

**REPLACING PATTERNS: TOWARDS
A REVISION OF GUITAR FRETBOARD PEDAGOGY**

by

Colin Elmer

A submission comprising CD, DVD and an exegesis
in fulfilment of the requirements for
the degree of Master of Music

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Included with this submission:

- CD – Audio recording of remedial compositions and backing tracks
- DVD – Video recording of musical examples and remedial compositions

ABSTRACT

This thesis deals with pedagogical shortcomings encountered by contemporary guitar students and players, which have been further exacerbated by what is shown to be teaching syllabi that hamper a deeper understanding of the theoretical underpinnings of the guitar fretboard. The thesis is structured in two halves. The first half discusses deficiencies in current guitar teaching methodologies, as identified by the candidate, and through a survey of leading South Australian guitar teachers. The second half addresses those deficiencies by means of a series of structured exercises and original short compositions designed to imbue the guitar student with a deeper understanding of the harmonic and melodic capabilities of the instrument. These, it is argued, should form the basis of a revised pedagogical approach to the guitar, its fretboard in particular.

DECLARATION

This work contains no material that has been accepted for the award of any other degree or diploma in any university or other tertiary institution, and to the best of my knowledge and belief contains no material previously published or written by another person, except where due reference has been made in the text of the thesis.

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Dedicated to Hal Hall

Issues and Perspectives

I am a professional guitar player with over twenty years experience across a broad spectrum of genres. I have been a tutor in the jazz courses offered at the University of Adelaide since 1988, as well as in a host of public and private secondary schools in metropolitan Adelaide. These activities have enhanced my awareness of the lack of fretboard knowledge on the part of both seasoned professionals and secondary and tertiary students of the guitar. The purpose of the current research project is therefore two-fold. First, to identify deficiencies in contemporary guitar (as distinct from classical guitar) instruction books, and second, to create teaching materials in the form of structured exercises, which, it will be argued, remedy the shortfalls in the current situation. These exercises are demonstrated on DVD and form the basis for the solutions offered to redress specific problem areas. Included as part of this submission is a CD of original works, including backing tracks for improvisation, that facilitate the application of the single string approach towards learning scales and chords across the fretboard.

There are two principal areas of concern in relation to modern guitar pedagogy. The first concerns the lack of knowledge of the guitar fretboard, and therefore the location of notes and chords outside predetermined patterns and positions. This aspect highlights what is referred to as position playing and points to the second concern, a practical understanding of the capabilities of the guitar as a harmonic instrument, an instrument capable of harmonising a melodic line. The esteemed guitar pedagogue Mick Goodrick has this to say about position playing

Any guitarist who has played at all seriously knows that position playing is very important. Also, position playing is a huge project. Lots of stuff to learn. Years of work involved. The point I'm trying to make (which may be one of the most important points in this book) is that position playing is not even half of it. (Probably not even a third of it!) Equally as important as position playing is playing up and down on one string. I'd even go so far as to say that it's more important than position playing as it's so seldom explored. In addition, I might add that standardized methods for position playing have been in existence for some time, whereas methods for playing up and down on one string are practically non-existent, at least in the WEST.¹

These problems are here shown to be, in part, the product of shortcomings established and perpetuated in mainstream, conventional guitar tutors. Stanley Schleuter suggests the problem has its root causes in 'music teachers who lack skills and rely on materials in the order printed in method books'.²

My experience has shown that a lack of knowledge and understanding of the fretboard creates inherent problems when a student undertakes formal study. The problems as outlined in this paper become more acute in the field of jazz where, as S. Degner notes in his survey of jazz guitar students that 'many students will not have

¹ Mick Goodrick, *The Advancing Guitarist* (Milwaukee: Hal Leonard, 1987), p. 9.

² Stanley Schleuter, *A Sound Approach to Teaching Instrumentalists* (New York: Schirmer, 1997), p. 21.

played or studied jazz before and do so only to gain access to higher education'.³ These problems surface at the tertiary level, where students display a general lack of ability in the following areas:

- Playing through twelve keys without changing position
- Sight-reading
- Playing chordal inversions
- Playing the chord and related scale
- Transposing in the one position
- Improvising over non-diatonic chord changes
- Harmonising a melody
- Playing a three octave scale over the range of the instrument

Some of the problems are genre-specific in that, for example, the concept of chord melody playing on the guitar is traditionally the domain of jazz players and has largely escaped the notice of rock musicians. As a consequence non-jazz players rarely explore the guitar's capabilities as a harmonic instrument. A lack of relevant repertoire and the omission of this style from guitar methodology have allowed chord melody playing to be largely overlooked.

There are also historical and cultural causes for the dilemma that myself and others face. Learning modern guitar is largely an aural exercise that has its roots in folk traditions, when music was (and is) passed from person to person through direct interaction. Many guitar players refuse to undertake formal music training, in the mistaken belief that to do so will inhibit their creativity and therefore acquire their skills and knowledge through other methods. The work of Lucy Green's ethnographic study of popular musicians living in and around London documents these methods:

Alongside or instead of formal music education there are always, in every society, other ways of passing on and acquiring musical skills and knowledge. These involve what I will refer to as 'informal music learning practices,' which share few or none of the defining features of formal music education. Rather, within, these traditions, young musicians largely teach themselves or 'pick up' skills and knowledge, usually with the help or encouragement of their family and peers, by watching and imitating musicians around them and by making reference to recordings or performances and other live events involving their chosen music.⁴

These observations are also to be found in other contemporary genres including jazz for example Degner suggests that 'jazz has a less institutionalized and formalized instructional system compared to classical music. Some jazz musicians still doubt the necessity of formal jazz education offered by universities and conservatories'.⁵ Degner goes on to make a separate, but no less valid point that:

³ S. Degner et al., *Expert Learning in the Domain of Jazz Guitar Music* (Hanover: Proceedings of the 5th Triennial ESCOM Conference, 2003), p. 386.

⁴ Lucy Green, *How Popular Musicians Learn* (Aldershot, UK: Ashgate Publishing, 2001), p. 5.

⁵ Degner et al., *Expert Learning in the Domain of Jazz Guitar Music*, p. 384.

In a preliminary survey of six professional jazz guitar teachers, and twelve advanced tertiary level students, the results found that these musicians had started their instrument relatively late in comparison to classical musicians. More importantly, their first exposure to the instrument was not associated with taking formal lessons. They received their knowledge and skills in informal settings similar to popular musicians.⁶

While it will be shown that this informal, less didactic approach has impacted directly on the student's understanding of the fretboard, Goodrick argues that this lack of understanding stems in part from the idiosyncrasies of the instrument:

There are some inherent problems that need to be overcome; for example there are five different places on the guitar to play concert middle C and at least 16 different fingerings for this one note. According to the numbers calculated 'the range of the guitar is about 45 half steps and the average note has 2.8 locations and 9.2 fingerings. Some notes such as the low and very high notes really only have one location and a limited number of practical fingerings.⁷

Method Books

To gain some insight into current modern guitar pedagogy it is important to critically evaluate what may be considered conventional method books. Conventional pedagogy usually employs some form of graded system from beginners to advanced, or a numbered system progressing from Book 1. This basic format has been available for over thirty years. That the shortcomings identified in this study are so widespread stems from the ready availability of guitar method books which embrace this approach. Most conventional pedagogy is based upon the Behaviorism theory of learning, which is described by Orison Carlile and Anne Jordan as concentrating on

observable behavior without considering motivation or other mental processes. In its favour, Behaviorism builds on aspects of practice that you know are effective. These include the importance of repetition in learning, of presenting strong and varied stimuli (avoid boring the group), of careful planning and the sequencing of learning events, and of specifying achievable and verifiable learning objectives in the form of learning outcomes. Overall, while the training world, particularly in the US, is still dependant on Behaviorist 'rational' principles, Behaviorism becomes more problematic when you are dealing with higher-level learning, and acquisition of concepts, problem solving and originality. It is not a model that suits the general view of university or higher-level learning.⁸

Graded teaching manuals follow the behaviourist model, something that Goodrick bemoans:

Most guitarists have never had the chance to learn the instrument in an intelligent, logical and complete manner. The vast majority of guitar method books do not offer much in the way of underpinning theoretical and technical knowledge, and nor do they aid in the

⁶ Degner et al., *Expert Learning in the Domain of Jazz Guitar Music*, p. 387.

⁷ Goodrick, *The Advancing Guitarist*, p. 5.

⁸ Orison Carlile and Anne Jordan, 'It Works in Practice But Will It Work In Theory: The Theoretical Underpinnings of Pedagogy', www.aishe.org/readings/2005-1/carlile-jordan, (accessed July 19 2008).

overall comprehension of the instrument. Unfortunately the vast majority of guitar teachers are the product of these methods and when you follow the method you are the result of the method.⁹

This observation has certainly been true in my experience.

A visit to the largest sheet music retailer in Adelaide (Allans Music) reveals a complete section devoted to the learning of the guitar. There is a range of graded and non-graded modern guitar method books, as well as genre-related books that offer instruction in specific styles, including blues, jazz, heavy metal, country and rock. These books generally include a CD of recorded excerpts and backing tracks, and presume to educate the student in the particular nuances of the chosen genre. A notable feature of books is an increasing reliance on guitar tablature (TAB), at the expense of, or as a supplement to conventional staff notation. TAB uses six horizontal lines to represent the guitar strings, on to which numbers are placed to indicate the fret to be played on any given string. TAB has largely replaced conventional staff notation as the preferred option for modern guitar students. The effect of the rise of TAB has been to polarize guitar players into two camps – those who rely on it, and those who read conventional staff notation. Jazz guitar legend John Scofield puts it this way:

I've never used this system and have never known any guitar players that did. TAB would never be used in any professional musical situation; using it to learn music is a crutch. Standard musical notation is the only method of communicating music other than using your own ear. I think that reading music is essential, not only for understanding music, but for playing guitar professionally as well.¹⁰

Popular titles to be found in stores such as Allans include *Mel Bay's Modern Guitar Method* (Grade 2), *Hal Leonard Guitar Method* (2nd ed.), *Progressive Method* (Book 2), and *Contemporary Popular Music: Guitar* (Step 3). A descriptive overview of the Hal Leonard volume is followed below by an in-depth discussion of shortcomings generated by the CPM method.

***Hal Leonard Guitar Method* (2nd ed.)**

Hal Leonard method books have been in publication for many years and are considered one of the market leaders in guitar method books. The book in question includes TAB inserted under the notation staff for some of the musical examples. The C major scale is the starting point in the first position, but the etudes included utilize a twelve bar blues form, along with more traditional folk songs. This method also includes reference to the so-called 'power chord' – a chord which is virtually unique to rock music and which is noteworthy for its omission of the third. The chromatic scale in one position is in the book displayed over one octave, and also included is a diagram of the fretboard depicting all the notes up to the twelfth fret. Major and minor scales, and major and minor pentatonics are written with TAB, and explained as movable scales with the root on either the fifth or sixth strings.

⁹ Goodrick, *The Advancing Guitarist*, p. 9.

¹⁰ John Scofield, *Jazz-Funk Guitar 1* (Manhattan: CPP Media, 1993), p. 4.

These contents point to a significant pedagogical flaw in that no connection is made between chords and scales, and neither is any emphasis placed upon learning scales other than by position. There is no connection between the melodies given and the chords; they are separated into two very distinct categories. Melody playing is seen as separate to that of chordal playing, and chords are offered as a separate accompaniment to a melodic line. There is little or no emphasis placed on time feel and the repertoire in the main is outdated and irrelevant to the modern guitar student. There is no reference to learning the fretboard or understanding major and minor chords through their inversions.

Contemporary Popular Music: Guitar (Step 3)

The Contemporary Popular Music Books for guitar are an attempt to organise contemporary music into a graded system suitable for assessment by the Australian Music Examinations Board. The repertoire in this series is certainly more contemporary than that contained in other methodology, but there are also many shortcomings. Instrumental teachers use Book 3 for students in the latter part of their secondary education, and in many ways this volume may therefore be considered the method preceding tertiary education. The following headings address particular areas of concern in the volume.

Figure 1: Technical work.¹¹

$\text{♩} = 126$

C major: transposable to C#, D, Eb, E and F major

Pattern 1 – starting on the 5th string

F# major: transposable to G, Ab, A, Bb and B major

Pattern 2 – starting on the 6th string

¹¹ This and subsequent examples are reproduced from *Contemporary Popular Music: Guitar (Step 3)*, (Melbourne: Allans Publishing, 1998), pp. 14, 20, 21, 25.

Students are required to play major scales from six different keys using so-called Pattern 1, and six keys using Pattern 2. These patterns are prescribed by string names written under the staff in brackets and fingerings above in numbers. The patterns are used by many teachers and are formed by playing the root of the scale on either the fifth or sixth strings. The patterns are memorised by students as a fingering and can then be moved up and down the neck to change key. Here lies the essence of the problem in that this encourages the rote learning of patterns that have negligible musical value and little practical application beyond pure technique. Finally, the patterns bear no relation either to chords or to the repertoire studies included in the book.

Figure 2 : Chordal work.

Dominant 7th chord shapes



The box system is a pictorial display of the guitar neck, whereby the six strings of the guitar are shown vertically and the frets are displayed horizontally. These four unrelated dominant chords are given as inversions in the one position, with E as the bottom note. Yet there is no explanation given as to why these chords or their inversions have been chosen. The voicings have no relationship to any scales or the repertoire included in the book. A similar situation prevails in the chords following:

Figure 3 : Chords.

The figure displays 15 guitar chord diagrams arranged in a grid. Each diagram consists of a treble clef staff with a chord symbol above it and a box diagram below it. The box diagrams show fingerings on strings 3, 4, 5, and 6, with 'x' marks for muted strings. The chords are:

- C Δ** : Treble clef, C chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6.
- Cm7**: Treble clef, Cm7 chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6.
- C $^{\circ}$** : Treble clef, C $^{\circ}$ chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6.
- C+**: Treble clef, C+ chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6.
- C9**: Treble clef, C9 chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6.
- C7(#9)**: Treble clef, C7(#9) chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6.
- G Δ** : Treble clef, G Δ chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6. Note: (mute the 5th string).
- Gm7**: Treble clef, Gm7 chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6. Note: (mute the 5th string).
- G $^{\circ}$** : Treble clef, G $^{\circ}$ chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6. Note: (mute the 5th string).
- G+**: Treble clef, G+ chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6. Note: (mute the 5th string).
- G9**: Treble clef, G9 chord symbol. Box diagram: 3rd string (finger 3), 4th string (finger 2), 5th string (finger 1), 6th string (finger 2). Muted strings: 1, 2, 6. Note: (mute the 5th string).
- G9**: Treble clef, G9 chord symbol. Box diagram: 5th string (finger 5), 4th string (finger 4), 3rd string (finger 3), 6th string (finger 2). Muted strings: 1, 2, 6.
- G7(#9)**: Treble clef, G7(#9) chord symbol. Box diagram: 5th string (finger 5), 4th string (finger 4), 3rd string (finger 3), 6th string (finger 2). Muted strings: 1, 2, 6.

The chords displayed using the box diagram are given as five variations on a root note on either the fifth or sixth string. Again, the chords are not related to any scales or repertoire given throughout the book and are all in one position. They therefore constitute a technical exercise approached in isolation, to be performed for the purposes of assessment only.

Current conventional method books of the type identified promote inflexible approaches to learning scales, chords and arpeggios. The use of fingerings and patterns is a recurring feature of most method books, one that has accordingly become the preferred option in the learning process. The student commits these fingerings and patterns to memory, with the result being that motor memory prevails, often with no reference to the

notes and scales used. Technically proficient players have become increasingly prominent in modern music over the past decade, and a vast number of modern guitarists rely solely on motor and memory skills for performance. This is often at the expense of other qualities such as tone, touch, sound, groove and feel, which are all but ignored in current methodology.

Repertoire

While the lack of fretboard knowledge amongst students entering tertiary study is attributable to dated and inflexible technical methods, the performance repertoire chosen by students and teachers alike also bears some responsibility. Again, the CPM book highlights flaws in this aspect of instruction.

Figure 4 : Set Works.

The set works for this Step are listed here, together with the original recording source for your information.

1. Stairway To Heaven

by Jimmy Page and Robert Plant, *Led Zeppelin*, Jimmy Page (Atlantic Records, 1971)

2. Sweet Child O' Mine

by W Axl Rose, Slash, Izzy Stradlin', Duff McKagan and Steven Adler,
Appetite for Destruction, Guns 'N' Roses (Geffen Records, 1987)

3. 'Round Midnight

by Thelonius Monk, Cootie Williams and Bernie Hanighen,
'Round Midnight, Volume 40, Thelonius Monk (Jamey Aebersold, 1987)

4. Hearts Grow Fonder

by Tommy Emmanuel, *Dare To Be Different*, Tommy Emmanuel (Sony Music, 1990)

5. Still Got The Blues

by Garry Moore, *Blues Alive*, Garry Moore (Virgin Records, 1993)

6. Malam (Evening)

by Jan Gold (no recording available)

These are set works from which the student must choose to perform two. The works are not consistent in their level of difficulty and some are of questionable relevance, although the accompanying CD of backing tracks does allow the student to gain experience in ensemble playing. The set works are in no way related to the technical work required at this level. The only chord melody ('Malam'), is an obscure tune, difficult to play and has no recording to demonstrate the piece to the student.

Modern repertoire for guitar can quite often be technically demanding but somewhat one-dimensional musically. Guitar players may demonstrate a high level of technical skill in performance but often this has been pre-learned from memory as repertoire that is often reduced to a series of patterns. Herein lies the first challenge, in that modern guitar repertoire is heavily reliant on the use of motor and/or memory skills. Caroline Palmer describes these as follows:

Music performance can be depicted as a cognitive skill with large memory demands, or as a motor skill with large physical execution demands. Cognitive dimensions of performers' memory for music are often described in terms of musical structures such as harmony, tonality, phrasing and meter. Motor aspects of performance are measured in physical dimensions such as fluency, speed, rhythmic precision and hand coordination.¹²

Motor memory is a tool used in the performance of many different genres of music, but for guitar students this can often become the primary source of learning. Motor memory is acquired through general repetition, rather than via a critical analysis of the music being played. An issue of great concern is that students also apply motor memory to their learning of current repertoire.

A salient example of the over-reliance on motor memory on the part of students emerges in the learning of a piece such as 'For the Love of God', by Steve Vai. Vai is one of a number of technically proficient players who have become increasingly prominent in contemporary rock music. 'For the Love of God' exemplifies this in its intricate rhythms and specialist techniques, including sweep picking, where the pick is used in one direction to play very fast arpeggios using a shape with the left hand, and a very legato left hand where the right hand only picks possibly one out of six notes played. The whammy bar (tremolo arm) is also heavily used throughout 'For the Love of God' to lower or raise the pitch of a given note, or to add vibrato. The piece requires a special sound and a degree of volume to perform successfully, as the overdriven guitar tone aids in the fast legato, left hand scale passages. Even though this particular piece moves around and across the neck, a student is able to learn it using TAB with the aid of the recording. The net result is often that the student may have not learnt anything about what they are actually playing on the guitar. In my experience the learning of repertoire does not always result in a greater understanding of the guitar fretboard, rather it abets the development of motor and or memory skills.

¹² Caroline Palmer, *The Nature of memory for music performance skills* (Montreal: McGill University Press, 2003), p. 3.

Figure 5 : Excerpt from 'For the Love of God' ¹³

steve vai 'for the love of god... continued

103

105 Dsus2 D G

107 Fmaj7sus2

109 Low B string

112 Dsus2

¹³ Steve Vai, *Guitar Techniques* (Bath: Future Publishing, 2000), p. 27.

I have encountered students who have spent twelve months learning this piece, but have only learnt to imitate Vai through a reliance on motor and memory skills, without analyzing the music itself, and how it sits on the fretboard. While repertoire such as this encourages new and sometimes difficult techniques, mastering these techniques is divorced from musical considerations and a more complete understanding of the fretboard. A good part of the responsibility for redressing the problems brought about through an over-reliance on motor and memory skills rests with guitar teachers themselves.

Guitar Lessons

Ice B. Risteski makes a valid observation concerning the responsibility carried by teachers:

To thoroughly understand the problems encountered in modern guitar methodology it is important to identify the factors that are important in any guitar teacher's effectiveness. The best guitar teachers are able to translate good judgment, experience and wisdom into the art of playing guitar.¹⁴

A study conducted by an American guitar teacher into music shop instruction highlights the over-reliance of TAB and patterns by modern guitar teachers. The situation described by Anthony Guest Scott is mirrored in South Australia:

Considering the ways in which generic multiplicity is an important part of instructor identity and knowledge assessment for Music Shop Guitar Lessons [MSGLs], it is not surprising that the use of multiple musical genres is a significant force in the structuring of lesson activities. In terms of organization and teaching of key lesson concepts, guitar instructors often align specific musical genres with particular performance techniques.¹⁵

Scott then makes a very salient point that 'for guitar teachers, there appears to be a strong sense that genre and technique are interrelated'.¹⁶ More problematic is Scott's concession to what he calls 'performative utterances':

Further along one encounters activities oriented around the teaching of theoretical building blocks for performance. These are often realized as patterns for visualization on the instrument-scale patterns, interval patterns and chord shapes, for example, which may be practiced on the instrument as patterns or realized through the context of musical exercises.¹⁷

It will be apparent that this study calls into question the very validity of the use of patterns in guitar pedagogy as advocated by Scott.

¹⁴ Ice B. Risteski, 'A New Foundation of Guitar Philosophy', in *Theoria*, Vol. 15 (2): 91-98. <http://redalyc.uaemex.mx/redalyc/pdf/416/41618104.pdf> (accessed 5 June 2007).

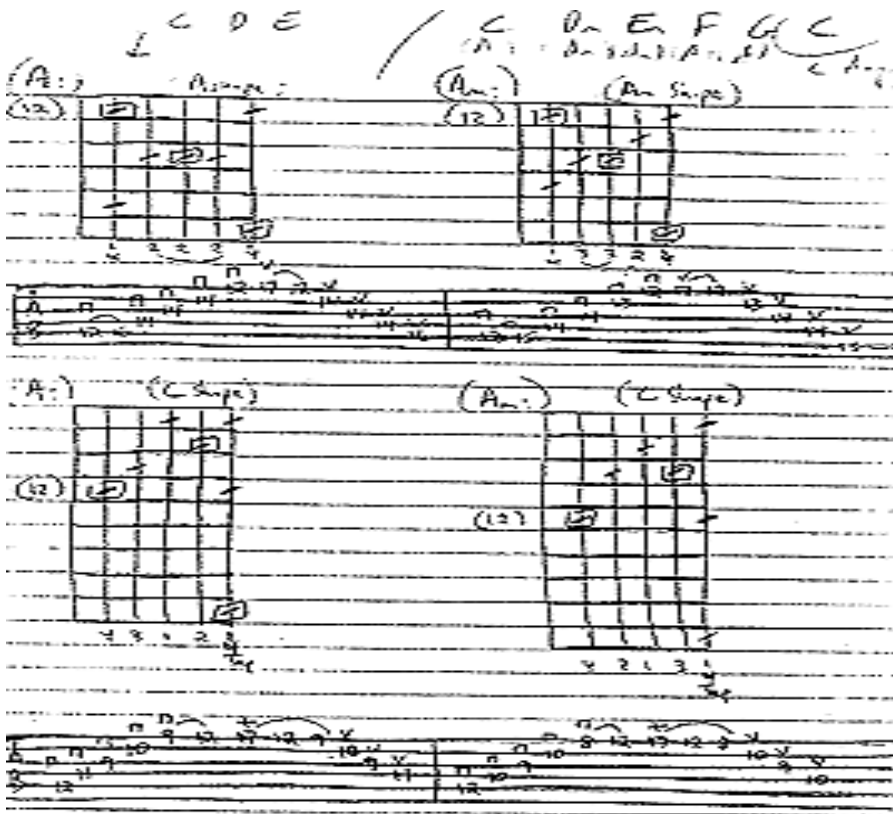
¹⁵ Anthony Guest Scott, 'Categories in Motion', *Ethnomusicology* Vol. 52, No.3, 2008, p. 443.

¹⁶ Scott, 'Categories in Motion', p. 444.

¹⁷ Scott, 'Categories in Motion', p. 445.

While it is important for students to have the ability to visualise the fretboard, an over reliance on patterns in the learning process exacerbates the problems identified here. No clear understanding of the fretboard is gained through patterns alone, no matter how competently visualised. Scott provides an example of what he terms 'patterns of visualisation', one that would be familiar to most teachers:

Figure 6 : ¹⁸



The use of TAB, positions, patterns and shapes allows the student to reproduce a guitar solo in a particular genre, or to play chords along with a recording, but their knowledge of how to play the guitar outside of these parameters is limited. Teaching at secondary level, where lessons are conducted on a one to one basis, experience tells me that very few students can read music or have any understanding of the fretboard.

When preparing repertoire it is important to be aware that students have most likely never been asked to play a piece outside of their preferred genre. This reliance on rote learning of repertoire undermines their ability to improvise with any confidence. There are advantages to a repertoire based learning system and students who are a product of this methodology may be quite confident players on certain tunes, and with certain techniques, but their understanding is almost certainly limited to a small range of pieces.

¹⁸ Scott, 'Categories in Motion', Reproduced from, *Ethnomusicology* Vol. 52, No.3, 2008. p. 447.

That many guitar teachers rely on songs exclusively to teach a student carries with it the risk that the student is ultimately learning songs and not necessarily the instrument.

The immediacy of the problems and challenges outlined above became apparent in a survey conducted as part of this Master's project. Taken in the order in which they are addressed below, the survey confirms that the impediments to a more complete understanding of the fretboard are 1) the proliferation of tablature as a crude form of notation; 2) method books that focus on the memorisation of fretboard patterns and positions at the expense of an holistic approach; and 3) guitar repertoires that cater to either or both of the above.

The Survey

Twenty highly experienced guitar teachers were contacted, eighteen of whom agreed to participate, and fourteen responses were received. The following selection criteria applied:

- A minimum teaching experience of five years at secondary level.
- A selection of both private and public teachers at secondary level.
- A minimum ten years experience for tertiary level teachers.

The respondents included one secondary teacher with over thirty years experience who is currently employed by the Instrumental Music Service of the South Australian Department of Education and Children's Services. Included in the tertiary teachers is one with over thirty-five years experience, whose involvement included the establishment of the VET courses in commercial music in 1985, which are still being offered in the TAFE system throughout South Australia. The survey was set out as a series of statements to which the respondents were invited to choose from a multiple choice format, ranging across six categories. In the graphs following, the horizontal axis ranges from 1: strongly agree, to 6: strongly disagree. The vertical axis identifies the number of respondents in these categories.

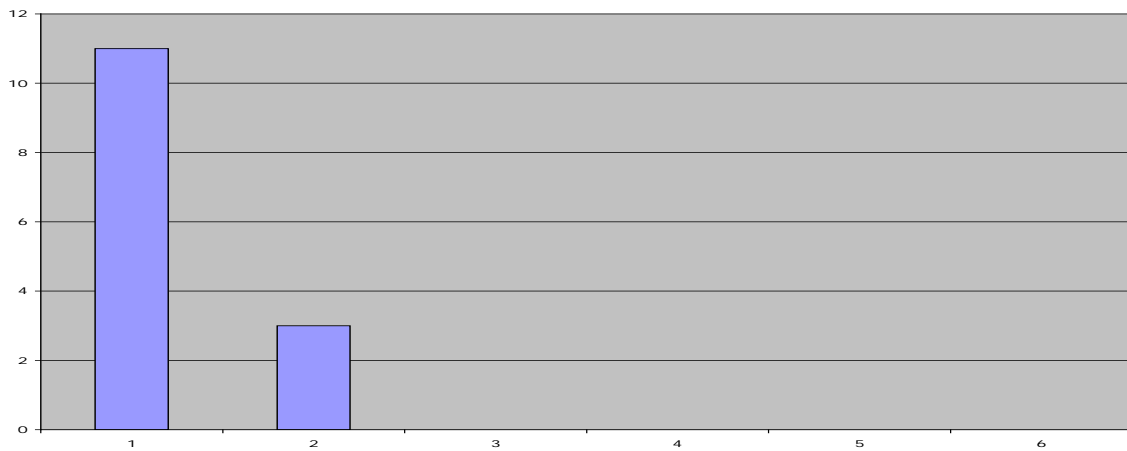
The statements fall into two categories. The first eleven test the veracity of the problems outlined above, while the next thirteen explore the extent to which contemporary guitar instruction books perpetuate the problems. Statements 1 to 6 deal with the problems as presented by students. Statements 7 and 8 determine the reliance on patterns and fingerings by students. The final statements in this first section seek to determine to what degree students understand chords and chord/scale relationships. The answers gleaned, together with my own experience, have informed the revisions and exercises offered subsequently.

The statements, their justification, and a summary of the respondent's replies are as follows:

1. Guitar players are generally poor sightreaders.

That modern guitarists are poor sightreaders is a well-established fact amongst the music fraternity, and has certainly been my experience of students entering tertiary education

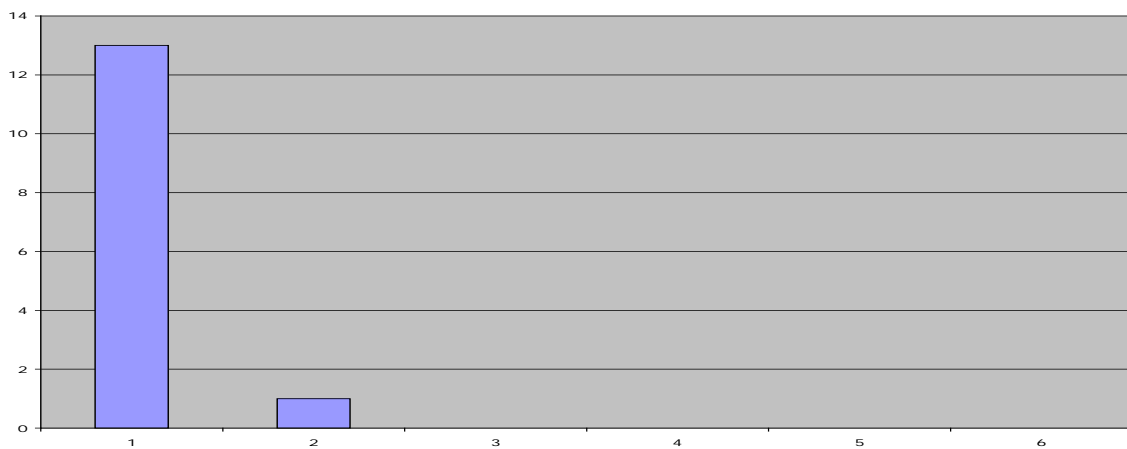
for the past twenty years. Students struggle with even the most basic staff notation, which severely impedes their progress in many areas.



Response: A very strong positive response was received, which suggests that the majority of guitar teachers experience this inherent problem. This sentiment is summed up in the comment of one respondent: ‘I am certainly frustrated in my teaching by students’ lack of ability to read music’.

2. A knowledge and understanding of the neck is essential in being able to sight-read.

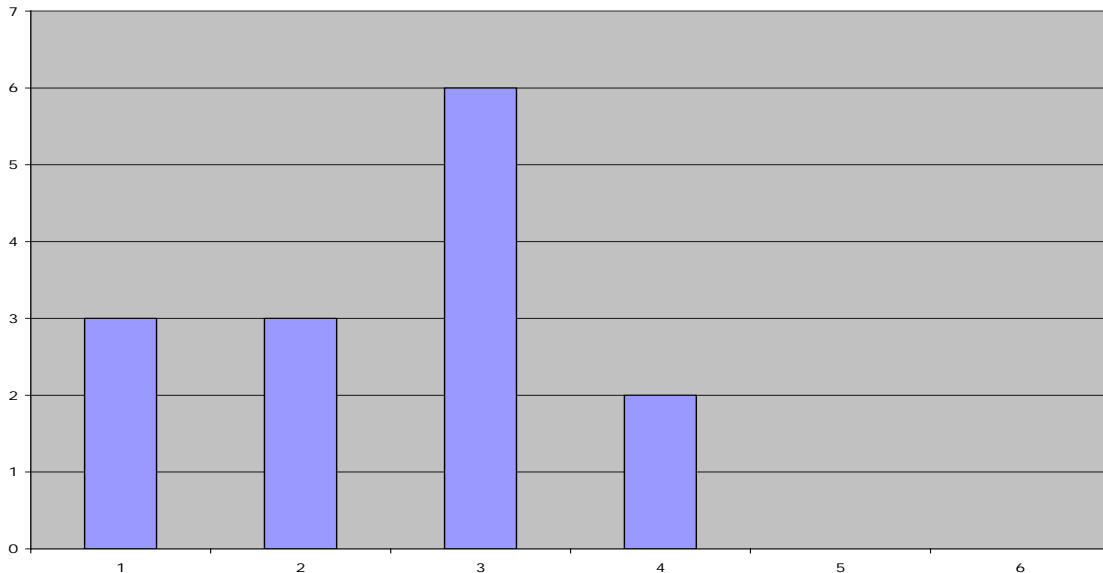
In my experience a large number of students have very little knowledge of the fretboard despite being able to play guitar competently. I believe this problem to be unique to guitar and is partly as a result of the methodologies employed in guitar instruction books. Many students who learn guitar do so informally and, as the study of the guitar has largely been an aural tradition, formal study may only occur much later in a student’s development and therefore sightreading is not a part of their study.



Response: Thirteen teachers strongly agreed with this contention. Clearly, teachers agree that neck knowledge is a very important component in learning to play guitar and in enhancing the ability to sight-read.¹⁹

3. Most students cannot identify the five locations for playing middle C.

This question relates to the complexity of the guitar fretboard as flagged by Goodrick, and the fact that many students and teachers are not even aware that the guitar sounds an octave lower than written.



Response: This statement elicited varied responses, and the reason for this is summed up in a written comment received by one teacher:

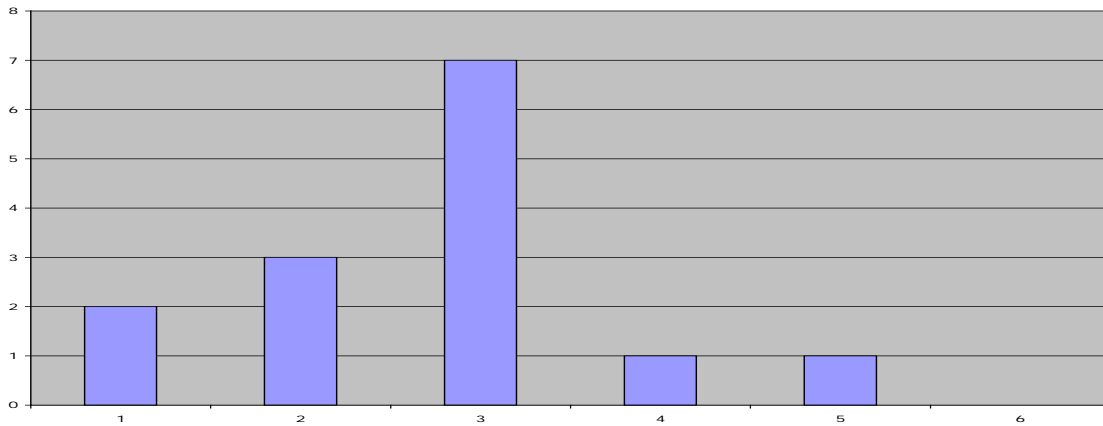
The issues regarding sightreading seem to be directly related to the styles that a particular student is interested in. The students who have concentrated their efforts on jazz and or classical studies appear to be better readers. The students who have concentrated their efforts on jazz studies tend to have a stronger grasp of scale chord relationships, chord inversions and are less likely to play purely from pre-determined patterns. The students who have concentrated entirely on rock studies tend to be more reliant on tablature resulting in weaker reading skills and often have minimal fretboard knowledge.

Although I agree with this point, my experience in teaching students who enter the jazz course at the University of Adelaide suggests that only a very small percentage have either a jazz or classical background.

4. Students have little or no knowledge of the actual note names on the fretboard.

¹⁹ The terms ‘neck knowledge’ or ‘knowledge of the fretboard’ refer to the ability to be able to name all notes across the range of the guitar on all six strings.

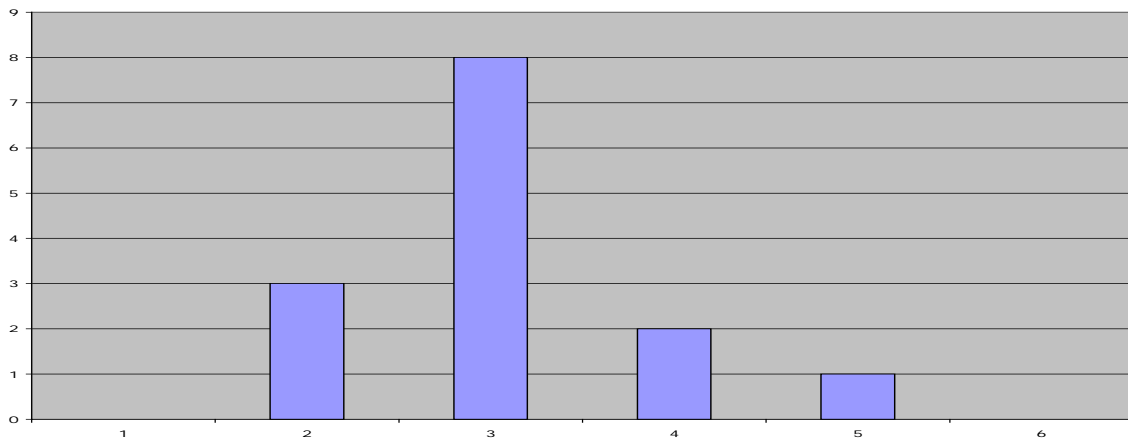
This statement relates to the fact that guitar players generally place more importance on patterns than fretboard knowledge.



Response: The response was quite varied, which suggests that this issue might be genre-specific. Students with a classical background who undertake formal study will be learning to sight-read in different positions on the neck and therefore learning note names. Jazz students are regularly required to play in twelve keys and therefore need to learn the fretboard, while rock guitar players are more key specific. Modern and rock guitar players rarely play in twelve keys and therefore may decide that there is no need to learn the notes in a specific key as they will not be required to use them outside of a predetermined pattern.

5. Students cannot name the notes found on an individual string.

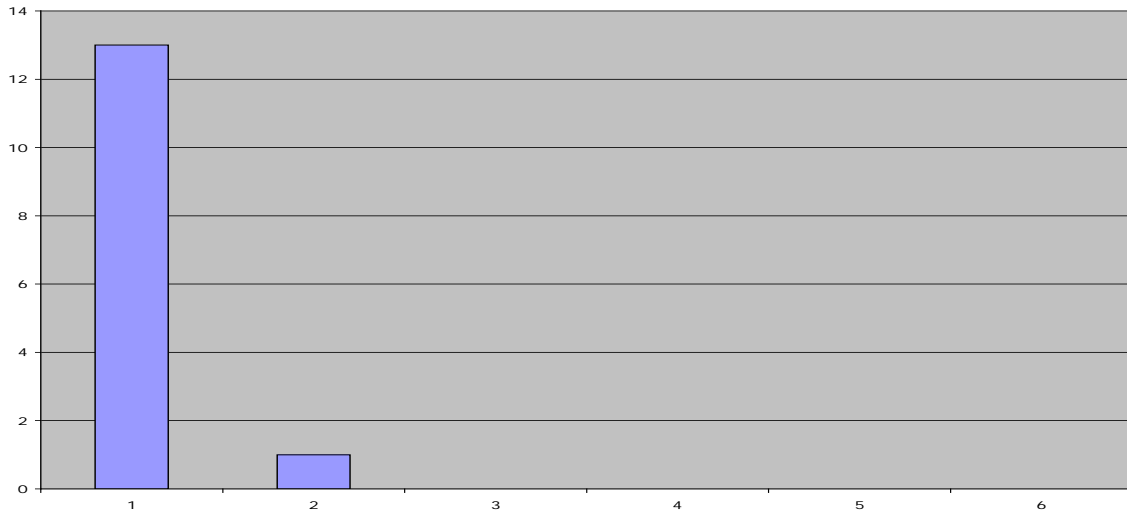
This is based on my experience of guitar students and their inability to play a tune or scale limited to one given string. This is due to the fact that a scale, for instance, is more likely to have been memorised as a pattern starting from the root (usually on the fifth or sixth strings) and spanning one or two octaves, without there being any real understanding of the interval structure involved.



Response: The response to this question was one where the majority took the middle ground by agreeing with reservations. This trend points to a lack of specificity in the original statement, in that irrespective of genre, the fifth and sixth strings are more widely understood as functioning as the root notes of chords and scales. The upper four strings, by contrast, are not identified in current instruction books as serving a root function – something that the current study seeks to redress.

6. It is important that students know and understand the fretboard.

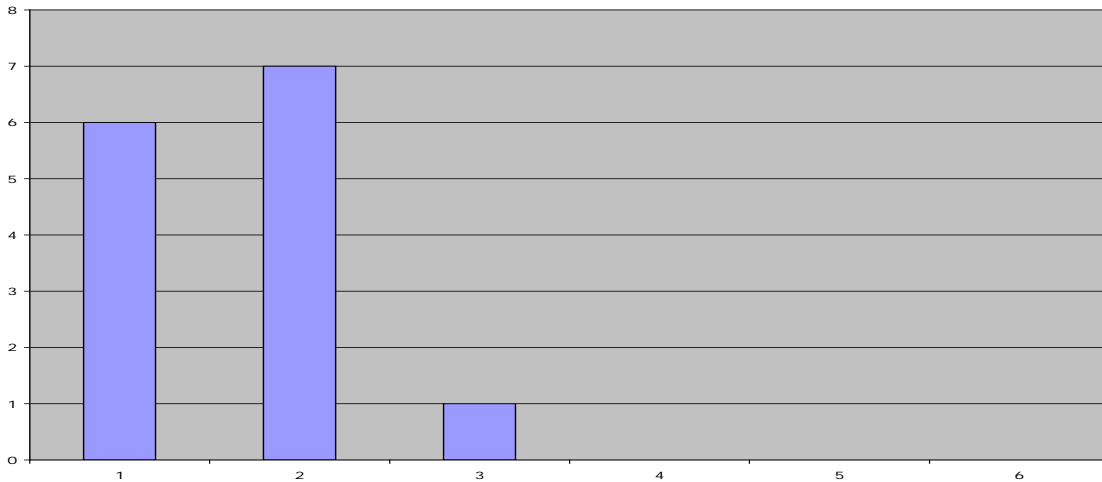
The rationale behind this statement is that students need to know the fretboard in its entirety and not just in selected positions. To understand the neck is to be able to see and hear where best to play a particular phrase, so that it logically falls under the fingers and produces the required tone for the phrase, chord or scale. To enable the student to make logical choices when moving from one phrase or chord to another they must be able to visualise the fretboard and understand the sound they are trying to produce.



Response: Thirteen teachers strongly agreed, and it is clear from their written comments that they rate fretboard knowledge very highly.

7. Guitar players may demonstrate a high level of technical skill in performance but often this has been pre-learned from memory as patterns.

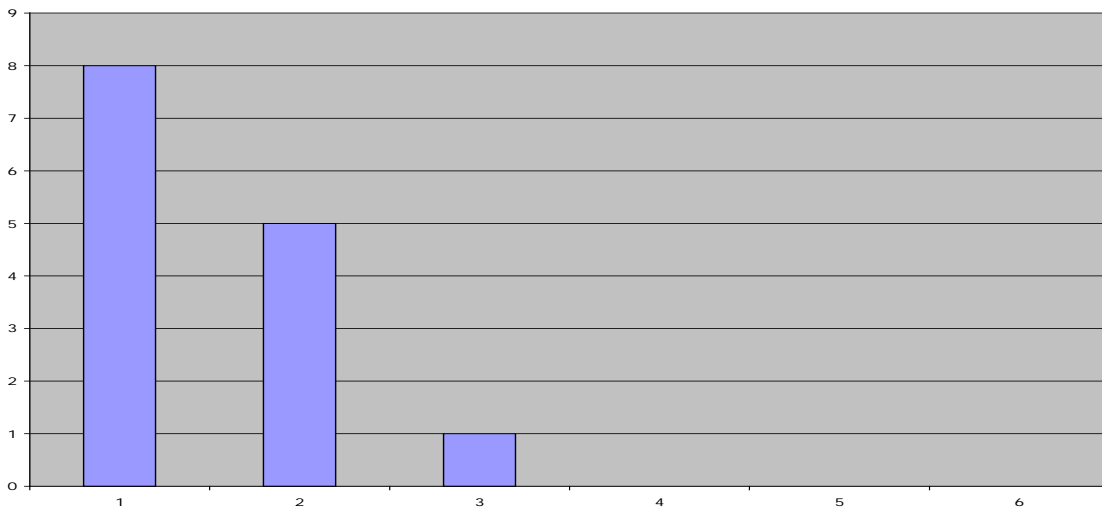
This statement addresses the use of patterns and guitar TAB and the reliance on motor and memory skills by modern guitar students, often to the exclusion of any genuine understanding of the fretboard. The guitar lends itself to patterns, shapes and diagrams very easily, and the reliance on these devices can be found in almost all published instructional methods. In my own teaching experience I have had students who can play incredibly complex rhythms and fingerings, but have very little knowledge of what they are actually playing.



Response: The majority of teachers agreed strongly with this question.

8. Guitar students tend to largely rely on patterns to learn scales.

When requested to play a scale, students invariably start to play from either the fifth or sixth string and play a pre-determined pattern. As has been demonstrated, published method books identify scales by means of either TAB or box diagrams, or a combination of both. This leads to pattern memorization, the practical use of which is limited.

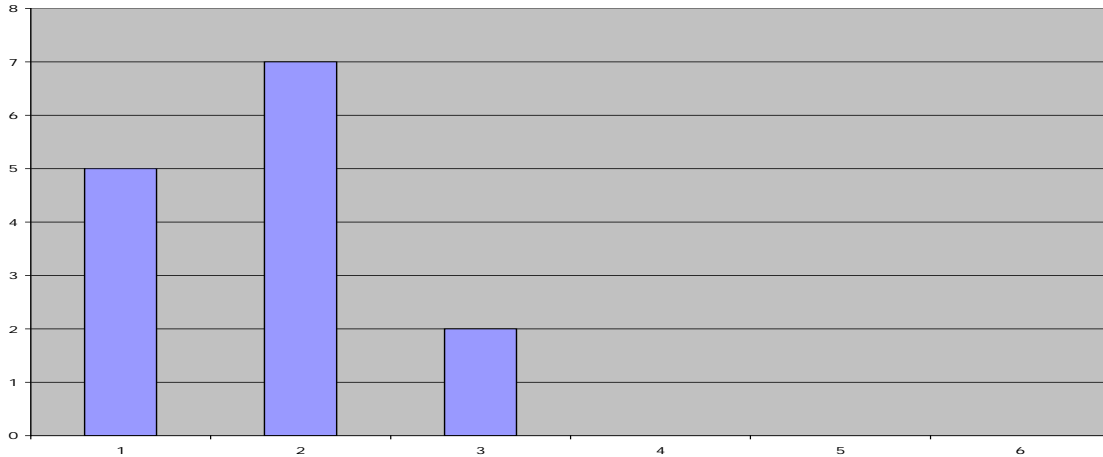


Response: The response from teachers confirms that the patterned approach to learning scales is the preferred option amongst students.

9. Students lack an understanding of the chord/scale relationship and do not have the ability to make this connection on the fretboard.

This observation arises from experience with my own students. Chords and scales are taught in isolation and students rarely make the connection that they are derived from the

same source. Students lack an awareness that around every chordal inversion there is a corresponding scale.

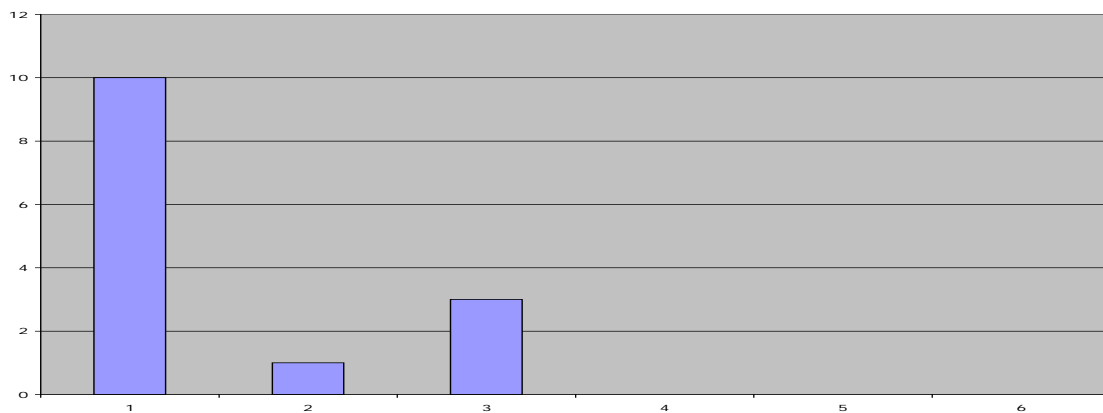


Response: Teachers made some interesting observations, with one remarking that ‘with the extensive number of TAB sites and download software like ‘Guitar Pro’, a young player with a level of technique can literally become a reasonable player and end up without any knowledge at all’. Another was more strident:

Totally agree with many of the above points. Students need to learn to approach the guitar thinking ‘notes’ rather than ‘frets’ but unfortunately, many of the current teaching repertoire encourages the latter as does the proliferation of TAB sites.

10. It is important to understand the way chords can be played through their inversions.

Guitar chords are generally learnt as shapes without consideration given to the identity of the inversion actually being played. The idea that a chord has inversions and that the related scale can be easily found around these chordal inversions across the fretboard is lost on most students.

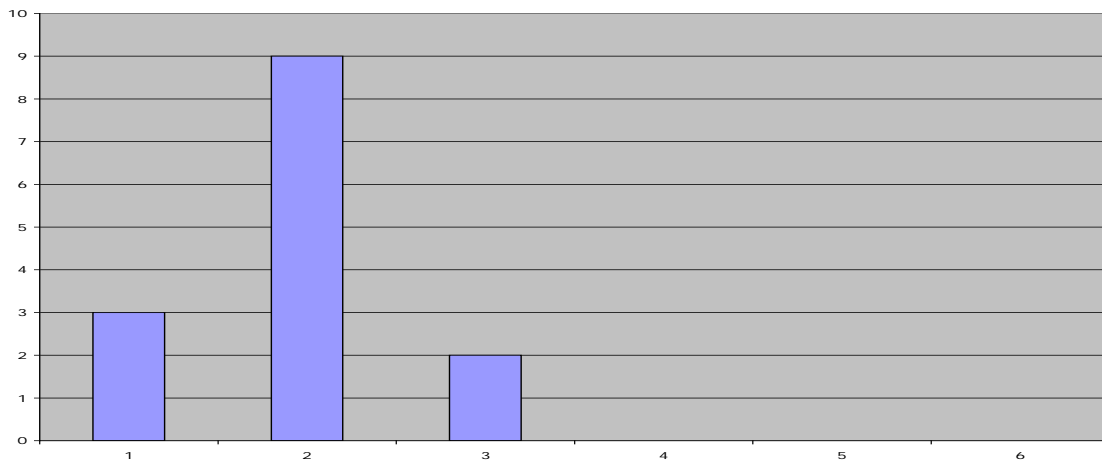


Response: All respondents agreed with the need for a method which sets out how simple triads and more complex chords can be inverted horizontally across the guitar fretboard. One teacher saw the issue as being genre specific: ‘The students who have concentrated

their efforts on jazz studies again tend to have a stronger grasp of scale-chord relationships, chord inversions and are less likely to play purely from pre-determined patterns’.

11. Students are often not clear on the range of their instrument.

Even competent guitar players are often not clear on the range of their instrument. This shortcoming seems to be unique to guitar players, as other instrumentalists tend to be aware of the range of their instrument from an early stage in their development. Other teachers saw this as an even more basic lack of awareness of the fact that the guitar sounds an octave lower than written.



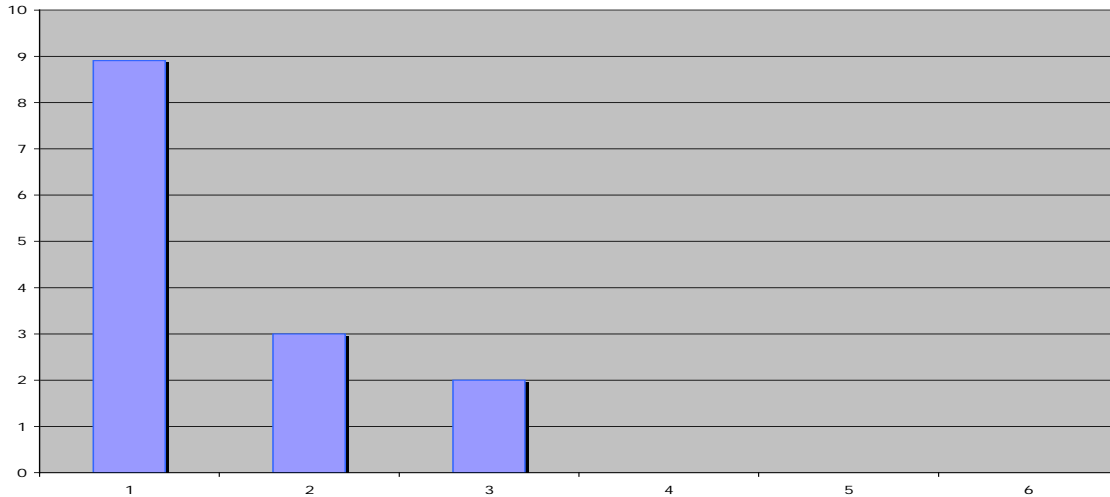
Response: Teachers were in agreement with this view. But interestingly, several teachers identified factors other than teaching manuals as being responsible for these inherent problems. One respondent sheeted the blame back to teachers themselves:

I have also found that many guitar teachers are unqualified and set their students an extremely poor example by using and endorsing the same TAB method and system, often exclusively. Guitar teachers who can play and read notation (in my experience at least) are generally the exception rather than the rule.

Having established the pedagogical shortcomings the second part of the survey evaluated current guitar method books. The response largely mirrored my own findings.

1. Current methodologies rely heavily on the use of teaching students through the learning of positions.

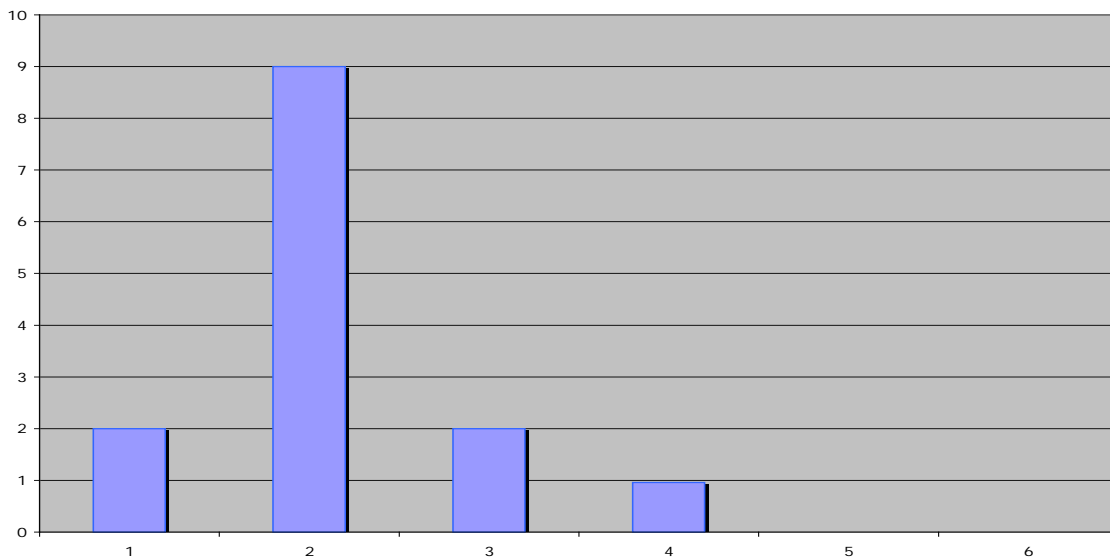
The majority of students are familiar with chords and notes in the first position, and will often use this position by default when sight-reading a piece of notation for the first time. This is the product of an over-emphasis on the positions in guitar tutors.



Response: There was strong agreement from teachers that current methodology relies heavily on the teaching of students through the learning of positions. Current methodology starts with the learning of what is known as the open position at the first fret, so called because it employs the use of open strings in chords and scales.

2. Tablature is used extensively throughout modern method books.

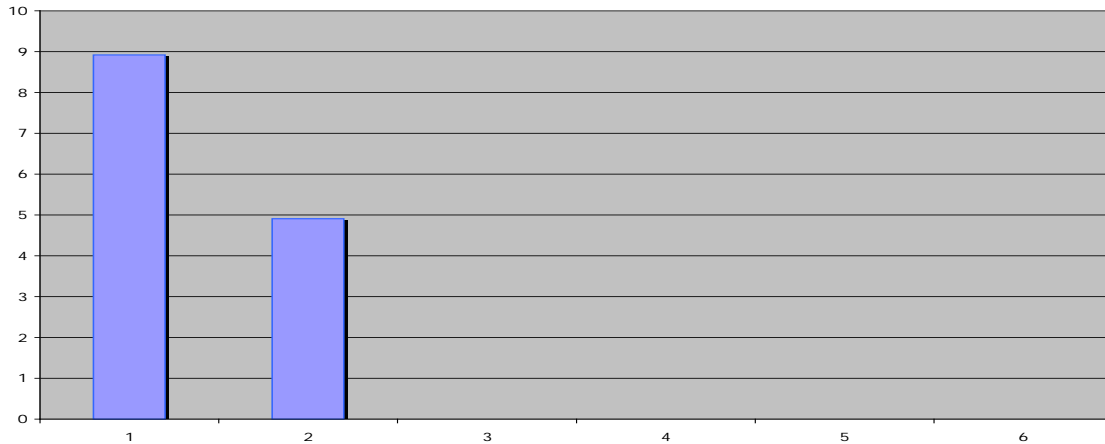
Most method books use some form or system of TAB in conjunction with conventional staff notation. The use of TAB is widespread, as is indicated in the response below.



Response: The majority agreed with this question, although the issue of genre was raised. One teacher qualified their response in a way that highlights again problems associated with the genre-specific approach advocated by Scott: ‘The students who have concentrated entirely on rock studies tend to be more reliant on tablature resulting in weaker reading skills and often have minimal fretboard knowledge’.

Another teacher felt that TAB was part of the ‘non-educational material that students have available to them’, which includes, ‘transcription books/magazines – particularly tablature versions where none of the intricacies (chord/scale relationships, rhythm divisions/placement, etc.) of guitar playing are mentioned’ and ‘the millions of TAB sites on the Internet’.

3. Method books are only useful as part of an overall teaching methodology.



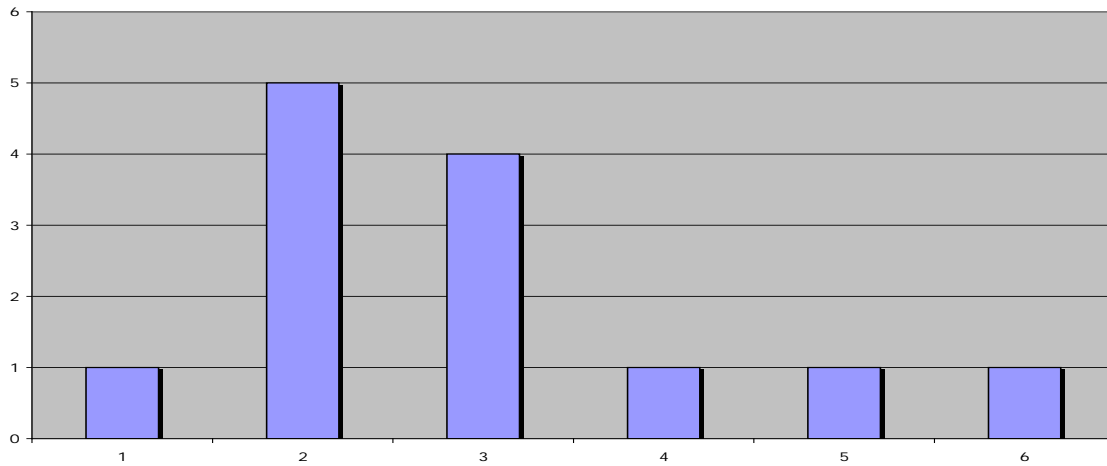
Response: Teachers agreed, and several went on to say that they have developed their own teaching methodology using a variety of resources. According to one:

I feel a little uneasy commenting on the pros & cons of method books, as I only use my ‘own’ material, based around the CAGED system, and lovingly hand crafted to TAFE specifications. Although I don’t use method books, I guess like you I encounter the results of them in my students at TAFE, assuming that their High School teachers are using them.

The CAGED system employs the use of the C, A, G, E and D major triads previously learnt in the first position, to play any major chord across the fretboard and is useful in introducing the student to a wider range of voicings than standard root five and root six voicings.

4. The CAGED system as used in some method books is a useful tool in learning the fretboard.

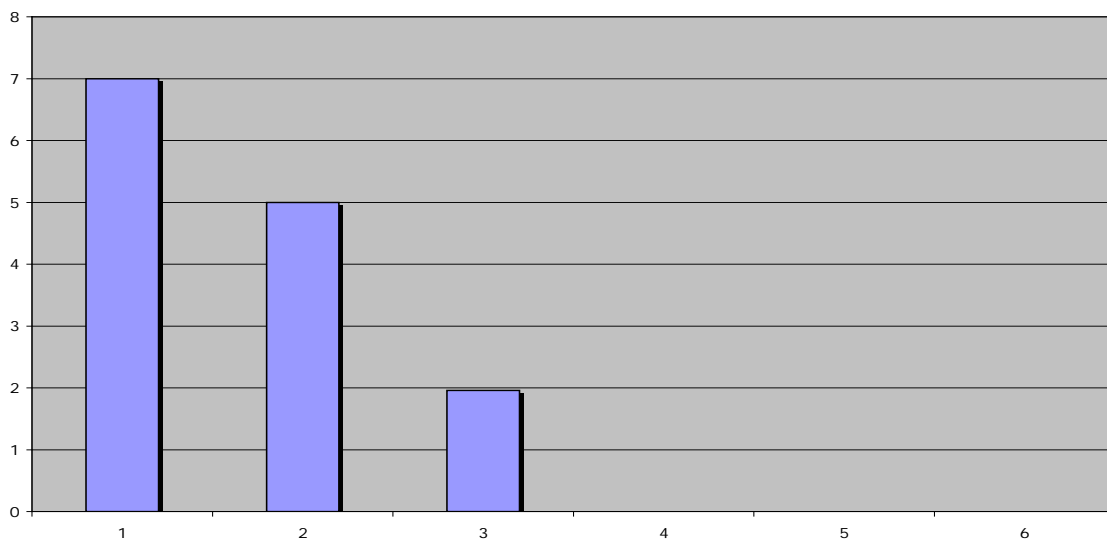
In question five I address the use of the CAGED system in methodology in an attempt to gauge how many teachers currently use this approach and to what degree they find it useful. There is no one definitive book that employs this system but some books make reference to it.



Response: The response from teachers covered the full spectrum, but the majority took the middle ground. Despite its limitations the CAGED system is the most common one employed in relation to learning chords across the fretboard.

5. Method books generally rely on the box system to demonstrate chords.

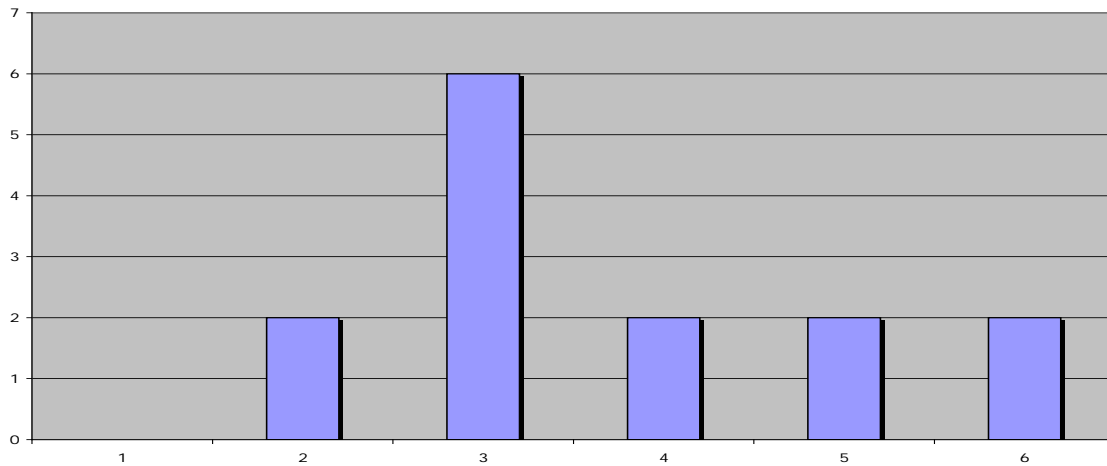
From very early on in the learning process students are asked to memorise shapes as a way of learning chords.



Response: Teachers agreed with the statement.

6. The Internet and the proliferation of tablature sites are helpful as an addition to a method book.

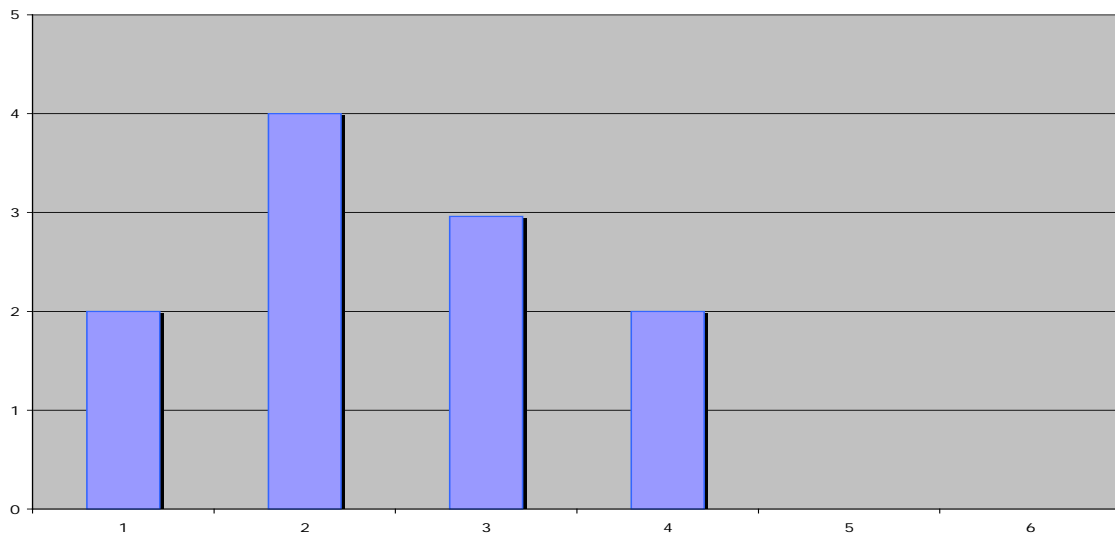
Given the proliferation of TAB sites on the Internet, the obvious question to ask is whether and to what degree teachers found these sites useful as a pedagogical tool.



Response: It is clear from this that in some situations TAB sites exacerbate the problems as outlined.

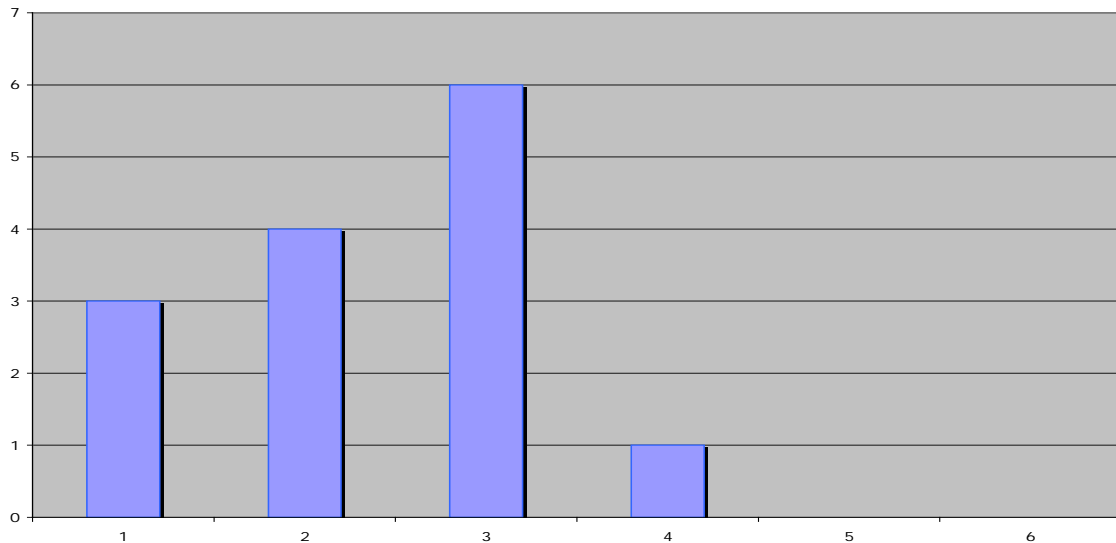
7. Chords and scales are generally taught in isolation of each other.

In current instruction books chords are taught as an accompaniment to a melodic line, and the use of scales is rarely explained other than as a technical requirement.



Response: Teachers largely agreed.

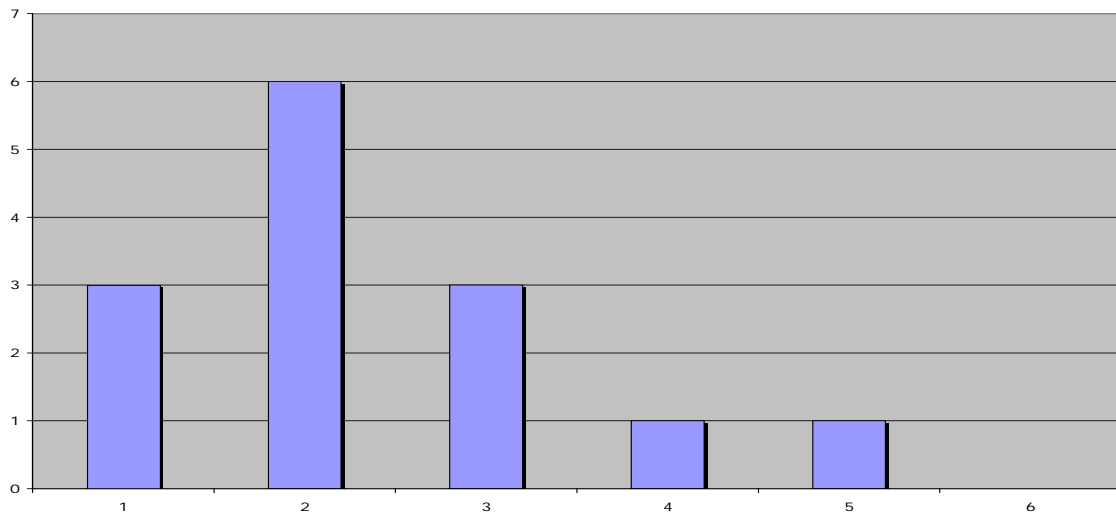
8. Most guitar instruction books place little or no importance on learning chords and triads through their inversions.



Response: The response from teachers largely concurs with my own findings.

9. Method books do not generally explain the guitar's capabilities as a chord melody instrument.

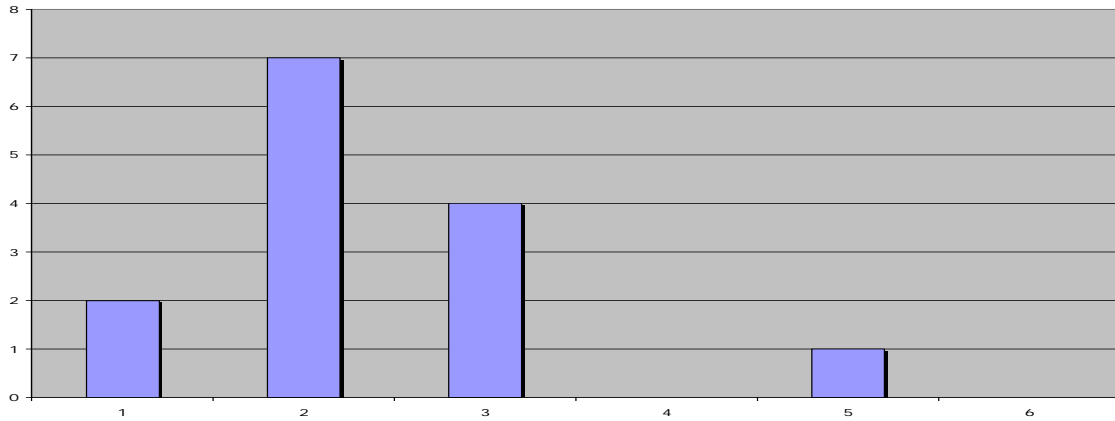
Method books generally display a melodic line as distinct from the chordal accompaniment.



Response: All but two teachers agreed with this question. There are some jazz method books that do begin to explain the concept of chord melody playing on the guitar, but it is certainly not a concept that is introduced early in a student's development.

10. Much of the repertoire featured in method books is out of date.

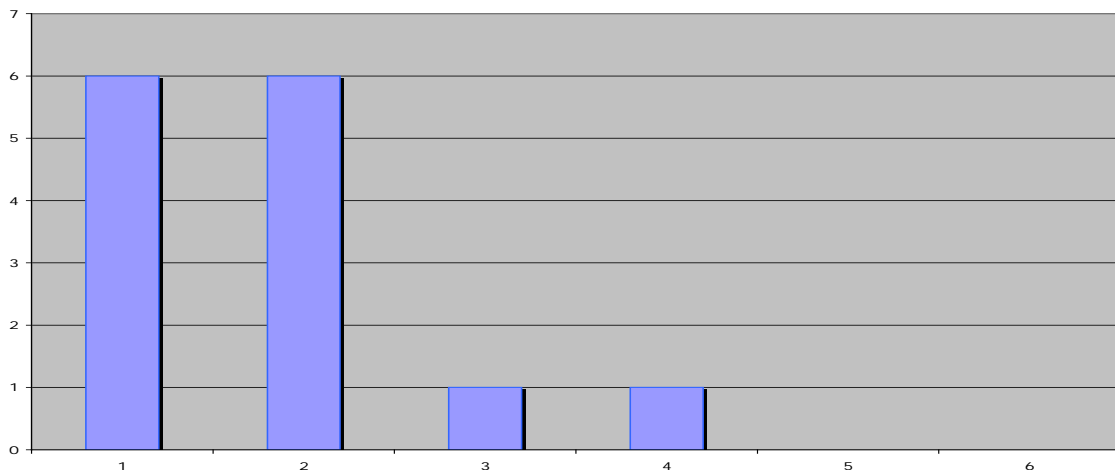
The repertoire included in method books has remained static over the past thirty-five years. The chief reasons for this is that copyright restrictions make it unviable to include modern repertoire. As a result, many students are not keen to work through a method book containing repertoire that is dated, one with which they are unfamiliar. This has in turn pushed them towards Internet-based popular repertoire.



Response: Teachers largely agreed with this question, with one disagreeing for reasons not given.

11. Method books in general do not address the parameters of sound, dynamics, touch and feel.

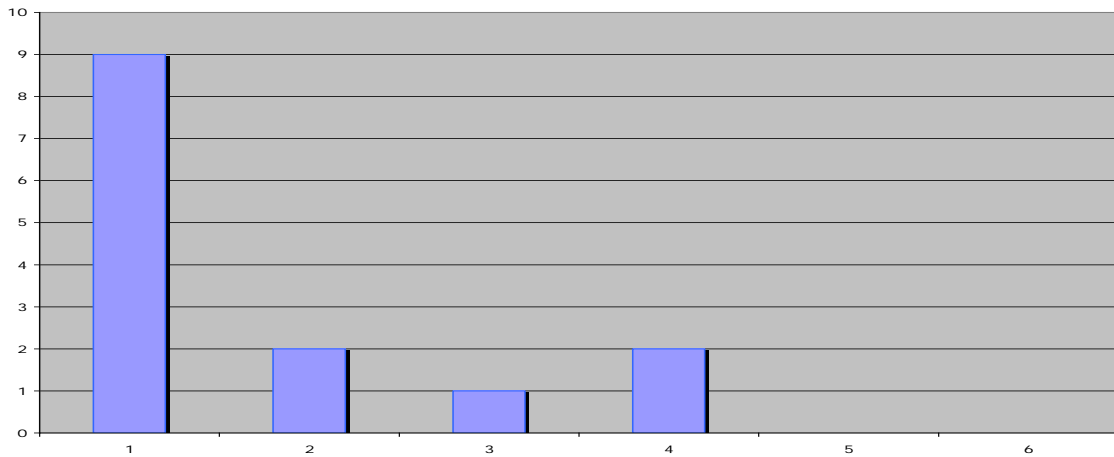
The guitar has a range of subtleties and nuances that are employed over a diverse collection of genres. In my experience, guitar students at the tertiary level have very little concept of the subtleties of the guitar.



Response: Teachers were mostly in agreement.

12. Very little emphasis is placed on developing a strong time feel in single note playing.

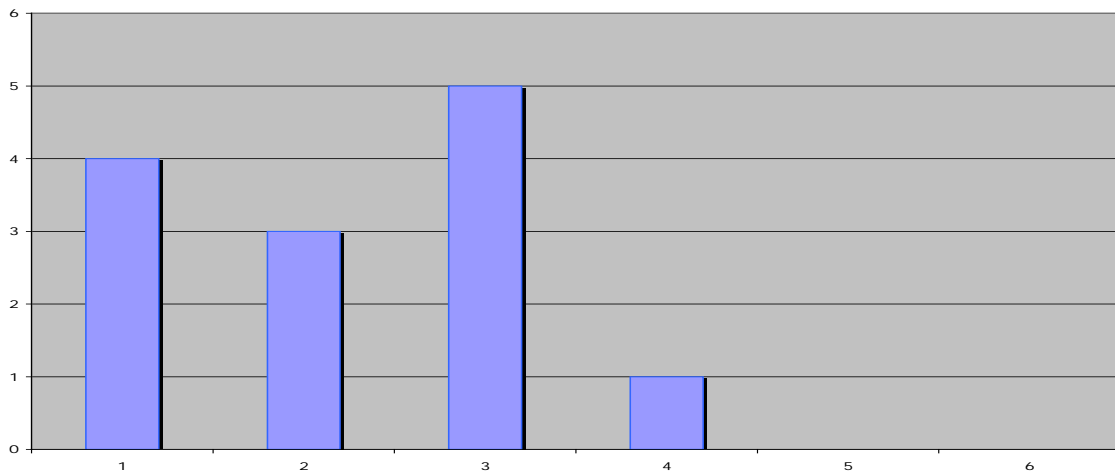
From my own experience very few students have a true understanding of time feel in their own playing, and often confuse it with technique. This area seems to be neglected in current tutor books, yet it is one that all teachers need to address in their own teaching methodologies.



Response: This is best summed up in the comment from one teacher that ‘none of the books I’ve used say anything significant on the subject of rhythm’.

13. There is no one method that has an integrated approach to chords, scales and repertoire.

In modern method books there is no logical connection made between chords, scales and repertoire. Chords and scales are often explained randomly as information for the student to memorise in relation to technique and divorced from repertoire.



Response: The majority of teachers agreed.

It has been pleasing to recognise throughout this survey that the problems as outlined earlier are not mine in isolation. Secondary and tertiary teachers have confirmed my own findings and in some cases expressed a level of frustration. It is clear that teachers do not rely solely on current method books and many, like me, have experienced shortcomings that can only be addressed through the creation of original material in order to visualise and better understand the fretboard.

This conclusion is also apparent in guitar books that have been written by highly respected guitar players in response to the perceived problems and shortcomings in current pedagogy. Goodrick goes so far as to specify a better knowledge of the fingerboard as his first priority in regards to what a student will learn from his book.²⁰

Steve Khan for his part advocates learning chords and notes on strings 1 (E), 2 (B), 3 (G) and 4 (D):

It is my experience that in the context of making music with other instruments, most of the chord voicings that employ the 'E' and 'A' strings are essentially useless. The reason being, that when we're using these two strings, we're likely to be in the way of the bass, and potentially clouding the lower register of the keyboard.²¹

George Van Eps makes triads a priority:

The recognition, identification, relationships and understanding of the various triads is very important to all these studies and music in general. One must try to evaluate the many possibilities they afford for they are endless.²²

The problems highlighted, and reinforced throughout the survey can be addressed in a number of ways. These are summarized as follows:

- Taking a single string approach to scales
- Learning diatonic chords via string sets
- Better chosen and targeted repertoire choices

The written exercises following section, 'Solutions' address these considerations sequentially, and are presented as a series of lessons. In support of the exercises a DVD (Appendix A) is provided demonstrating all written examples, with each chapter corresponding to the lessons following. An accompanying CD (Appendix B) provides recordings of the original compositions used in support of selected lessons, and offers backing tracks to allow the student to play along. The CD also contains backing tracks provided for improvisation in support of the single string approach to the fingerboard. Improvisation is an integral part of the contemporary guitarist's skill set, and the learning

²⁰ Mick Goodrick. *Almanac of Guitar voice leading. Vol 1.* (Cambridge: Liquid Harmony, 2002), n.p.

²⁰ Steve Khan, *Contemporary Chord Concepts* (Miami: Warner Brothers, 1996), p. 7.

²¹ George Van Eps, *Harmonic Mechanisms For Guitar* (Pacific, USA: Mel Bay, 1980), p. 18.

of scales across the fretboard will remove the reliance on predetermined patterns which commence on the tonic.

Solutions

A Triad and Scale Study for Contemporary Guitar

The following method comprises four lessons, with lessons 1 to 3 exploring the keys of C, F and Bb major respectively. Lesson 4, a repertoire-based lesson, applies a triadic approach to a blues in G. The content of the first three lessons falls into three main sections, with each lesson following the same format, as follows:

- 1) exercises that redress the problems of fretboard knowledge through the study of major scales on one string in isolation, across keys generally unfamiliar to the non-jazz guitarist. Each key area is divided into string sets starting with the first, second and third strings, which allow four string sets per key and the student should work on each string set individually before attempting to move on. This study has omitted the scale on strings five and six, as these strings will be familiar to intermediate students who have studied chords and scale patterns from existing methodology. The scales deliberately omit positions and fingerings. The distance between intervals and relevant note location are easier to conceptualise on one string and concentration can be focused on subtleties specific to the guitar, such as, dynamics, tone, touch and feel.
- 2) expanding on this, exercises are offered to enhance a greater understanding of guitar harmony through the use of diatonic triads employing specific string sets. As a pedagogical device this provides an understanding of the chord-scale relationship and demonstrates the use of chords as more than just an accompaniment to a melodic line. As a visual device chords can be seen on the fretboard and surrounding scale notes can be visualised in relation to them.
- 3) original repertoire is provided to contextualize what has been learned in 1) and 2). The material assists the student in visualising triads across the fretboard and places a strong emphasis on the importance of time feel.

Lesson 1: C Major

DVD Example 1.1

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The C major scale starting from open E on the first string is played through an octave expressing the phrygian mode, followed by the notes of a C major triad played on the first string. The tonic triad is played as close position voicings through its inversions, starting with the second inversion, root position, first inversion and the octave repeated. The diatonic triads are in second inversion and built from each scale note on the first string. The C, F and G major triads are played through their three inversions with the first string as the reference point. Finally, the C major scale is played surrounding each triad from the lowest chord note to the highest allowing for six scale notes. This step is of particular importance in being able to visualize the scale in reference to the chord being played, and to make the connection between the chord/scale relationship.

DVD Example 1. 2

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The C major scale is played entirely on the second string from C to C, an octave higher. The process for this set of strings is identical to the first set of strings being scale, triad, diatonic triads, one, four and five chords, diatonic triads and surrounding scale notes. This string set gives us the first inversion of all diatonic triads.

When moving string sets it is important to note that the top note from the preceding string set drops an octave to become the lowest note on the new string set. That is, first position C contains the notes G, C, E lowest to highest on strings 1, 2, 3, on strings 2, 3, 4 the E is now found an octave lower giving us E, G, C. This is true of all triads when moving through the string sets.

DVD Example 1.3

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C major is played from G to G on the third string, a G mixolydian mode, and on this set of strings all diatonic triads are root position. Whenever triads are in root position only five scale notes are possible from lowest to highest notes in the triad.

DVD Example 1.4

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Format as for previous string sets.

DVD Example 1. 5

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This lesson demonstrates the C major chord played through all inversions across all string sets, giving a possible sixteen different fingerings for a C major close position voicing. As shown in the written lesson this same idea can be used for the diatonic triads across all string sets.

DVD Example 1. 6

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Many method books contain this old spiritual and this arrangement in the key of C uses triads and employs a very loose time feel. The student should learn the melody in single notes as indicated in the upper most voice before then learning to harmonise the melody and add embellishments.

C Rock: (DVD Example 1. 7)

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'C Rock' demonstrates the use of triads in a rock style in the key of C major. C major is an unusual key for a rock tune on guitar, and this style of playing would more commonly be found in the keys of E or A, where open strings can be utilised.

- C major scale improvisation (DVD Only, Example 1. 8)

This is a practical application of the C major scale being employed in improvisation utilizing the complete fretboard. The ability to visualise the triads and scale over the whole fretboard allows the player freedom to create melodies, rather than rely on patterns and pre-determined fingerings.

Lesson 2: F Major

DVD Example 2. 1

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F major scale starting from F on the first string is played through an octave, followed by the notes of an F major triad played on the first string. The triad is then played as close position voicings through its inversions, starting with the first inversion. The diatonic triads are in first inversion built from each scale note on the first string. The F, Bb and C major triads are then played through their three inversions with the first string as the reference point. Finally, the F major scale is played surrounding each triad from the lowest chord note to the highest, allowing for six scale notes.

DVD Example 2. 2

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The same format is followed as was used in Lesson 1. All diatonic triads are in root position and therefore only five surrounding scale notes from the lowest to highest are possible around each triad.

DVD Example 2. 3

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The F major scale is played from G to G (therefore outlining a dorian mode) on the third string, and all diatonic triads are played in second inversion.

DVD Example 2. 4

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Format is as for previous strings, with all diatonic triads played in first inversion.

F Rock: (DVD Example 2. 5)

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‘F Rock’ demonstrates how both chords and single notes can be combined in a manner that was commonly employed by Jimi Hendrix. It features the use of double stops, two notes played together, and the chord structure is an ABA form. A piece in this style would more commonly be written in the key of E for guitar. The time feel in this piece is slightly swung and behind the beat throughout.

Lesson 3: Bb Major

DVD Example 3. 1

QuickTime™ and a
None decompressor
are needed to see this picture.

The Bb major scale starting from F on the first string is played through an octave (the F mixolydian mode), followed by the notes of a Bb major triad on the first string. The tonic triad is played as a close position voicing through its inversions, starting with root position. The diatonic triads are in root position built from each scale note on the first string. The Bb, Eb and F Major triads are played through their three inversions, with the first string as the reference point. Finally, the Bb major scale surrounding each triad is played from the lowest chord note to the highest allowing for five scale notes.

DVD Example 3. 2

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The same format is followed as for the previous lessons, although it is important to note all diatonic triads are second inversion.

DVD Example 3.3

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The Bb Major scale is played from the root note on the third string, and all diatonic triads are played in first inversion.

DVD Example 3.4

QuickTime™ and a
Hewlett-Packard
are needed to see this picture.

The Bb major scale is played from the open D string through an octave (D phrygian mode). In this string set an extra Bb major triad is included starting from the low F on the sixth string, but all diatonic triads are played in root position.

I, V1, II, V. in Bb Major: (DVD Example 3. 5)

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This previous example demonstrates that simple triads can be used to outline four-part harmony omitting the root, which is played by the bass. The exercise has been separated into string sets and played using a repetitive rhythm to allow the student to visualise the triads across the fretboard without the complication of changing rhythms.

The triads used throughout are

- D minor – Bb major 7
- Bb major – G minor 7
- Eb major – C minor 7
- F major – F major#5 – F7

The first eight bars use the next closest inversion of each of the following triads so as to allow the student to see that there is a close connection between chords, even though the bass notes maybe moving by up to a fifth. In bars 16 and 32 an Fmajor#5 triad is used to set up tension before resolving back to the tonic chord.

Improvisation (DVD, Example 3.6)

This example (only on DVD) is based on the previous chord progression and demonstrates the use of triads in an improvised setting, where the primary focus is melody and rhythm.

Lesson 4: G Blues

The use of minor triads. (DVD Example 4. 1)

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In this lesson two minor triads are used to represent a given dominant seventh chord. The minor triads are:

- Dm and Em (G7)
- Am and Gm (C7)
- Am and Bm (D7)

Two triads played over a root note provide the upper extensions of a dominant chord, the ninth and the thirteenth, and also include the root, third, fifth and seventh degrees. Lesson 4.1 sets out the way to practice these triads in relation to the dominant seventh inversions, thus enabling the student to visualize the two triads around the dominant chord. These triads should be played on the 1, 2, 3 and 2, 3, 4 string sets.

G7 Blues: (DVD Example 4.2)

QuickTime™ and a
H.264 decompressor
are needed to see this picture.

This piece is a 12 bar blues in G, in a 12/8 feel. It is played in a question and answer or call and response style typical of the blues.

Conclusion

This project has been largely motivated by the problems and difficulties I as a guitar teacher have encountered with students upon entering tertiary study. To recap, the problems are two-fold and relate to

- An inability to find notes and chords outside of predetermined patterns, positions and fingerings.
- A lack of understanding of the harmonic capabilities of the guitar.

A general commentary, together with a brief critique of selected method books and an expert survey, have highlighted reasons as to why these problems have come about. These reasons include shortcomings in current method books, ill-prepared guitar lessons, limited and dated repertoire, an over-reliance on tablature, and the reluctance of students to move outside of their genre-specific comfort zones.

Throughout this study it has become increasingly clear that the areas of study that are neglected in current method books are those of triads and their inversions and the study of scales on one string. To enable a more complete understanding of the fretboard there needs to be an introduction to the linear approach of learning scales and chords much earlier in a student's development. These concerns, together with the problems highlighted above, are addressed in the structured exercises offered here, which merge technical and theoretical aspects of fretboard pedagogy. Technique is often considered to be limited to the ability to play fast on the guitar but subtleties such as tone, feel and touch are as important and need to be addressed under the general heading of technique. These areas of technique can be developed more easily on one string in isolation, where the goal is not speed as with the learning of a pattern or fingering but the sound produced on each note. Steve Kahn has this to say on the subject:

As a teacher I've been amazed at the technical advances on the instrument. Never have there been so many players with such incredible technique. Oftentimes that ability has come at the expense of a comprehensive knowledge of music, harmony and theory. In my experience, that has translated into students allowing their chordal knowledge to lag far, far behind.²³

Playing on one string, such as is advocated here, will result in a greater understanding and knowledge of the fretboard. It will also assist in those areas which are currently considered difficult; sight-reading, chordal inversions and playing in twelve keys.

The motivation for undertaking this study, and for the resultant revision of fretboard pedagogy is based on the belief that there needs to be a fundamental shift in thinking, away from the genre approach to guitar lessons whereby performative techniques are demonstrated to the student from a particular artist to the exclusion of the wider body of knowledge. The broader implications of this approach need to be

²³ Steve Khan, *Contemporary Chord Concepts*, p. 5.

considered in terms of the student's ability to gain a comprehensive understanding of the theoretical underpinnings of the guitar fretboard. One teacher engaged in the survey agreed, and advocated a teaching philosophy along the following lines:

- Be in tune with the student (regarding what they are interested in musically, how much music means to them, how much they can physically practice a week, their ambition and desires as a guitarist, being aware if a teaching method is having a negative or positive affect)
- Keep the teaching interesting and varied allowing the student to comprehend a small amount of theory each lesson and then revising it regularly. Show them how important the knowledge is and how they can apply the knowledge in an interesting way. Then do something different like learn a song by a group they relate to.
- At the start of a lesson do something new spontaneously maybe using a new concept like a chord scale relationship or a scale or a new chord/progression and improvise on it.

Yet a more inclusive teaching philosophy will not solve all of the problems in isolation. There perhaps needs to be a change in the way that educational bodies consider their criteria for contemporary guitar performance assessments. Current examination criteria are conducive to a patterned approach to learning, advocated with the bulk of contemporary teaching syllabi. A greater understanding of the body of knowledge required by a student entering tertiary study, and a greater correlation between secondary and tertiary performance standards need to be adopted by educational bodies in regards to contemporary guitar in SA. There are certain shortcomings in the performance requirements, which are currently purely repertoire-based. An examination system which is far more holistic in its approach to assessment would produce a better outcome for all students.

In conclusion, the examples and concepts presented in this study are in many ways just an introduction to the linear approach to the fretboard, and can be explored and expanded upon by both teachers and students alike. The use of triads and their inversions have all been presented as close voicings, and further study would involve learning triads as spread or open voicings across string sets. The use of triads as part of a larger chord is another area of potential study, whereby the triad forms the upper voices, the colour tones of a chord.

My experience has shown that the study of triads when adopted by my own students offers a greater understanding and comprehension of the fretboard. It is anticipated that the ideas and exercises presented in this thesis will go some way to addressing the shortcomings in conventional methodology, and will form the basis of a revised pedagogical approach to contemporary guitar.

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Track List for DVD

C Major

- Track 1: Example 1. 1: String sets 1, 2, 3.
- Track 2: Example 1. 2: String sets 2, 3, 4.
- Track 3: Example 1. 3: String sets 3, 4, 5.
- Track 4: Example 1. 4: String sets 4, 5, 6.
- Track 5: Example 1. 5: C major inversions.
- Track 6: Example 1. 6: Amazing Grace
- Track 7: Example 1. 7: C Rock.
- Track 8: Example 1. 8: C major scale improvisation.

F Major

- Track 9: Example 2. 1: String sets 1, 2, 3.
- Track 10: Example 2. 2: String sets 2, 3, 4.
- Track 11: Example 2. 3: String sets 3, 4, 5.
- Track 12: Example 2. 4: String sets 4, 5, 6.
- Track 13: Example 2. 5: F Rock.

Bb Major

- Track 14: Example 3. 1: String sets 1,2,3.
- Track 15: Example 3. 2: String sets 2,3,4.
- Track 16: Example 3. 3: String sets 3,4,5.
- Track 17: Example 3. 4: String sets 4,5,6.
- Track 18: Example 3. 5: I, VI, II, V. in Bb Major.
- Track 19: Example 3. 6: Chordal Improvisation

G Blues

- Track 20: Example 4. 1: The use of minor triads.
- Track 21: Example 4. 2: G7 Blues

Track List for CD

- Track 1: C Rock
- Track 2: C Rock backing track.
- Track 3: F Rock
- Track 4: F Rock backing track.
- Track 5: Bb Major I, VI, II, V.
- Track 6: Bb Major chordal improvisation.
- Track 7: Bb Major backing track.
- Track 8: G7 Blues
- Track 9: G7 Blues backing track.
- Track 10: C Major backing track for improvisation.
- Track 11: F Major backing track for improvisation.
- Track 12: Bb Major backing track for improvisation.

CD and DVD are included with the print copy held in
the University of Adelaide Library.