IV6 V I I IV6 I6 IV V (Ottman, R.W. 1991:165) but exercises given should be suited to the needs of the student. UNISA Grade 5 theory student, for example, should be familiar with I $\frac{4}{4}$ and IV $\frac{4}{4}$ as used in passing and cadential progressions i.e. I $\frac{4}{4}$ V I I IV I $\frac{4}{4}$ I I6 IV I6 $\frac{4}{4}$ I IV I $\frac{4}{4}$ IV6 IV6 I $\frac{4}{4}$ IV

Ottman's method for dictation is modified when including inversions. Listen without writing to the determine tonic. Identify the cadence(s). Determine the root of each triad and write Roman numerals (If necessary identify the tonic triads then work from one to the next as before).
Write 6 or $\frac{5}{4}$ where necessary. Use Roman numerals and figured bass to determine the bass note then write each on the stave. Listen for melodic direction up/down to check then finally complete the soprano. (Ottman, R.W. 1991:168-169)

Alternately the student may notate the bass and soprano as separate melodies then apply suitable chords. This method, as used by Taylor (Taylor, E. n.d.:34) parallels that used for harmonic exercises therefore is preferable.

**Development programme** (to follow that of chord progressions)

1. Individual chords.
2. Repeated chords.
3. Cadences: 3.1 Perfect and imperfect.
   3.2 Include plagal.
   3.3 Include interrupted.
4. Progressions using I IV V VI
5. Include first inversions I₆, IV₆, V₆
6. Include second inversions I₆⁴, IV₆⁴, V₆⁴
7. Include other chords necessary for chord identification i.e. II and II₆, V⁷ and VI₆ as well as chords used in UNISA Grade V theory i.e. III and VII₆.

**Useful exercises**

1. Listen to famous folk tunes, pop songs etc. and try to write down the implied harmonic progressions and bass line.

**Suggested homework**

*With drill partner* - All steps. Ex. 1.  *Alone* - Ex. 1.
5. MODULATIONS (Changes of key)

Performance objectives
To identify modulations to IV, V, relative major or minor and major to the supertonic minor.

Prior knowledge necessary
Theoretical - Pitch names, intervals, 4 types of triad.
Aural - pitch matching, the use of reference pitches or "cues", direction of movement and major and minor tonality and intervals.

Pedagogical basis
The educator should precede identification of specific modulations with examples wherein the student must establish whether or not a passage modulates through specific focus on the tonic as a reference pitch. The student should, however proceed no further without reference to notation.

Although aural exercises relating to modulation require no specific link between sound and symbol modulation may be best understood with reference to notational examples from the literature. For example, the second movement of Haydn's Surprise Symphony modulates to the dominant. The teacher should play the example exaggerating the raised fourth while the student follows the score. The following two methods should therefore be undertaken with specific reference to scores, particularly in the early stages of development.

Firstly, whilst listening to the exercise the student should sustain the old tonic until the end of the exercise then analyse the interval between the old and new tonic i.e. focus on the bass line. The possible intervals formed by the bass notes of the modulations to the subdominant, dominant and relative key may be committed to aural memory melodically to enable comparison during practical exercises. (Obviously they should not all be introduced simultaneously.) After each has been introduced in turn the following bass patterns may be committed to memory. (The treble or bass clef may be used, depending on the vocal range of the student.)
A second method is to listen for cues during the course of the exercise. This involves a raised pitch for modulation to the dominant (said to cause a lift in the overall sound), a flattened pitch for the sub-dominant (lowering the seventh of the old key), a change from major to minor for the relative key and a raised tonic for the supertonic minor. The student is therefore required to focus on the tonal tendencies of certain pitches which are to be used as reference pitches e.g. leading note to tonic in the new key (indicated by below).

If uniformity of method is to be maintained within harmonic aural development then the first method is preferable because it involves focus on the bass line. The second, however may also be included after the first has been mastered because modulation analysis from a written score depends on noting the new accidental to indicate arrival in the new key.

Development programme

1. Establish whether or not a passage modulates.
2. Modulation to the dominant within a major key.
3. Modulation to the relative minor within a major key.
4. Modulation to the subdominant within a major key.
5. Modulation to the dominant within a minor key.
6. Modulation to the relative major within a minor key.
7. Modulation to the subdominant within a minor key.
8. Modulation to the supertonic minor within a major key.

Useful exercises

1. Listen to and analyse recordings. (Use a score if available.) Repertoire currently being studies may be used thus fulfilling a dual purpose.

Suggested homework

With drill partner - Ex. 1, 2.
Alone - Ex. 1, 2.
D. DEVELOPMENT OF A CRITICAL EAR

Critical skills to be developed
Recognition of compositional devices. This may be extended to recognition of a melody chosen from a group.
Detection of inaccuracies in the performance of these devices as well as pitch and rhythm.
Memorise a musical phrase and reproduce it on a musical instrument (Visualization).
Development of the art of improvisation - rhythmic, melodic and harmonic.
Identification of different instrumental timbres.

1. DEVICES

Performance objectives
Aural recognition of compositional devices: Use of pedal in piano music, slow/fast, simple/compound time, a conclusive or inconclusive ending, \( \text{pif, crescendo or decrescendo} \) i.e. dynamics, \( \text{legato or staccato} \) i.e. articulation, \( \text{rallentando/accelerando} \), major or minor mode, character, rubato (i.e. pulse changes), texture, rhythm including cross rhythms, form, style, sentence (sometimes called period) and phrases, repetition, sequence, augmentation, diminution and inversion.

Prior knowledge necessary
Theoretical - Understanding of the above concepts on a verbal and notational level.
Aural - simple and compound time, cadences, major and minor tonalities.

Pedagogical basis
The list of devices provided above is not intended to be all-inclusive. Teachers may include others according to student needs. Each device should be introduced through the following steps:

1. The teacher and student discuss the device with reference to a written example. Italian terms should be used where appropriate.
2. The student experiences the device aurally and compares it with the written example.
3. Once more than one device has been mastered the student may be asked to choose the correct description from a given list or recognise a melody from a group.
4. The student composes a melody using a given motif and various devices such as sequence and inversion, for example

\[ \text{motif} \quad \text{sequence} \quad \text{inversion} \]

\[ \text{\includegraphics[width=10cm]{motifsequenceinversion.png}} \]

It should be obvious that an accurate rendition by the teacher is particularly important in order for a particular device/devices to be detected. For example, RSM examiners have noted certain common misconceptions amongst students of which the teacher should make the student aware. Examples played louder seem faster whilst softer ones seem slower. (Examiners Comments Jul/Aug. 1993)

Aural recognition of texture, style and character as mentioned in the list above should be expanded considerably according to period and requirements of various syllabi. This should include other devices mentioned above pertaining to the particular period (whether Pre-Baroque, Baroque, Classical, Romantic or Modern.) e.g. rubato in the Romantic period.

UNISA Grade 6 theory students must study the following: Ballade, Baroque Suite (which includes the dances Allemande, Courante, Sarabande and Gigue, Bourée, Gavotte, Minuet), Berceuse, Bolero, Canon, Etude, Fugue, Impromptu, Intermezzo, Invention, Ländler, March, Mazurka, Moment Musical, Nocturne, Novelette, Overture, Polonaise, Scherzo, Siciliano, Strophic Song, Through Composed Song, Toccata and Waltz.

RSM Practical Musicianship students must be equipped to work with rests, dynamics, tempo changes, articulation, phrasing, two-part work and scores composed from 1700-1800 with up to four parts including vocal parts. Questions put on scores will encompass keys, harmonic framework, instrumentation, style and structure, sequences and use of imitation.
Development programme

No fixed order of introduction should be laid down. This will depend on the developmental needs of the student as well as the teachers priorities.

Useful exercises

1. Incorporate various devices into sight singing and dictation exercises to be given. The critical ear has a vital link with dictation because patterns must be detected.

2. Ensemble: One student composes a phrase to be altered, another alters it, for example using a sequence.

3. Recognize sequences in examples which contain three bars and one final note. Two of the three bars should make use of a device, for example sequence. The student must identify which is not.

4. Identify devices in examples from the literature which may include repertoire being studied.

Suggested homework

With drill partner - Ex. 2-4.

2. DETECTION OF INACCURACIES (Alterations)

Performance objectives

Detection of inaccuracies in the performance of pitches rhythms and later harmonic elements. Identification of errors by circling, verbalising a response or pointing.

Prior knowledge necessary (Theoretical and Aural)

Dependent on the section, for example knowledge of note values and time signatures are required for the discernment of rhythmic inaccuracies.

Pedagogical basis

This often-neglected area of aural development, to which McGaughey applies the title "Critical Listening" requires musical notation to be correlated with musical sounds by indicating deviations of sounds heard from the printed notation being followed. (McGaughey, J.M. 1966:2) It is essential that error detection be viewed as a vital part of every sphere of musical
work, rather than a skill to be used during specific parts of the RSM or UNISA aural examination. For example, the student should assume more responsibility for discerning and correcting rhythmic and melodic inaccuracies in his/her repertoire, a task often expected of the teacher on a weekly basis. Furthermore, error detection is also vital for correcting the performances of others, which, at its most basic level may involve assisting a friend with his/her repertoire, duet work or, for those who intend taking their musical studies further, enters the sphere of choir training, conducting or teaching.

Empirical evidence relating to the importance of error detection skills in relation to dictation and sight singing was established by Larson (1977:268), particularly in the case of dictation. Ramsey proved that the use of one instrument for ear training and dictation within the theory programme, does not develop the ability to discriminate individual instrumental timbres or groups thereof and that exercises such as dictation involve reproduction rather than discrimination. He therefore suggests having a student conduct an ensemble and correct the performance from the score in order to hone error detection skills. Use of a live ensemble is not practical, therefore he recommends use of a recording and score as a substitute for actual conducting. (Ramsey, D. 1981:16, 18, 19)

Ramsey's results showed that his programme in error detection for students of music education who had completed two years of theory and ear-training, using recorded band music and a score, had helped to improve inconsistencies between the written score and its aural realization and prepared students for error detection in ensembles that they would need as teachers. Furthermore, students who did not study with the programme made no gains. (Ramsey, D. 1981:16, 19) It should be noted, however, that a programme of error detection should begin much sooner than indicated by his study - indeed at beginner level - with the obvious assumption that it should be scaled down to the level appropriate to the individual student. In the light of the preceding discussion it becomes clear that all exercises should be undertaken with notational support i.o.w. sound and symbol should both be present.

Begin with short phrases which contain one error. At first rhythm and pitch should be separated as in other sections of aural development. Students may mark deviations with a pencil at first in order to remember their location in the given extract until the playing thereof has been completed and a verbal response must be given, but later this aid should be abandoned in order to improve selective memory. The teacher may alter exercises already given, for example in dictation, or extracts from the student's pieces. Extensive use may be
made of examples from the literature. Error detection skills suitable for both the specialist and
non-specialist musician may also be developed through work with a drill partner.

Development programme

1.1 One rhythmic error. (including rests)
1.2 One melodic error.
2. Gradually increase the number of errors presented. The maximum number will
depend on the level of the students development and concentration ability.
3. Combine melodic and rhythmic errors.
4. Include interpretational elements e.g. dynamic alterations and rubato. The
applications of this step are a broad and numerous as the educator allows. Here
the student moves into the realm of true music making.

Useful exercises

1. Detect errors in melodies heard and re-notate them i.e. link with dictation.

Suggested homework

With drill partner - All steps and Ex.1
Alone - Employ critical listening when practising repertoire. This may include
making use of a tape recorder.

3. VISUALIZATION

Performance objectives
To commit to memory the pitches and rhythms of an extract in order to perform it after limited
study time. The examination syllabi require the study of a single melodic line.

Prior knowledge necessary (Theoretical and Aural)
Melodic and rhythmic skills mastered in Sections A and B. Melodic and rhythmic devices.

Pedagogical basis
This skill which is found in the UNISA aural syllabus Grades 2-5 requires to student to be able
to store pitches and rhythms in memory then perform them on his/her instrument. In other
words it is a related skill to sight singing but is performed without a score. The student may
rehearse the exercise by attempting to hear it mentally using sight singing skills but a more
effective method is to relate the pitches to the fingerings of the student's instrument i.e. muscular memory is also employed. Furthermore, the knowledge of melodic, rhythmic and harmonic devices will aid the memorisation of pieces.

"Ear training [read "development"] is not merely, or even primarily, a matter of doing or responding, but rather of thinking about aural relationships." i.e. first perform exercises partly or wholly in silence with the sound imagined. (Kreter, L. 1976:4) Visualization expresses the sentiments of Leo Kreter in practical form and may therefore be applied to any suitable exercises, whether rhythmic or melodic or a combination of the two (for example those used for sight reading, sight singing or dictation exercises.) UNISA, for example, allows a maximum of three minutes but this time should be lengthened or shortened during the aural development process depending on the type of example presented and the developmental level of the student.

UNISA requires one of the students repertoire pieces in the examinations Pre-Grade 1 - Grade 4 to be memorized. Large-scale visualization therefore takes place and must also include interpretational aspects e.g. dynamics and rubato. The memorizing of repertoire may or may not be supervised by the aural teacher but he/she may develop memorizing skills by moving beyond the UNISA requirements.

It should be noted that pitch and rhythm are not separated in the early stages of visualization. Apart from the unmusical nature of such an approach the memory issue of "chunking" discussed under PITCH 7. DICTATION validates this view. (Marple, H.D. n.d.:78) (Miller, G. 1956:81-89)

The application of steps 2-4 in the programme will depend on the demands of the aural situation. The teacher may choose to have students present extracts of their own repertoire as a stimulus for critical aural analysis, detection of inaccuracies etc.

Development programme

1. Short melodies.
   Use time signatures as follows: 1.1 2/4 and 3/4.
   1.2 include 4/4
   1.3 include 2/2, 3/8 and 4/8
   1.4 include 6/8
2. Two parts (for keyboard and harp players only).
3. Cadences (for keyboard and harp players only).
4. Chord progressions (for keyboard and harp players only).

Useful exercises
1. Memorise melodies and present them to the class who must use them for dictation purposes.

Suggested homework
With drill partner - visualization exercises as selected
Alone - visualization exercises as selected

4. IMPROVISATION

Performance objectives
Melodic, rhythmic and harmonic improvisation using the voice and the student's instrument.

Prior knowledge necessary (Theoretical and Aural)
Melodic, rhythmic and harmonic skills mastered in the various other sections.

What is improvisation?
Improvisation "awakens and trains the capacity of spontaneous invention, of expressing musical ideas of a melodic, harmonic and rhythmic structure". (Rosenstrauch, H. 1973:9) Furthermore it is an important means of exploring music through practical activities, as favoured by Eric Clarke.

Pedagogical basis
Improvisation should be included at every possible developmental stage in the three previous sections both as a demonstration of understanding and in order to relieve the tedium of drills by allowing an outlet for creativity.

Although many musicians skilled in improvisation play by ear, for example Jazz musicians, the "Classically trained" musician should build his/her vocabulary in conjunction with notation. Notating improvised melodies, for example, will aid melodic composition as required by theoretical syllabi. The student may compile a "vocabulary" list to be used in creative
exercises. An analogy may be drawn with creative writing where the quality of words and phrases has a strong link with the extent of the students vocabulary.

Students who choose the RSM Practical Musicianship option instead of theory will need to follow the Improvisation Development Programme, which has been largely based on this syllabus, in detail, providing an opportunity for simulating improvisatory activities.

As was the case with dictation and echoes rhythmic improvisation should precede melodic improvisation as the former skill will be required for the latter. Melodic improvisation should begin with the student adding a pitch then a few pitches to complete a given melody, whereafter he/she should develop the ability to generate melodic material from a given motif. The rhythm may also be given at first if necessary. Simultaneously with rhythmic and melodic improvisation the student should work at creating harmonic patterns in different styles, for example chordal, Alberti bass and broken chord bass. Thereafter harmonic, rhythmic and melodic improvisation may be combined, i.e. the student improvises a melody according to given chord progressions.

Melodic improvisation should be attempted vocally and/or on the students instrument, depending on his/her performance confidence in either medium. Even though keyboard skills are important in aural development non-keyboard specialists should not be expected to improvise on the keyboard although some may be able to do so. Technical ability should not be allowed to impede the development of improvisational skills. Non-keyboard players may combine with keyboard players to form small ensembles, thus greatly expanding the scope of improvisation possible.

A time limit may be imposed on improvisation, for example beginning with 15 seconds and increasing in proportion to the improvisational skill level of the student.

**Development programme**

1.1 Rhythmic pattern improvisation.

1.2 The last pitch of a melody.

1.3 The last few pitches of a melody.

2. Melodies to a given rhythm based on a motif/phrase.

2.1 2 bars.

2.2 4 bars.
3. Melodies based on a motif/phrase.
   3.1 2 bars.
   3.2 4 bars.
   3.3 8 bars etc.
   3.4 Use a form (for example ABA, ABAC or ABCA) and devices
       like inversion or imitation.
       Length of 12 or 16 bars.
   3.5 Use harmonies I and V.
   3.6 Include II, IV, passing notes and appoggiaturas.
   3.7 Include V\(^7\) and inversions.
   3.8 Improvise a melody in a certain style for example seventeenth or eighteenth
       century. Complete to a length of 8 bars

Step 4 onwards requires vocabulary acquired in Steps 1, 2, and 3.

4. Harmonic accompaniments in different styles, for example Baroque, Alberti
   bass or broken chord accompaniment.

5. Melodies with accompaniment. This may involve continuation of fragments
   consisting of rhythm, melody and harmony.

6. Realize a figured bass.
   6.1 Use root position, first inversion, second inversion chords and V\(^7\).
   6.2 Include inversions of V\(^7\).
   6.3 Include secondary dominants.
   6.4 Include modulations.

7. Free improvisation:
   7.1 on a given motif (1 then 2 minutes).
   7.2 on an interval or texture, for example a tremolo or chord.
   7.3 on a poem or painting (useful for non-English-speaking students)
       (ABRSM 1989 I:5, 7, 9, 10, 13, 14 II:5, 11, 16)

**Useful exercises**

1. Improvise at beginning of daily practice, then record and listen and criticise.
   (Pratt, G. 1990:107)
2. Improvise different melodies to the same rhythm and vice versa.
3. A student improvises a melody, another sings it back (later say scale degrees).
   (Denegar, D. 1983:30)
4. Gauldin recommends four students improvising in succession, so that one
must build on the material generated by the others. The rest of the groups should criticize based on the assignment given as well as overall aesthetic judgements. These criticisms should be substantiated by specific faults thus developing the critical faculties of the whole group. (Gauldin, R. 1974:79-80)

5. Compose four four-bar phrases in 4/4 time. Avoid too many motifs, rather expand or repeat others. Perform them phrases as an ensemble, lightly stressing each first beat, then start again but one beat apart, i.e. the strong beats no longer coincide (a form of canon is being used). Once the student masters his/her part he/she can listen to the ensemble. African music is important in this area. (Pratt, G. 1990:40)

**Suggested homework**

*With drill partner* - All steps. Ex. 2, 3.

*Alone* - All steps. Ex. 1, 2.

---

**5. TIMBRE**

**Performance objectives**

1. Recognise that different timbres exist within the range of instruments and distinguish the timbres of different instruments. 2. Improve the tonal range of performance.

**Prior knowledge necessary**

Recognition of instruments by associating the name with an illustration of the instrument and performance skills on an instrument.

**What is timbre?**

Although few people have perfect pitch Pratt states that we all have `perfect timbre`, the ability to distinguish between different instruments. (Pratt, G. 1990:16) Students sometimes have difficulty distinguishing between instruments such as sopranino recorder and piccolo, oboe and clarinet, clarinet and saxophone but timbre recognition skills will improve with experience.

Within the pitch range of each instruments timbral differences are apparent, sometimes leading to the confusion previously described. A violinist playing *sul G* (i.e. playing on the G string) produces a different timbre when playing the identical pitches on the D string. Similarly *pizzicato* (plucking) produces a different timbre to *arco* (playing with the bow). On a more advanced level, instruments from the Baroque period have timbral differences from modern
instruments, which may be discerned whilst listening to recordings of early music ensembles and modern orchestras.

**Pedagogical basis**

Although not specifically included in the syllabus requirements of the examining bodies this skill is necessary when analysing recordings or live performances, including that of the student's own repertoire. A dual approach should be used.

Firstly, instruments should be introduced according to section i.e. strings, woodwind, brass and percussion and including "non-orchestral" instruments such as the banjo or bagpipes. In each case the aural stimulus i.e. timbre of the instrument from a recording or live should be identified together with a picture thereof or the instrument itself if one is available as well as information on sound production. This may include the practical experience of attempts at sound production by students, teacher/student demonstrations and the viewing of video material, or attendance at live symphony concerts if possible.

Further intricacies of sound quality fall within the scope of practical lessons. A useful resource for teachers who find a more advanced study necessary is Henson's *Timbral considerations in performance*. He emphasizes the importance of developing awareness of different timbres, not only between registers, but at the same pitch, which involves the student listening critically to his/her practical work and that of other students and broadening his/her tonal palette. Recordings of works being studied are invaluable in this area.

**Development programme**

1. Strings.
2. Woodwind.
4. Percussion.

**Useful exercises**

Henson suggests exercises such as comparison of two performances of the same piece (in diagram form) or playing a single pitch several times whilst trying to keep the timbre the same, then trying to vary the timbre while the class criticizes. The student must also learn to prehear sounds and imagine different timbres. A series of intervals may be played on a particular instrument followed
by timbral variations, for example using an increase in vibrato. Timbral balance may be explored by comparing instruments whilst playing in a chamber group. (Henson, M. 1987:37-41)

Suggested homework

With drill partner - Listen, discuss and try to improve!
Alone - Listen, discuss and try to improve!

The four main areas of aural development covered in this Remedial Programme, therefore, ensure that the student works with both sound and symbol. Required responses are verbal, tactile, written or sung and meet the requirements of the RSM, TCL and UNISA syllabi up to and including the Grade 8 examination. A profusion of ideas, which are supported by empirical evidence, are presented for work both within and outside of the classroom environment.
The development of skills and creativity within the context of the RSM, TCL and UNISA syllabi through the application of the educational maxims of Chapter 1, specific resources cited in Chapter 3 and methods suggested in Chapter 4 demands a broad practical application in order to ensure systematic and equal progress in all areas of aural development. In each section requirements for beginning the various steps of the programme are given. It is therefore possible to work in various sections simultaneously, once the requirements of each have been met. This will ensure that interest is maintained. Teachers working with small groups or individual students must use their initiative to adapt exercises intended for larger groups. In addition to resources, methods and exercises previously suggested, all of which pertain to certain areas of study, two additional teaching aids suited to overall application should be employed.

1. The "listening grid"
This device was developed by Paul Larson to "focus attention directly on specific musical events" and thereby maintain student interest. Information gathered may be transferred from the grid to the stave if required. It consists of numbered squares in which various factors may be noted, for example the number of bars, beats, trills or the nature of certain chords etc. (Larson, P. 1971:51) The only problem that I have encountered with its use is that upbeats are not taken into account therefore I have modified the grid to include the anacrusis (if necessary) in a bar numbered 0.

Larson gives an example of an application of the listening grid in an analytical study of Minuet from Water music suite in G major, by G.F. Handel. He requires the student to indicate the number of bars as well as the occurrence of trills on the grid, as shown in the example overleaf:
Amongst others Larson includes an analysis of the *Hallelujah Chorus* from Handel's *Messiah*. Numbers from 1-100 were typed on a sheet, each number representing a bar. The students were required to underline a number for each bar heard in order to determine the number of bars. Secondly, an x was placed over each bar number where only "Hallelujah" was sung and, thirdly, bars where "Hallelujah" appeared together with other words were indicated by circling the numbers. (Larson, P. 1971:51-52)

Another possible application of the grid is in the areas of rhythm and harmony using the tune *Clementine*. After marking the number of bars the student should indicate the number of bars where \( \text{\textbullet\textbullet\textbullet} \) occurs then mark the harmonies as either I or V.

The listening grid is suited to both class and homework assignments, the only limit to its use being the imagination of the educator involved in its application.

2. Progress monitor (chart)

Although the student may possess more advanced skills in certain areas he/she would benefit from working systematically through the entire programme until the required level is reached. In the early stages the exercises may be covered very quickly, which may serve to boost his/her confidence, but no steps should be omitted in each section. The student, however, should not dwell too long on any particular step or false confidence will be built. The rate of progress should be monitored and regulated through the use of a progress monitor, an aid which may serve to motivate students by concrete evidence of improvement and serve as an
incentive for further development (i.e. performance objectives achieved). For example, students may select areas to improve and indicate these on the chart. The use of progress monitors is supported by Trubitt (1979), Horacek (1970) and Kraft (1967).

Appendix C contains specimen progress charts to cover the four main sections of this Development Programme and may serve as a checklist (for both teacher and student) for rehearsal of skills before testing, documentation of test results or a record of homework assignments. Limited space is available on each of the charts for the inclusion of extra performance objectives if necessary. Furthermore, no compositional devices have been listed under "CRITICAL EAR". The requirements will depend on the needs of both teacher and student.

The extent to which testing is used will depend on the individual teacher. Some may require tests at regular intervals while others prefer to spend more time on further development, feeling that the detailed recording of marks makes the development process too test orientated. Alternately colour-coding may be employed. Each chart may be personalised by the student using his/her favourite colour to indicate completion of a certain step, while a neutral colour indicates further work required. A number of columns are provided on each chart. All or only one may be necessary, depending on the standard of performance per step. Each student may further personalize the charts by stapling them into booklet with a creative cover containing his/her name as well as inspirational or motivational words or drawings.

**Structured practice times**

The student should be made aware of the importance of practising aural skills in the same way as repertoire and scales are practised. Regular practising times should be established and adhered to. Frequent brief sessions are more important than occasional intensive sessions. Van Zuilenburg advocates sessions of 35-40 minutes per day with time assigned as follows: 10 minutes each to rhythm, sight singing, patterns including chords and practical harmony. (Van Zuilenburg, P.L. n.d.:15, 17) For the average musician, one who is not studying full time, this may be idealistic but nevertheless he/she should set aside time, even if only 10-15 minutes per day five days per week. When improved results are achieved effort will be rewarded.

It is "essential to respect the value of continuous practice and the necessity of being self-demanding in all musical activities. These two factors, above all others, will foster the development of the musical aptitudes and abilities needed first simply to understand a score, and then to discover a sense of the music that is behind the words, signs, and notations." (Ghezzo, M.A. 1980:6)
CONCLUSION

The vital importance of the human element must be acknowledged as the major determining factor in the success of aural development. Time, methods and materials are manipulated by the two participants in the process, namely teacher and student.

The process of aural development involves training the voice, ears, eyes, hands, feet and the brain to work with the sounds and symbols of the five elements of music - rhythm, pitch, harmony, timbre and dynamics - and their interaction in context i.e. both an aural and visual stimulus are involved. The educator should aim to achieve a balance between curriculum (syllabus) requirements, necessary musical skills and personal development.

The curriculum requirements of RSM, TCL and UNISA examinations involve imitation, memory or insight or combinations thereof. All exercises have a tonal base and include the whole tone and pentatonic scale. In order to meet the requirements of these syllabi the aural student needs to develop skills in the areas of Rhythm, Pitch, Harmony and use of a Critical Ear. It is essential that this development is combined with a study of theory and performance skills on an instrument.

The positive or negative attitude of the teacher and student and their control of time influence aural development as do suitable methods and materials. A large variety of examination-specific and non-specific texts which are either skill-orientated, or have a creative or theoretical bias. These texts may prove useful but the educator should select according to his/her situation and number, age and developmental stage of the students. Exercises may also be used in more than one context.

Skills involving Rhythm, Pitch, Harmony and development of a Critical Ear should be introduced systematically and progress should be monitored on a regular basis.

The practical implementation of a theory-based Remedial Aural Development Programme such as this one will differ from one learning situation to another depending on the number, ability and attitude of the students, the attitude of the teacher as well as the time available to apply suggested methods and materials.
The teacher guides implementation, but the final onus rests with the student who will not derive benefit if the correct mental attitude is not employed and coupled with regular rehearsal both inside and outside of the classroom.

Remedial attention to aural development will ensure that this discipline will receive due prominence within the musical sphere as a means of understanding the link between sounds and their notational representation.

Aural "is the focal point of all musical activity because it is synonymous with the development of musical comprehension, thinking and creativity." (Viljoen, N. 1994:26)
APPENDIX A
CORRESPONDING TERMINOLOGY

The following pairs of descriptions which may confront the aural educator have similar meaning. Texts of American origin often make use of the first while those of British origin usually contain the second. This list may therefore serve as a mini-thesaurus.

Binary/double meter = duple time
By-tones = non-chord notes
Half step = semitone
Key-chord = tonic chord
Key-note = tonic
Measure = bar
Meter signature = time signature
Period = sentence
Prime = a unison
Ternary/triple meter = triple time
Tertian triad = triad (because all triads consist of thirds)
Whole step = tone

CHORDS
Major-minor 7th = dominant 7th
Diminished-minor 7th = diminished 7th

TYPES OF CADENCES
Full close = perfect cadence (V-I)
Perfect authentic = perfect cadence (V-I) with 7-8 in the soprano part
Imperfect authentic = perfect cadence (V-I) with 2-3, 5-5 or 5-3 in the soprano part
Terminal cadences = perfect (V-I) or plagal cadence (IV-I)
Half close/half cadence = imperfect cadence (I-V)
Deceptive cadence = interrupted cadence (V-VI)
Perfect plagal cadence = plagal cadence (IV-I) with 1-1 in the soprano part.
Imperfect plagal cadence = plagal cadence (IV-I) with 6-5, 4-3 or 1-3 in the soprano part.
ASSOCIATED BOARD OF THE ROYAL SCHOOLS OF MUSIC

1. OLD SYLLABUS


Part I Grades I-V  Part II Grades VI-VII  Part III Grades VIII.

Taylor, E. A Method of Aural Training (n.d.)

Warburton, A.O. Graded aural tests for all purposes (1971)

2. NEW SYLLABUS


Aural training in practice. ABRSM

Bk I Grades 1-3  Bk II Grades 4-5  Both have companion cassettes.

David Turnball. Aural Time! Practice Tests for ABRSM and Other Examinations.

Bosworth 1993.

Separate books for Grade 1, Grade 2, Grade 3, Grade 4, Grade 5.

Roy Wilkinson and Maria Chen Wilkinson. The ABC of aural awakening.

Boosey & Hawkes 1993.

Bk I Grades 1-2  Bk II Grades 3-4, Bk III Grade 5 respectively.

* refer to current syllabus for differences in Grades
3. OTHER CURRENT ITEMS

Bk I Grades 1-5  Bk II Grade 6-8.

Bk I Grades 1-3  Bk II Grades 4-5.


Specimen Sight-Reading Tests for Singing. ABRSM
Bk I Grades 1-5

Specimen Sight-Reading Tests and Technical Exercises for Singing and Voice. ABRSM
Bk II Grades 6-8

Alternative Aural Tests for Candidates with Hearing Impairment. ABRSM
Bk I Grades 1-5  Bk II Grades 6-8

TRINITY COLLEGE OF MUSIC

Sample Ear Tests for Grade Examinations. TCM 1987.

UNISA

Practical musicianship and sight reading. Pre-Grade 1. UNISA n.d.

Practical musicianship. UNISA n.d.
Separate books for Grades I-III, Grades IV-V, Grades VI-VII & Grade VIII and Licentiate.

Singing Grades IV-VII. UNISA n.d.
Upper case letters indicate the main emphasis of each text.
[] indicates exercises not presented directly.

1. ACQUISITION OF A SPECIFIC SKILL

**Adler, Samuel.** *Sight singing: Pitch-Interval Rhythm* (Norton 1970)
SIGHT SINGING, rhythm, intervals, harmony (canons only).
[Detection of inaccuracies, timbre/texture].

**Fish, Arnold** and **Lloyd, Norman.** *Fundamentals of sight singing and ear training.*
(Dodd, Mead & Co. 1964)
Sight singing, rhythm, intervals, IMPROVISATION, harmony.
[Dictation].

**Gould, Murray J.** *Paths to musical thought: an approach to ear training through sight singing* (Holt, Rinehart & Winston 1979)
SIGHT SINGING, rhythm, intervals, improvisation, harmony.
(Dictation if sight singing exercises used).

**Kern, Alice M.** *Harmonization - transposition at the keyboard for the student and teacher of class or group piano, private piano, music education & general education.*
(Summy-Birchard Company 1963)
IMPROVISATION, HARMONY.

**Kraft, Leo.** *A new approach to ear training: a programmed course in melodic dictation.*
(W.W. Norton and Co. 1967)
Dictation.

**Ottman, R.W.** *Basic ear skills.* (Prentice Hall. 1991)
SIGHT SINGING, DICTATION, rhythm, intervals, harmony.
[Detection of inaccuracies].
Shumway, Stanley N. Harmony and ear training at the keyboard. (W.C. Brown. 1980)

IMPROVISATION, HARMONY.

Limited focus on pitch elements first.


2 volumes. SIGHT SINGING.

2. GENERAL AURAL DEVELOPMENT

2.1 Drill-orientated texts

Benward, Bruce. Ear Training: a technique for listening. (W.C. Brown. 1987)

rhythm, intervals, dictation, harmony, detection of inaccuracies.


intervals, dictation, harmony, detection of inaccuracies.

Ghezzo, Marta Arkossy. Solfège, ear training, rhythm, dictation, and music theory: a comprehensive course. (University of Alabama Press. 1980)

Sight singing, rhythm, intervals, dictation.


Sight singing, rhythm, intervals, dictation, harmony, detection of inaccuracies.


Sight singing, rhythm, intervals, dictation.


HARMONY.

Rhythmic and melodic elements, for example intervals, are covered in Volumes I-II.
Dictation, detection of inaccuracies, timbre/texture.
[Sight singing, rhythm, intervals].

Sight singing, rhythm, intervals, dictation.

Levin, Robert D, and Martin, Louis. Sight singing and ear training through literature.
(Prentice-Hall. 1988)
Sight singing, rhythm, intervals, dictation, harmony.

Sight singing, rhythm, intervals, dictation, harmony, detection of inaccuracies.

Sight singing, rhythm, intervals, dictation, improvisation, harmony, detection of inaccuracies, timbre/texture.

Sight singing, rhythm, intervals, dictation, harmony, detection of inaccuracies.

Winold, Allen and Rehm, John. Introduction to music theory: an integrated approach to notation, music reading and ear training. (Prentice-Hall. 1971)
Sight singing, rhythm, intervals, dictation, improvisation, harmony.
2.2 Creativity-orientated texts

Alchin, C.A. Ear training for teacher and student. (Oliver Ditson Co. 1904)
Sight singing, rhythm, intervals, dictation, improvisation, harmony, critical ear.

Herder, Ronald. Tonal/atonal; progressive ear training, singing and dictation studies in
diatonic, chromatic and atonal music. (Continuo Music Press. 1972)
Sight singing, rhythm, intervals, dictation, improvisation, critical ear.

Kreter, Leo. Sight and Sound: a manual of aural musicianship. 2 Volumes.
(Prentice-Hall. 1976)
Sight singing, rhythm, intervals, dictation, improvisation, harmony, detection of inaccuracies.

2.3 Texts with a theoretical bias

Davidson, Gerry Frank. An investigation into the systematic application of performance
objectives to ear training. (Univ. Microfilms International. 1994)
DICTATION.

Pratt, George with Michael Henson and Simon Scargill. Aural Awareness : principles and
practice. (Open University Press. 1990)
TIMBRE/TEXTURE
[Sight singing, rhythm, intervals, echoes, dictation, improvisation, harmony, detection of
inaccuracies].

Thackray, Rupert Manfred. Aural Awakening: a course in aural training and general
musicianship for students and teachers. (University of Western Australia,
Dept of Music. 1978)
Sight singing, rhythm, intervals, dictation, improvisation, harmony, TIMBRE/TEXTURE.
3. OTHER RESOURCES
Bach, J.S.-Riemenschneider, A. 371 Harmonized chorales and 69 chorale melodies with figured bass. (Schirmer 1941)
Harmony.

Butterworth, N & A. 400 Aural training examples from the masters Vol. I-III. (Novello. n.d.)
Sight singing, dictation.

Sight singing, dictation.

Jacobsen, M. The treasury sight reader. (Curwen. n.d.)
Sight singing, dictation.

(Prentice-Hall 1973)
Harmony.

Ensemble rhythmic and melodic work.
### APPENDIX C

#### PROGRESS MONITOR - RHYTHM

<table>
<thead>
<tr>
<th>PERFORMANCE OBJECTIVE</th>
<th>ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. a) Tap pulse</td>
<td></td>
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<tr>
<td>b) Beat and ID character of pulse</td>
<td>Duplet</td>
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<td></td>
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<tr>
<td>2. Simple vs compound</td>
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<td></td>
<td></td>
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<tr>
<td>3. a) Rhythmic reading and dictation</td>
<td></td>
</tr>
<tr>
<td>b) naming of note values</td>
<td></td>
</tr>
<tr>
<td>c) composition (improvisation)</td>
<td></td>
</tr>
<tr>
<td>using time signatures, note values and rhythmic patterns as follows:</td>
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</tr>
<tr>
<td>Simple:</td>
<td></td>
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<tr>
<td>2/4</td>
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<tr>
<td>3/4</td>
<td></td>
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<tr>
<td>5/4</td>
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<tr>
<td>2/3 3/4 15/16</td>
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<tr>
<td>2/8 3/8 6/8</td>
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<td>5/8</td>
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<td>6/8</td>
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<td>8/8</td>
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<tr>
<td>Compound:</td>
<td></td>
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<tr>
<td>6/8</td>
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<tr>
<td>PERFORMANCE OBJECTIVE</td>
<td>ACHIEVED</td>
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<tr>
<td>---------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>1. Pitch matching (individual pitches)</td>
<td></td>
</tr>
<tr>
<td>a) within vocal range</td>
<td></td>
</tr>
<tr>
<td>b) at the 8ve higher</td>
<td></td>
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<tr>
<td>c) at the 8ve lower</td>
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</tr>
<tr>
<td>d) establishment of a reference pitch (ID and sing)</td>
<td></td>
</tr>
<tr>
<td>2. a) Identify the higher/lower of 2 pitches</td>
<td></td>
</tr>
<tr>
<td>b) Identify direction movement as up/down</td>
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<tr>
<td>3. a) Melodic echoes 5-8 pitches</td>
<td></td>
</tr>
<tr>
<td>1 phrase</td>
<td></td>
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<tr>
<td>2 phrases</td>
<td></td>
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<tr>
<td>with accompaniment</td>
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<tr>
<td>b) Development of a selective memory first pitch</td>
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<tr>
<td>first and last</td>
<td></td>
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<tr>
<td>first 2 and last</td>
<td></td>
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<tr>
<td>first/second phrase</td>
<td></td>
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<tr>
<td>4. Tonality cue major vs minor</td>
<td></td>
</tr>
<tr>
<td>harmonic and melodic minor</td>
<td></td>
</tr>
<tr>
<td>chromatic scale</td>
<td></td>
</tr>
<tr>
<td>pentatonic scale</td>
<td></td>
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<tr>
<td>whole tone scale</td>
<td></td>
</tr>
<tr>
<td>5. Intervals (Sing/ID/Write)</td>
<td></td>
</tr>
<tr>
<td>Major scale 1-5 (M2, M3, P4, P5)</td>
<td></td>
</tr>
<tr>
<td>include major 6-8 (M6, M7, P8)</td>
<td></td>
</tr>
<tr>
<td>from upper tonic (include m2, m7)</td>
<td></td>
</tr>
<tr>
<td>Minor scale 1-5 ((M2, m3, P4, P5)</td>
<td></td>
</tr>
<tr>
<td>include major 6-8 (m6, M7, P8)</td>
<td></td>
</tr>
<tr>
<td>from upper tonic</td>
<td></td>
</tr>
<tr>
<td>A4/D5</td>
<td></td>
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<tr>
<td>Compound intervals</td>
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<tr>
<td>PERFORMANCE OBJECTIVE</td>
<td>ACHIEVED</td>
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<td>-----------------------</td>
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</tr>
<tr>
<td>Dictation preliminaries:</td>
<td></td>
</tr>
<tr>
<td>1. Fill in notes omitted</td>
<td></td>
</tr>
<tr>
<td>2. Circle reference pitches</td>
<td></td>
</tr>
<tr>
<td>3. pitch pattern drills</td>
<td></td>
</tr>
<tr>
<td>6. a) Sight singing  b) dictation</td>
<td></td>
</tr>
<tr>
<td>c) playing from memory</td>
<td></td>
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<tr>
<td>d) composition and improvisation</td>
<td></td>
</tr>
<tr>
<td>e) ID letter names  f) transposition</td>
<td></td>
</tr>
<tr>
<td>(link with note values under rhythmic development)</td>
<td></td>
</tr>
<tr>
<td>Pattern drills:</td>
<td>2 bars</td>
</tr>
<tr>
<td></td>
<td>4 bars</td>
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<tr>
<td></td>
<td>8 bars</td>
</tr>
<tr>
<td>Major scale</td>
<td>1-5 using 2nds</td>
</tr>
<tr>
<td></td>
<td>include 6-8 using 2nds</td>
</tr>
<tr>
<td></td>
<td>include triads I IV V</td>
</tr>
<tr>
<td></td>
<td>Dominant 7th</td>
</tr>
<tr>
<td>Minor scale</td>
<td>1-5 using 2nds</td>
</tr>
<tr>
<td></td>
<td>include 6-8 using 2nds</td>
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<td>major 2nd up/down</td>
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<td>minor 3rd up/down</td>
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<td>major 3rd up/down</td>
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<td>c) middle - major/minor (sight sing)</td>
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<td>d) sing one whilst playing another</td>
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<td>sing upper, play lower</td>
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<td>sing lower, play upper</td>
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<td>sing lower, play middle/upper</td>
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<td>2 staves</td>
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<td>5-6 bars</td>
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<td>include II6</td>
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<td>(include VI6)</td>
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<td>include VII6</td>
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<td>2-4</td>
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<td>more than 4</td>
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<td>melodic errors</td>
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<td>2-4</td>
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<td>ABAC</td>
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