A Cappella Harmony Singing and Its Effects on Aural Perception in Jazz Students’ Improvisation Skills

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Abstract

This project investigates the aural and musicianship skills of students enrolled in a Bachelor of Jazz Studies Course, with the ultimate goal of improving their improvisation skills. At the core of the project is the idea that students consolidate their theoretical knowledge and link it with their aural skills when they use their voices in an ensemble, rather than relying on their instrumental skills. Participating students were surveyed to gain insight into their thoughts about the effect that the musicianship skills gained during class had on their improvisation skills. Data has been gathered regarding methods of ear training in current use in various jazz schools in Australia as well as surveying current theories of the importance of ear training in jazz education and the extant modes of delivery. Throughout the project repertoire was arranged especially for each group in accordance with the desired learning outcomes. The final result of the project is a syllabus for conducting the course, which is known as A Cappella Ear Training, including excerpts from the author’s arrangements and instructions for delivering the course content.
Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

(Signed)____________________________________________

Helen Margaret Russell
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Introduction

This project investigates the ways in which a cappella part singing can be used as a means for the development of aural skills for students of jazz in a tertiary setting. It seeks to answer the question of how the use of the voice in a group setting can reinforce understanding of music theory by putting it into immediate practical use without mediation through the mechanics of any instrument. The project focuses on the development and delivery of a course I have developed called ‘A Cappella Ear Training’. The drills, exercises, repertoire and arrangements are designed to foster the development of a deep understanding of theoretical material. Repertoire has been chosen and arranged to meet the specific aims of the learning outcomes, and an analysis of these arrangements forms part of the work.

There are many texts available regarding aural training, many of them useful for both students of jazz and classical music. Indeed, the two streams are taught in the same ear-training courses in quite a few institutions. However, although aural learning is given much more weight in jazz courses, there is not a great deal yet written about specific jazz ear training methods. For this reason I have embarked on an investigation into current methods for aural training in jazz education in Australia, including my own pedagogical practice, in order to apply this knowledge to the development of new pedagogical resources for jazz aural training using a cappella singing.

Background

Internationally, there is a feeling in some jazz education quarters that the oral/aural tradition is being lost with the standardization of jazz education and that this has produced a generation of players that lack in distinctive voices. In his appraisal of collegiate jazz programs in the United States of America, Javors (2001) found that “Collegiate jazz programs have often been charged with functioning as factories in producing very proficient musicians who rarely assume an individual voice or creative style, a deficiency that is diametrically opposed to the essence of jazz” (p. 67). Similarly, it has been noted by Ake (2001) that “In many instances, tests and grades measure only a student’s ability to reproduce, rather than apply, a given knowledge system” (p. 144). Green (2002) notes that the institutionalization of popular styles in Conservatoria can lead to a “peculiar ‘educational’ sub-style” (p. 38). These statements would appear to be commenting on the results of an over-reliance on codified theory in contrast with the largely ear-based way in which the
giants of the jazz world learnt to play. Swann (2000), writing on the subject of teaching jazz theory aurally, writes: “The primary question, then, is how the jazz educator can integrate aural skills and theory training. The answer is through singing” (p. 4).

Over the past several years as a teacher in the jazz education field I have been developing a way for all students of jazz, whether instrumentalists or vocalists, to benefit from the experience of group harmony singing, unaccompanied by instruments.

As part of my musical background, I participated for many years in choral and small group harmony singing. It is my experience that singing in harmony without instrumental accompaniment is an effective way to develop an inner sense of tonality and fine-tuned listening skills. This is supported by academics such as Gleason (Anonymous, 2012) who states: “Vocal ensembles in general provide the student with an organic learning experience; one that enables them to collectively develop their skills in harmony, sight-reading, and ear-training” (p. 28). Over the past thirty years I have arranged music for several a cappella groups, drawing mainly on my own childhood-to-teenage experience of singing in and listening to close harmony groups. In recent years I have reflected on how harmony singing has impacted on my aural and improvisational skills and have come to the conclusion that it has been essential to the development of my ability to learn music by listening – a skill that is fundamental for students of jazz.

As someone who plays jazz principally by ear I have always encouraged my bass students to improve their aural skills, reasoning that the better they can hear, the better they can teach themselves. Hearing music and perceiving musical elements is not the same thing, of course. ‘Audiation’ is the term coined by Gordon (1999) to describe the difference between merely hearing sounds and being able to understand those sounds within a musical framework or syntax. Audiation also describes the reverse process; that of hearing sound as one looks at the printed page:

To notationally audiate, we need to transcend the printed symbols and audiate the music that the symbols represent. Just as aural perception is different from audiation, so the process of decoding notation is different from notational audiation. (Gordon, p. 42)

Thus, Audiation describes what ideally goes on in the brain of a functional musician when they listen to or read music. As such, I find it interesting that the term has not become more widely used in music education literature.
Research Design

This research uses a multi-faceted approach that intends to capture both my existing embedded knowledge as a jazz educator, the views of other jazz educators in Australia, and the experiences of my students in working with material that I have developed specifically for this study. It revolves around an action research methodology, in which information gleaned from the project has been directly applied to classroom contexts and then evaluated, revised and re-applied over the course of three semesters of study.

The background information for this research has been derived from multiple sources, the first of which is a representative literature review on jazz education, aural training and improvisation. The second source of data is a survey administered to jazz education practitioners around Australia. Nine teachers from tertiary institutions around Australia completed my questionnaire. In this survey teachers were asked about the tools they were using to promote aural skills in their students; which books, methods, and whether/how they are using singing towards this end. They were also asked about the course design of their aural skills program and whether or not it was included within a larger course description, for instance Musicianship. Respondents were asked to rate (in their opinion) how highly aural skills development was valued by them, their institution and their students. The questionnaire was distributed as a PDF document in some instances, and a Google document was also used. I interviewed two other teachers in a semi-structured way about their thoughts on aural training and how it should be taught. Additional information was gathered by means of a journal kept throughout the project and data gathered from participating students via personal reflections, a survey and interviews with several students.

The action research aspect of the project took place in the context of an aural skills class at the Jazz Music Institute, an independent jazz tertiary institute in Brisbane, called “A Cappella Ear-Training”. Half of each session was spent on drills facilitating understanding of key centres and chord building, including chord progressions, and the other half was spent rehearsing repertoire as an a cappella ensemble. Each semester I had a new intake of students, most of them instrumentalists with no particular singing background. The emphasis was less on creating a performing ensemble and more on using the voice to solidify understanding of common musical material, reflecting the idea of process over result as articulated by Gamez & Sorensen (2014). Nevertheless, the courses culminated in a performance, which resulted in various benefits for the students as musicians and as performers.

Action research as described by Dick (2000) is cyclic, participative, qualitative and reflective. These descriptors can all be applied to this research project. For each of the three
semesters covered by the study, a lesson plan including assessments was formulated. Within each semester these plans were altered as necessary to accommodate the characteristics of each cohort of students, for example, new arrangements, or spending more or less time on particular drills and exercises. In making these decisions I would draw on my experiences as a performer and teacher in a reflexive way, speaking to “the articulation of one’s tacit way of knowing, which is considered an important font of professional knowledge” (O’Callaghan, 2005, p. 217). For each semester, my journals have disclosed the efficacy of the various drills and exercises as well as the ways in which repertoire was received and ultimately performed.

The result of this activity constitutes my creative output for this project, along with the arrangements themselves. It is a series of ten lesson plans for the delivery of the AET course and this is supplied as a separate document. Each lesson plan provides examples of exercises that are used to develop the requisite skills. There is a progression throughout the plans from easy to more difficult tasks, but the various activities can be repeated and/or adapted to suit the needs of a given cohort. The assessment activities that I have so far used are touched on, but not in detail, as these assessments are not completely necessary to the successful conduct of the class. I have also included excerpts of several of my arrangements along with instructions, or suggestions, as to how the material may be taught to the group. In addition to the lesson plans, I have provided two introductions, one for students and one for teachers. The “Foreword to Students Embarking on AET Course” is a short document outlining the goals of AET as well as the existing learning challenges that led me to its development. The teachers’ introduction is a more substantial document, which describes in detail the exercises used and the rationale behind them. It also details the ways in which I have assessed students. The perusal of this document would be necessary before any teacher were to begin giving AET classes, as the instructions in the lesson plans themselves are briefly outlined only.

Data was collected through three different processes in an attempt to triangulate the students’ responses. Each course at JMI requires a 500-word essay that reflects on the subject undertaken and the skills gained from it, and these have been a valuable source of feedback for me. I collected 34 of these over three semesters. I also posted a survey on Survey Monkey, which all students were invited to complete after participating in the course. I had eighteen respondents to this. The third data collection vehicle consisted of ten interviews with volunteer students, for which ethics clearance was granted (Protocol number QCM/06/13/HREC). These interviews were semi-structured in nature, with a short list of questions but ample opportunity for students to elaborate freely in their responses. It can
probably be assumed that those that volunteered felt positively about the course, although
some were more articulate about it than others. The data I have been able to gather from them
are to be understood qualitatively as the subject matter is not readily quantifiable; what is
being sought here is deep learning that may take time to manifest in a given student’s playing
abilities. I have found that the students’ own abilities and biases when they entered the course
are reflected in their responses to questioning. While there have been criticisms, nothing
negative has emerged as a trend from the survey.

Scope and Limitations

This research is located at the intersection of three large and complex fields of study:
jazz, aural training, and improvisation. It is not intended to provide a comprehensive
examination of any of these fields, as to do so would require a far greater research space than
that which is provided through the Master of Music Research. Rather, this study draws
information from each of these fields wherever it provides a useful basis for my applied research, either by way of contextual explanation, or specifically as a basis for the
development of my own pedagogical methods.

Although I am interested in the larger picture of music education, it is in the context
of jazz education that I have had the opportunity to research aural training via a cappella
singing. Jazz education is a relatively new field and although there are many well-established
curricula running throughout the world, methods for teaching the requisite knowledge are
constantly being evaluated for their effectiveness. For the purposes of this study I have
restricted the scope of my engagement to one case study of jazz education in an institutional
context, scaffolded by a broad survey of existing literature on the state and perception of jazz
education in general in the Australian context. Within this, my focus is specifically concerned
with ear training as a key component of jazz education. Thus, I specifically consider ear
training as it is delivered in jazz programs in the Australian context.

Aural training literature is itself replete with references to early musical learning, and
many aural training methods are specifically directed at young learners, such as the methods
of Kodaly, Orff, and Dalcroze. However, where institutions are concerned, some authors
have been critical of the way in which aural training can be neglected in favour of ensemble
development, rather than individual development, or as Swanwick (1999) describes, an effect
where ‘school music’ becomes a different phenomenon from ‘music’. A student can be a
member of one such ensemble for several years and have a negligible degree of musicianship
improvement at the end of their involvement. Similarly, Pratt (1998), notes that
“…conventional aural training programmes suffer from being driven by the need for assessment…” (p. 150). My case study is not concerned with assessment or normative development per se, but with evaluating the capacity for young adult musicians to effectively engage with aural training in a way that benefits their overall ability as musicians. This case study does incorporate ideas drawn from early childhood education, but applies them in a young adult context.

This investigation of jazz and aural education informs a central question, which considers the effect that improved aural skills gained via a cappella singing have on improvisation outcomes. This study does not seek to prove the validity or otherwise of the contention that improved aural skills lead to better improvisation skills as this contention is actually widely supported in the literature that I have surveyed such as Dobbins (1980), Azzarra (1993) and Crook (1999) etc. Thus, I have not set up ‘before and after’ tests of improvisational skill, or other similar measures of improvisational aptitude, as such tests have been conducted in previous research and are notoriously difficult to judge objectively as Madura (1995) points out: “there appears to be little agreement on the number and types of measurable descriptors of jazz improvisation achievement” (p. 48). Rather, I am collecting information from teachers and students that sheds light on the process by which information understood aurally feeds into an overall jazz education and enables the player to perform spontaneously and reactively as an improvising musician.

Finally, it should also be noted that I am not a trained singer in the technical sense and I don’t expect to ‘teach singing’ in my classes; neither am I prescribing a technically challenging array of singing exercises. I do not act as conductor for the group beyond leading the beginnings and endings of songs; I merely sing with them in various different parts. I have accumulated vocal knowledge through my participation in choirs and my experience in working with singers and actors, and I apply this to my teaching contexts. Neither am I intending to produce ‘a cappella’ singers who might go on to participate in the plethora of amateur a cappella singing opportunities that exist. Rather, this case study considers a cappella singing as a means for achieving greater musicianship in a broad sense, as evidenced by students’ own perceptions and appraisals of their musical abilities.

**Thesis Summary**

Following on from this introduction, this thesis presents three chapters that each discuss a different aspect of the study. These are accompanied by an appendix that contains the survey and interview questions used in the research.
The creative component of the research: a set of learning tools for incorporating a cappella singing into a jazz education aural studies context, is supplied separately.

Chapter One provides the background to the topic and expands upon the research context. It begins with an overview of my own background and practice context, then a review of literature encompassing the three key areas of this study: a cappella singing, jazz education, and aural training. The chapter then presents survey and interview findings from other jazz practitioners in Australia, before moving to a conclusion that summarises the overall tenor of aural training in jazz.

Chapter Two presents the specific research context for this study, the Jazz Music Institute. It describes the school environment, the usual nature, format and structure of the curriculum, and the aural training class in which I have applied an a cappella approach. It delineates the ways in which student responses have been gathered, and explores these for the purposes of reflection.

Chapter Three is a theoretical analysis and discussion of the arrangements that I have written especially for the class, from which the learning tools in the appendix have been derived. These chapters are followed by a conclusion that summarizes how student experiences have been used to inform the development of a new approach to aural training in jazz.
Chapter 1: Australian Jazz and Aural Training In Context

This chapter has three sections: situating the researcher, background literature, and results from surveys and interviews.

My own education in jazz, being a mixture of the traditional, ‘learn by listening’ method and a more formal classical music education, makes me something of an outsider to jazz education as it has existed in universities for the last 50 years. By necessity, people like me without formal jazz education have been employed in jazz courses, drawing on our ‘real world’ experience to instruct our students. It is only in comparatively recent times that graduates of such degree programs have become teachers of jazz. As someone in jazz education, but not of it, so to speak, I have come to question the way in which jazz knowledge has been packaged and presented to students, and this research is intended to take a close look at the success or otherwise, and the perception of, jazz teaching, with a focus on aural skills, particularly in the Australian context.

In this project I have brought together strands of new knowledge, my own lived knowledge and existing knowledge in order to situate my ideas in the music education field.

Situating the Researcher

My engagement with this topic reflects a musical upbringing within my own family in which singing was a constant aspect of our learning environment. My mother was a classically trained pianist who also played jazz by ear. I and my siblings were taught classical piano but we were also from an early age exposed to a diverse and eclectic range of musical experiences, from gospel choirs to jazz trios. I played my first professional gigs as a teenager with my mother’s trio, being expected in this situation to play by ear in the complete absence of notated music.

When I first began gigging as a jazz musician in Brisbane I noticed that other musicians assumed that I was unable to read music because I played by ear. The underlying assumption corresponding to this is that musicians who read don’t or cannot play by ear. As someone who has consistently used both skills throughout my musical life I find these assumptions to be unhelpful in the extreme, and they are part
of the reason I have begun asking questions of music education. Nolet (2007) articulates this issue: “When music literacy and orality are perceived not as a dualism, but rather, as dialectic, both musical literacy skills and orality skills are strengthened, for the purpose of enhancing the overall musicianship of the learner” (p. 33). My perception as I was growing up was that in formal/classical music circles playing by ear is sometimes regarded as a bad habit that needs to be broken by teaching the student to read music. Even students who have a demonstrated ability to learn by copying music they hear are often discouraged from this practice once they begin formal lessons. Lilliestam (1996) is cited by Musco (2010) in her discussion of the phenomenon of “notational centricity” which has grown out of the Western world’s dominant paradigm of literacy (p. 58). She found that many teachers worry that playing by ear will have a deleterious effect on students’ notation reading skills, and also that many teachers are too uncertain about their own aural skills to encourage students to continue playing by ear. To me this indicates negligence in the development of musicianship skills and leads to those students being denied many of the more creative and enjoyable aspects of being a musician. In fact, it appears from Musco’s appraisal of ear-playing research, that “skills in playing by ear are correlated with skills in music reading” (p. 54). I am not suggesting that great joy cannot be found in learning to play an instrument and its repertoire in the formal way, but the formalization of music in Western society has contributed to a degree of removal of music from everyday life as it is enjoyed in other societies. However, to return from this bigger cultural picture, research does suggest that musicians who develop visual and aural skills simultaneously and in an integrated way tend to achieve better overall musicianship skills.

An interesting side issue that Woody (2012) observes is that musicians who play by ear tend to continue participating in music making later in to their lives than formally trained musicians, some of whom give up entirely even after reaching high levels of instrumental performance. Cope (2005) writes: “A 1967 American study (Lawrence & Dachinger, 1967) suggested that 37% of those who had taken formal tuition continued to play into adulthood. Interestingly, their sample contained a small number of self-taught musicians, 100% of whom remained musically active as adults” (p. 127).

It was whilst teaching aural studies a few years ago at the Queensland Conservatorium that I first noticed the disinclination of students to make connections
between the knowledge gained in the different subjects studied, for example, aural skills, music theory and principal instrumental study. This observation started me thinking about the possibility of better ways to teach music and importantly, musicianship, in more integrated ways. I have also reflected on my own musical experiences and how they have impacted on my creative self and my improvisation skills. It seems clear to me that the combination of listening skills and chordal knowledge that is gained in vocal harmony singing has had a positive effect on my ability to learn by listening and also to play interactively on the bandstand.

Singing is a way of embodying musical information, so for instrumentalists it is a potentially deeper way of learning the required skills. My experience as a bassist is that I can learn to play anything on the instrument that I can sing. Hiatt (2006) contends that “…musical activities in general are the result of clear mental images of sound. We believe that all music teaching can be improved if it is combined with efforts to improve students’ mental hearing” (p. 49). For singers, who generally come from a more emotional standpoint, participating in an a cappella group forces them to use theoretical information in a conscious way that they may not always do as a soloist.

Whilst I realize that my ear-training background is far from standard there are aspects of it that I can introduce to music students that will help them to draw together the seemingly disparate pieces of information that they are receiving in their jazz studies. My experience of playing with my siblings and the diminishing number of other musicians I know that can play music by ear is that it is a hugely enjoyable way of engaging with music, and I would advocate for the literacy/orality dichotomy to be worked through in all types of musical education. I hope that by deconstructing and analyzing my broad musical experiences, I can help my students improve their aural skills and ability to frame musical information in order to gain the maximum freedom, creativity and enjoyment out of playing jazz.

**Situating the Research: Literature Context**

**The A Capella Context**

A cappella singing of popular music has generally not featured in tertiary music courses in Australia. In American colleges there has long existed a flourishing a cappella scene but it has tended to be a voluntary, social, extracurricular activity,
often involving and even run by students who are not majoring in music. “But a cappella groups also serve a larger purpose, often made plain to singers in retrospect: they create a sense of community.” (Duchan, 2012c, p. 488). In Australia much of the choral activity is linked with political causes, such as gay and lesbian or union choirs. Backhouse (Scott-Maxwell & Whiteoak, Eds. 2003, pp. 15-16) posits that some a cappella activity, particularly that involving females only, is expressive of a backlash against technology. Over the last thirty years much has been written about the positive emotional benefits of singing in choirs. Busch & Glick (2012) have shown it to not only to enhance mood but also to promote personal growth. From my point of view as an educator, this aspect of singing is a welcome side effect rather than the central purpose, as my aim is to have students learn musical concepts thoroughly by singing as a group.

There is a long history of a cappella singing in the Western Art music tradition, but it is not directly relevant to this study. Modern a cappella groups frequently take music originally produced using instruments, and rearrange it for unaccompanied voices. The popularity of such groups has waxed and waned: the Barbershop quartet, originating in late 19th century United States, still has many adherents worldwide, and Doo-wop was a strong force in 1950s popular music. In the jazz world groups such as ‘Singers Unlimited’ and ‘The Hi-Lo’s’, with arranger Gene Puerling, set a high standard for the vocal rendition of complex jazz harmonies. Britain’s ‘King’s Singers’ are another notable group in this genre, and mention must be made of the superlative ‘Take 6’, which perform their complex jazz-inflected arrangements of gospel music with incredible precision and groove. While never going away completely, a cappella has had a fillip in popularity in recent years due to the movie ‘Pitch Perfect’, which has inspired the formation of many vocal harmony groups. Current a cappella groups, such as ‘Naturally 7’ and ‘Pentatonix’, use percussive effects such as ‘beat-boxing’ to further simulate the missing instruments. This has resulted in some creative and innovative arranging for voices, however it is mostly taking place independently of music teaching institutions. This is no bad thing - all singing, especially group singing, is to be encouraged, however it appears to me that an opportunity is being lost to make the formal study of musicianship fun and engaging by using the inbuilt instrument belonging to all students, the voice.
Jazz in Academia

Although as Squinobal (2005) notes the first tertiary jazz courses began at New England Conservatory in 1942 and at the Berklee College of Music in 1945 (p. 49), jazz remained uncommon in American universities until the 1960s. The subsequent uptake of jazz by European music schools, and the European inclination to take jazz seriously as an art form, fed into the acceptance of jazz by Academia in the United States. Crichton (2002) states “Jazz was the first twentieth century music to be taken seriously by Academia” (p. 57). Australia’s first jazz course was established at the Sydney Conservatorium in 1972, by Rex Hobcroft and saxophonist/flautist Don Burrows, who was at the time Australia’s most notable jazz musician. Since those days the term ‘jazz’ has come to encompass enormously varied styles of music and institutions are free to place emphasis on whichever of these styles they wish. There is however a core study of what is referred to as chord/scale theory, which forms the basis of theoretical teaching and refers to what is now seen as the canon of jazz music. In the opinion of Squinobal (2005):

Much of what is taught in jazz education directly mirrors the harmonic developmental stages of John Coltrane. Coltrane’s constant searching and persistence has created a perfect model for the teaching of jazz, although only the harmonic facet of his art is focussed upon. (p. 49)

Whilst not being against this course of study, Squinobal (2005) regrets the way in which it “focuses on harmony and neglects all other aspects of improvisation” (p. 50). “The development of advanced rhythmic use and individual tonal expressions are two of the most creative and vital aspects of improvisation that have been neglected in jazz education” (p. 50). He cites Schuller: “The rhythmic drive made no doubt that we were listening to jazz, for mere choice of notes has never determined whether a thing was jazz or not” (Squinobal, 2005, p. 50).

John Coltrane was one of the first jazz masters known to have studied and extended his technique and harmonic material in a methodical way. However, studying Coltrane's harmonic development will not help a student to play melodically over a Gershwin or Rodgers melody from the ‘30s or ‘40s. Bass player Adam Nitti (2004) writes of the difference between playing from learned theory and playing ‘what you hear’.

In making our choices of what notes to play (or to avoid), we rely mostly on
the fundamental “rules” of chordal improvisation. As a result, we tend to
develop what I call “default” ideas that can be used over many common
progressions... Although this is an effective way to be introduced to the art of
improvisation, improvising only by “playing the math” ultimately leads to a
dead end in your development. If you want to be a great improver, you need
to learn how to play what you hear – and this level of development doesn't
naturally evolve from matching memorized patterns to chords. (p. 92)

Gonda (1983) observes that the ‘natural’, street-smart musicians have largely
“given way to a new breed of well-educated, academically trained musicians” (p. 19).
Maceli (2009) posits that the university course has come to replace the jam session,
which once was the primary learning ground for a jazz musician (p. 22). There is a
general feeling amongst the jazz fraternity that perhaps the jazz education sector has
followed the classical musical education model a little too closely and lost some of
the connections with the organic beginnings of the genre.

Even though Berklee and the New England Conservatory were offering jazz
courses in the 1940s it is true to say for the most part that the prominent proponents of
‘straight ahead’ jazz did not attend university to learn to play jazz. Many jazz
musicians and listeners like to think of jazz as an ‘oral/aural tradition’, defined by
Goldman (2010) as:

The oral/aural transmission of both socio-cultural information (attitudes,
values, mores, etc.), and musical information (repertoire, techniques,
pedagogy) in certain societies, namely traditional African society (in contrast
to writing and notation in Western society). Jazz music and its associated
learning practices have their origins in the oral/aural tradition of Africa. (pp.
5-6)

In a system of learning that Goldman calls “Aural Modelling”, he explains:

In this learning model, practitioners learn by observing, listening and imitating
their idols either in person or on record. Prouty (2006) underscores the
importance of the oral tradition by pointing out that in this context learning
often takes place without the benefit of an additional medium, such as musical
notation or theory. This is further evidenced by the fact that many great jazz
masters did not know musical theory or read music but rather learned to play
by copying their idols completely by ear. (pp. 9-10)
Although the one thing that can be said with certainty on the subject is that jazz cannot be learnt exclusively from books, it is not a simple either/or proposition. Prouty (2006) argues that the jazz masters were not always as theoretically uneducated as people like to believe, and that the tradition has been handed down using various types of one-to-one instruction, listening, and notated methods, sometimes all methods used by one person. “Mingus, in fact, was known for regularly teaching his band members their parts by singing them, while at other times he relied on notated scores” (Prouty, 2006, p. 5).

Students who are paying attention to the general tenor of the teaching realize that it is the recordings of the jazz masters that really operate as texts that will, if studied assiduously, impart the most useful knowledge of how the art form is executed. Therefore it follows that the better they can train their ears to perceive the recorded information, the more effectively they can educate themselves as a performing, improvising musician. As is the case with ‘classical’ music styles, the theory has grown up after the practice has been established. This is something that many university students do not realize, and they tend not to connect their learning in formal theory with the skills that they acquire in aural skills classes. It is however vitally important that students of jazz make these connections as they are required to demonstrate their knowledge in a practical way by improvising.

EFFECTS OF HARMONY SINGING ON IMPROVISATION SKILLS

Being actively cognizant of musical material in a performance situation, as in Gordon’s (1999) ‘audiation’, is essential to interaction with other musicians. This interaction is what makes jazz a constantly interesting form of music to play. It can lead to what Seddon (2005) refers to as ‘empathetic attunement’, a state that enables a musician to make truly original and spontaneous musical statements, which is the end-goal of every jazz musician:

For example, musicians describe how they listen to recordings they have made and hear themselves playing phrases they have never previously practised but which have emerged as a result of what the other musicians were playing at the time. These spontaneous musical utterances rely upon empathetic attunement between the musicians, which although rooted in the sharing of stocks of musical knowledge evolves beyond this process. (Seddon, 2005, p. 50)
**Aural Training**

The literature relevant to aural training encompasses three main areas: jazz education, aural training, and musicianship training methods developed for young children. A significant amount of the literature available on the theme of singing as a musical learning tool has been focussed on the education of young children. Both Kodaly and Dalcroze insist that musical concepts should be taught to small children experientially, involving singing and movement, before those children embark on the intensive study of any instrument. Kodaly (1974), however, has the simple advice “Sing in choirs often, particularly the middle parts. This will help you to become a better and better musician” (p. 190). The same tenets that Kodaly held about making the musician first and the instrumentalist second can be put to use for older students. Plank (2002), an American saxophonist and educator, states “It is my opinion that singing is the easiest, most efficient, most necessary, most basic and most required step to building musical awareness” (para. 6). Plank is not writing on the subject of improvisation but of school band performances and goes on to enumerate the elements of playing that can be improved by singing – tone quality, intonation, rhythm, technique and interpretation. Wolbers (2002) writes in a similar way of having students in concert bands sing their parts before playing them to give them a deeper understanding of the role of their individual parts in the whole, with respect to both harmonic understanding and balance. Bell (2004) writes of the helping students to “activate their ‘thinking ear’” (p. 31), suggesting that choir rehearsal time be used to sing chords and chord progressions and to develop the ability to spontaneously harmonise using this knowledge, as well as fine tuning the ear’s perception of the ‘colour’ of the note within the chord.

Many jazz musicians cite ‘being able to play what you hear’ as a goal of jazz study. In the words of Bill Dobbins (1980) “An improviser must be able to accurately hear the melodic, harmonic, and rhythmic tendencies in the music he or she is making at any given moment in order to intuit, with equal accuracy, where the music logically can go from there” (p. 39). To reach this stage, one needs to be able to identify those elements in the music through listening. Then, in order to get musical ideas out of one's head and onto the instrument, one needs to be able to translate the ideas into known intervallic, rhythmic, harmonic, musical elements, that is, to “think in sounds”
(Priest, 1989, p.175). The importance of using the voice in this process is stressed by English (2006) who has noted “Singing what you hear brings what you are learning into the body so that you can *embody* your knowledge of music. It’s not just a theory or skill anymore. It’s part of your identity” (Why Singing What You Hear Is Important to Your Ear Training, para. 7).

Similarly, other pedagogues, such as Donelian (1992), advocate for the use of singing in aural training as a fundamental aspect of jazz training:

The place to start working is with listening and singing (or tapping, for rhythm), which are physical actions, in conjunction with theory, which is cerebral action. When theory is joined to the physical action of singing (or tapping), a complete grasp of the music is created. (p. 14)

Ear training methods in tertiary jazz institutions vary quite widely in their areas of focus although most agree that it is an essential skill for their students to learn. Ran Blake (2010), of the New England Conservatory, in *Primacy of the Ear*, sets out an ear-based way of learning to become a jazz player, addressing not only melody and harmony but also nuance, timbre and memory with his Third Stream method. Many schools take their cue from traditional classical ear training, focussing on interval and scale/mode recognition; but there is a trend to contextualize this material, even for example in the ensemble setting. At the University of North Texas an on-line aural training course is offered, including on-line sessions with tutors in which topics can be worked through. Jazz courses universally place a strong emphasis on transcription, an activity which functions both as a measure of one’s aural acuity and a means to develop that capacity.

Weir (2003), in her advice for jazz vocalists about learning instrumental improvised solos from recordings, says: “…try singing it A Cappella. This is the true test of whether or not you really know the solo” (p. 54). The ability to sing an improvised solo unaccompanied is dependent on the existence of an internalised sense of tonality. It may be possible to learn a whole solo interval by interval, but it is not necessarily a musically useful process. The thing that makes such a performance both possible and efficacious for learning is the awareness of how the soloist is expressing the chord progression through their single lines.
Situating the Research: Practice Context

To expand upon the literature base of this thesis, I conducted a voluntary survey and a series of interviews with other jazz pedagogues in Australia, to ascertain their own views on and approaches to aural training in jazz. The aim was to find out which methods were being used in university jazz (and contemporary) music courses throughout Australia along with how students were assessed. In the context of my overall research question, the way singing is being used, both for assessment and as a learning tool, is of particular interest.

I asked the respondents to rate, in their opinion, how important a) their institution b) their students and c) they themselves believed aural skills training to be. In most cases the teachers rated it most highly, 90% putting it at 5/5. In their opinions the institutions also rate quite highly, with 50% at 5/5 and 40% at 4/5. It is the students, (in the teachers’ opinion), that rate it the lowest, with 50% rating it at 3 on a scale from 1-5. One respondent, in an interview situation, was only exaggerating a little when he said “Well, for a jazz student that’s all we really do!” (R. Burke, personal communication, October 16, 2013). In a similar vein, I was interested to know whether the teachers thought that this value was reflected in credit point allocation. In more cases than not they thought that this should be higher.

All respondents agreed that jazz students have particular needs with regard to aural training due to the necessity of being able to respond instantly in an improvisational setting. To quote one: “…jazz improvisation entails the ability to respond to what others in the band play and also the building of a large repertoire of learned tunes on which to improvise.” However in one of the larger institutions the jazz students share an aural skills class with their classical counterparts. The instructors do not see this as a handicap, as the course there is outstandingly diverse in the range of musical styles that it references in its specially designed syllabus. Of course this situation has a bearing on the range of methods used for teaching. At this school there is a range of texts from which material is drawn – Hearing and Writing Music (Gorow, 2003), Modus Vetus (Edlund & Stout, 1974) and Primacy of the Ear (Blake, 2010).

The former two texts are fairly traditional ear training texts with graduated tonal and rhythmic exercises; but Blake takes a more holistic view aimed at improvisers, guiding the reader through the development of skill in listening to music in order to perceive not just tonal and rhythmic information but also less tangible
aspects such as timbre, inflection, dynamics and feel. There is also a great emphasis on creating long-term musical memory:

Memory is the skill that enables us to turn listening into repertoire and stylistic preferences into part of an actual style. Aural long-term memory is the foundation of the trained ear, and the trained ear is the basis for any musical creation. Developing long-term memory is the basis of building a style, and of the methods presented in this book. (p. 7)

Blake is a proponent of ‘Third Stream Methodology’ in which stylistic barriers are disregarded and the ear is used as the principal learning instrument for the improviser. “In the Third Stream discipline, Billie Holiday, the music of Sephardic Spain, different forms of black improvisation, jazz, ethnic, and contemporary concert music are heard. Here as before the music is learned exclusively by ear” (Blake, 1982, p. 4).

Two other books mentioned by the respondents explore aspects of listening other than the nuts and bolts of tonality and rhythm. Aural Awareness (Pratt, 1998), focuses on setting listening exercises for the development of awareness of timbre, register, dynamics etc. Harmonic Experience (Mathieu, 1997) explores the physical phenomena of sound, taking in both just intonation and the tempered twelve-tone scale from Western music as well as exploring Eastern tonal systems.

One of the standard tests for aural skill is interval recognition. I asked the respondents about ways in which they contextualize this, as students often wonder, not without cause, what the musical point is of being able to recognize random intervals. The old trick of remembering songs with specific intervals (such as “My Bonnie” for the major 6th) has limitations when the harmonic context is different.

The overuse of familiar tunes as a crutch should be discouraged…Almost every one can be made to sound stable, tension-provoking, compressed, expanding, etc., by imagining differing aural surroundings or key contexts. This demonstrates the fallacy in assigning one particular effect or meaning for each interval, which specific melody references tend to foster. (Rogers, 1984, p. 106)

Most of the teachers recognize these limitations and endeavor to show how intervals exist in various contexts, as put by one respondent: “I mention the first 2
notes method, but interval recognition is tied to chord recognition, for example hearing the simultaneous sounding of a major or minor 3rd in a triad, or the distance between the flat7 and the 9th in a dom9 chord.” Texts that focus more on jazz and popular music such as those by Donelian (1992) and Radley (2008) tend to emphasize this skill as well as those more broadly aimed, such as Telesco (2013) and Karpinski (2000), and all of these sources are used by the respondents.

The underpinning of my approach to teaching aural skills is that nothing a student learns in written theory or aural skills exists in a vacuum, independent of anything else. Theory and ear training are flip sides of the same coin — every component works to reinforce every other one. Consequently, everything in theory and ear training should be as coordinated and interrelated as possible. (Telesco, 2013, p. 1)

One of the questions put to respondents was whether their ear-training course was presented in conjunction with any other courses, for instance, Theory, Musicianship or Ensemble. The answer in 90% of cases was yes, at least for 1st year students, and Improvisation and Arranging were added to the list of possible bedfellows. In some cases the aural classes were still held separately even though the subject covered other things areas such as theory and arranging, but in what to me was a pleasing finding, many teachers are linking the material covered in theory and improvisation closely with the material covered in aural training. To quote one: “Theoretical subjects need to have contiguous aural components – both harmonic/pitch related, and rhythmic based stuff. In general students can process theoretical information fairly quickly whereas aural material needs to be mapped physically.”

All respondents used singing as a learning tool, with the majority also using singing for assessment. In some cases, following the third stream model, students are required to learn melodies by listening and perform them from memory. Following the logic of aural skills reflecting what is learnt in theory, many students are asked to sing scales, chords (arpeggios), guide tones and bass lines. In general it would appear that the singing tool is used individually for assessment, and as a group only in the class, non-assessed, situation. In 90% of institutions the students have the opportunity to take part in choirs and vocal groups, some making it compulsory for first year students, which is useful because in my experience not all students understand the ear
training value of part-singing until it is explicitly pointed out to them. The other aural skills-enhancing activity that is invariably practised in jazz courses is transcription. Many of the respondents report encouraging and sometimes requiring students to be able to sing transcriptions.

In the Sydney Conservatorium jazz program, the Jazz Vocal Workshop course run by pianist and composer Judy Bailey bears similarities to my AET course. It is an elective, open to all vocalists and instrumentalists. The repertoire is primarily jazz based and parts are mostly taught by ear and with the use of voice-leading methods. The repertoire is for the most part memorized by the students. The ensemble performs only within the context of department workshops. The course has been running for many years but I was unable to observe it first-hand this year because there were not enough enrolments for the class to go ahead. I interviewed Judy, who often talks of ‘alert listening’ and was in agreement with me about the voice being the best tool for assimilating harmonic information: “…there’s an immediacy about the use of the voice.” (J. Bailey, personal communication, May 30, 2013).

In the interests of contextualizing the aural skill details, I asked the respondents to give a definition of Musicianship. When I began my research I found some disturbingly incomplete definitions such as this one from the Cambridge Advanced Learner’s Dictionary & Thesaurus:

- a person's skill in playing a musical instrument or singing: The sheer musicianship of this young woman is breathtaking.

In subsequent reading I have seen ‘Musicianship’ and ‘Aural Skills’ used almost interchangeably which does not seem to me entirely satisfactory either. Priest articulates the complexity of the problem: “Like sportsmanship, seamanship – or intelligence, musicianship tends to represent a collection of behaviours which can be demonstrated in a way which is recognised by those who have it, but which is difficult to define in a way acceptable to all” (Priest, 1989 p. 176).

One response neatly sums up the general tenor of the answers: “Musicianship is the ability to negotiate all aspects of music-making, such as technical facility, aural awareness, interpretation of notation, and improvisational skills, in order to synthesize them into creative, meaningful musical expression.”
Conclusion

These findings reveal clearly that those tasked with teaching aural skills in the jazz programs of Australia are in a continual search for the best way of improving the aural understanding of their students. Each participant surveyed has his or her own way of mixing and matching the available tools and methods to try to optimize the development of the students’ aural potential. This indicates that there is indeed something of a gap in the current pedagogical resources regarding ear training and that the subject requires further development and study. The finding that all the respondents are using singing as a way of teaching, if not always for assessment, indicates that there is consensus that, at the very least, singing is a way of finding out what a student is hearing. There is a general awareness indicated by the common requirement for students to participate in choirs that part-singing is an effective method of promoting musical awareness, especially of harmony and group dynamics.
Chapter 2: The JMI Context

The laboratory for this study was the Jazz Music Institute, a private music education institution which offers a Bachelor degree in Jazz Studies. The faculty members are all working jazz musicians with a wide range of experience and qualifications. The course provides practical tuition aimed at creating industry-ready musicians, and includes business studies, arranging and audio skills classes. It is a family-run business, and the 50 or so students in the Bachelor course all receive plenty of individual attention. The course is well integrated, with core repertoire studied in a range of subjects including Theory, Aural & Analysis, Improvisation and Performance. There is a clear musical focus on the ‘straight-ahead’ or ‘inside’ style of jazz from the 1920s - 1960s, using repertoire from the ‘Great American Song Book’ and jazz composers such as Duke Ellington, Thelonious Monk and Charlie Parker.

Students are taught traditional tonal improvisation with a strong emphasis on learning the guide tones in standard chord progressions. This activity dovetails nicely with my AET course because we put this knowledge to immediate practical use both in repertoire and in-class drills, promoting spontaneous voice leading skills.

The aural subject at JMI is called Aural and Analysis. This subject charts the usual course through interval, mode and chord quality recognition, the recognition of chord progressions and rhythms. The students sing intervals and modes in these classes, but are assessed mainly on recognition of, rather than performance or execution of these tasks. Listening to an individual student sing is one of the only ways that a teacher can judge whether they have an understanding of the concepts presented, although this can be a disadvantage to students who have not been involved with singing in their school years. As Rogers (1984) says, “singing is the teacher’s window into the mind and ear” (p. 128).

There is also a large transcription element to the Aural and Analysis course, including melodies and chord progressions of jazz repertoire. I have found that students need to be reminded to use their theoretical knowledge when they are unable to aurally discern harmonic details. This is a manifestation of the previously noted tendency not to make connections between different subjects. Even within the context of a transcription assignment, they often will not think to look at the melody for clues
to the harmony. In fact I would argue that in jazz education, harmony and melody have become separated to a deleterious degree. With my method I am endeavouring to address what I perceive as a limitation of the standard style of syllabus, which tends to separate theoretical knowledge from aural understanding.

Many of the students in the JMI course have had little or no formal music training, and thus little experience in reading or writing notation. The AET course is one of the few subjects in which students are expected to read notes on a staff as opposed to playing chords and improvising from chord symbols. Many past participants have commented on how the AET course has strengthened their notation reading skills.

It seems important to me to link notation with styles of music with which they are already familiar and proficient, such as rock and pop. In the past I have noticed that some students only think to use notation when dealing with jazz, and continue to use ‘garage’ methods in order to rehearse and perform their pop and rock projects. As JMI is such a mainstream jazz stronghold, my method of using pop and folk repertoire has come under question. There are three reasons for it, however: the fostering of the ability to apply theory to all styles, not only jazz; the difficulty of singing a cappella jazz with its harmonic complexity, even for experienced part-singers; and the more general idea that jazz exists in a continuum of Western Music, having evolved from classical and blues and having contributed ideas to more recent genres.

Many jazz instrumentalists feel a little shy about singing, many of them reasoning that their instrument is their ‘voice’. Most of these musicians are of course males, who as Harrison (2004) and others have found are often actively discouraged from participation in singing during their school years, not only by peers, but also sometimes their teachers. I have been encouraged by how open my AET students have been so far to exploring their voices and enjoying the experience of group singing. Of course the AET class has been an elective rather than a core subject, so anyone who is uninterested in or afraid of singing does not enroll.

Many of my students in AET over the past three years have been third year students who are not required to take an aural skills course once they have completed second year. They realise that ear training is a skill that needs continual development and they value AET as a replacement for the Aural and Analysis class. My experience at JMI has shown that, both by witnessing our performances and by speaking to the AET class members, other students are intrigued and motivated to enroll in the class.
as they can see the positive results of using one’s voice to learn music.

**Reflective Practice: Developing an a cappella approach through action research**

**Challenges and Responses.**

As usually at least half of the class members are instrumentalists, I have not expected anything of their voices except correct pitch, and there have been a few students who have had difficulty achieving even this. This unfortunately slowed down the process of learning for the students with good pitch skills. However, the students who have struggled with singing have generally reported and exhibited improvement in their pitching abilities, so I feel something very worthwhile has been achieved, albeit at the expense of their class-mates venturing on to more complex musical tasks.

When I first had the idea for the A Cappella Ear Training class I imagined that arrangements that I had previously written for various a cappella groups would be put to use. As it turns out, I’ve been able to use only a couple because I was forgetting that generally at least 80% of the students in a given jazz course are male. This of course gives me exactly the opposite gender composition of most choirs: many more males than females. I have now written twenty new arrangements tailored to suit the gender make-up of the group. This has also had some influence on my choice of repertoire. Another issue is that male pop singers usually sing in a significantly higher register than the average male choir member, an issue that I have dealt with using devices such as changing the key, or writing the highest parts of the melody for the females to sing.

The most difficult part of developing the course has been to design appropriate assessment, apart from the marks allocated for performance. Since the course is directed at developing practical skills, I have felt that the written tasks deemed necessary for all subjects in degree courses have required an unwelcome shift in my teaching aims in order to prepare students for harmony writing tasks, which could easily require a separate class itself. In each successive iteration of the course I have spent more time preparing students for their assignments, particularly the one in which they are required to add two harmony parts to a given melody with chord symbols, and I have become more specific with my instructions each semester. However I do feel that the students benefit from this requirement, even though it was
something I failed to foresee from the outset.

I am still working on ways to deal with students who don’t realize they are singing the melody (usually males, usually an octave lower) when they should be singing a harmony part. This is the most common problem; because the notes they are singing do not sound ‘bad’ they don’t hear a problem. With males, if at all possible, I have found that having them sing bass is the best way to start with part singing. Most of them can more easily conceptualize bass movement than an inner part.

It is also sometimes difficult to hear what a less confident student is singing without getting intimidatingly close to them. In later iterations I have divided the class into smaller groups to do some of the chord building and voice leading exercises so that I can hear how everyone is progressing.

I have now taught this class as a one-hour session and a two-hour session. In one hour, I was always struggling to fit in the content that I wanted to cover and the performances were always fairly underprepared. In two hours, I have covered a lot of exercises and repertoire, but the students tend not to focus as well, even if given a break in the middle. I have concluded that a 90-minute class would be the optimum time frame for achieving the necessary goals.

The class size has varied from six (seven including myself) to sixteen. There are some advantages and disadvantages to both situations but I remain convinced that the optimum number is eight to twelve, as I was when I began the course.

**Processes developed.**

After several iterations of this course, I have developed the following exercises and processes, some of which address the foregoing challenges, and some which serve a more general purpose of promoting the desired AET outcomes.

Many students would probably nominate the exercise that involves singing numbered notes from the scale as directed by myself on the white board as the hallmark of AET. I find that this task can be almost endlessly challenging for students, as my choice of the ordering of the notes can make it easy or much more difficult. As it operates almost as a game, they find it both fun and challenging. Working extensively with the chromatic scale has been very beneficial; jazz students tend to recognize how relevant it is to their functioning as musicians. When this exercise is expanded to moving chords up and down by semitones it makes the
students more aware of the inner relationships.

One of the most important and valuable activities I have developed for the AET course is the process of teaching repertoire without the use of notation. It has demonstrated its centrality, not only because of the harmonic work involved in working out one’s own parts, but because of the personal responsibility taken for form and the outcomes as a performer.

Ironically, one of the other unforeseen benefits of the class has been the development of students’ reading skills through the use of scale degree numbers. This activity is developed from the scale note reading exercise in to learning an SATB hymn. Students use the scale degree numbers to sight read through all the parts separately before using the lyrics to sing the hymn in parts. For many students this is their first exposure to traditional four-part harmony writing.

Root note singing is an activity that I have used increasingly throughout the project. This is a process that has come directly from my own experience as I have found for myself that learning new repertoire is facilitated best by learning to sing the root note movement whilst hearing the melody and vice-versa. The extra benefit of this for the students is that it is an activity they can work on in their own practice time. Perusal of my most recent journal reveals a plan to spend more time with students learning to sing progressions through voice leading parts, arpeggios and root movements using their course repertoire tunes.

One exercise I have used since the early iterations is that of using the hymn as a tool for focusing on the group sound. Once they know their parts, I slow it down by at least half and have them stand in a circle while singing very quietly. It makes them aware of each other’s notes and of the place their own note has in the chord, as well as being able to perceive the sound made by the group. Over the past few semesters I have asked them to stand up more often as it has a positive effect on their group dynamic.

Even though I have been using Sibelius notation software for many years, I hadn’t fully realized how useful it would be to my students when I posted files of my arrangements to the school website. These are a boon to anyone serious about practicing their part-singing, as in Sibelius the part can be played as a solo, which is very useful to those who don’t read fluently. The student can also practise his or her own part whilst hearing the other parts played.
The A Cappella Ear Training Approach: A Practice Example

A typical A Capella Ear Training session is roughly divided into halves, the first involving musical drills and the second being more of an ensemble rehearsal. During a typical class session, students sing exercises that reflect the information they have already covered in theory and aural classes, for example singing notes randomly from a scale on the white-board, singing arpeggios in all inversions in harmony with each other or building chords note by note and moving them up and down by semi-tones. We sing chromatic scales in many different ways, since a confident grasp of the size of a semi-tone gives them a clear advantage in many of the aural skills required of them in the broader course. Burstein says, “As chromaticism is prevalent throughout modern jazz, this exercise will improve both intonation and students' understanding of the genre” (Burstein 2009, p. 21).

At least five pieces of repertoire are prepared for an end-of-semester performance. One of these is always a hymn. This is an instance in which I am drawing on my own background: the most valuable legacy of my eighteen years of attendance at traditional Lutheran church services has been the absorption of classic SATB hymn harmony style. I also use the hymns as a written assignment for the class: they are asked to identify the chords and inversions and pinpoint which part of the chord each note is. Even if the students have participated in this kind of singing at church or school, which is becoming less likely every year, it is unlikely that they have been asked to analyse the harmony in such a detailed way.

The first repertoire item is usually a pop song for which I have written an arrangement, but which is not presented in notated form, for example, “Stand By Me” (King/Lieber/Stoller, 1961). Most of these students can hear that this song has a very simple chord progression, I-vi-IV-V-I, which occurs in both the verse and chorus. A simple way to get started on a song like that is to use the soloist plus bass line and chords model. Given starting notes for the initial chord, the students are guided towards making up their own parts to create the harmony. It is refreshing for both me and the students to have them perform something without ever looking at a chart for it. As Granlie (1999) says, “Once the dependency on the printed note is overcome, the ears seem to grow doubly acute” (p. 38). At least one, possibly two songs per semester are presented this way, or with the use of a ‘lead sheet’, that is, the melody, lyrics and chord progression, for songs with less repetitive progressions.

At least two repertoire pieces will be handed out in notated form, another pop
tune and something from the jazz repertoire. I like to address a particular style of harmonic construction, for instance, a descending bass line as appears in the old Nat King Cole hit “Answer Me” (Winkler/Sigman, 1953), which I arranged in three parts, with the melody in the middle.

The jazz tune is always the most difficult for the group to learn, but by the time we begin this arrangement they have spent considerable class time building typical jazz chords and finding upper extensions, for example #11s and 13s, from a root note.

**Student Responses**

This section presents the reflective data gained from students involved in A Cappella Ear training classes over three semesters. The data gathered from all three iterations of the course was used to inform the next course offering. In each instance, the data was collected towards the end of term, at a point when students were able to reflect effectively on their learning and progress in the course. The information has been collated and categorised according to prevailing themes in the student responses.

In most cases students felt very positively that they had benefited from participation in AET, but in some cases found it difficult to explain exactly how and why they had this feeling. On the topic of my overarching question of whether or how AET has improved their improvisation skills, an answer can only be obtained by considering the data holistically, as students gave partial responses to this topic across a range of questions and question formats.

*Listening.*

When jazz players speak of listening on the bandstand, they are referring to the central jazz skill of taking in what other musicians are doing and being able to respond appropriately. Students of jazz are often thinking so hard about how to deal with the musical materials in hand that they hardly have the brain space to also listen for what the other members of the ensemble are playing. The a cappella context is an ideal one in which to develop this skill, as each member of the group is acting as accompanist to the other members, and notes can only be pitched in relation to each other. (I have not yet had a student with absolute pitch and I hope not to. It is difficult
for such people to sing a cappella, as pitch can normally be expected to drop at least a little from the start to finish of any given song. This can be for reasons of breath control and technique or in serious cases due to a lack of understanding of the harmony, which is exactly the skill being addressed in AET. Anyone who has sung in an a cappella group has experienced this and it is accepted as a result of humans pitching to each other, but this kind of pitching to the mean is more-or-less impossible for those with absolute pitch.

I asked the students, ‘Do you think that your aural perception has improved after a semester of AET? If yes, how?’ One of the respondents said, “Yes, I’m more aware of other parts within an ensemble and listen more outside of myself.”

One of the interviewees concluded: “I’m just more aware in any situation really, which is a pretty big thing.” And another: “It’s very good to be able to know what you’re singing as well as being able to listen at the same time.”

Another student brought other benefits into the discussion: “In regards to confidence in performance I also found AET greatly improved my relaxation and ability to listen during performance. I feel this is largely due to using my ears to listen if I lost my pitch at any point throughout a piece. Because of this I feel like I’ve experienced an improvement in my ability to listen whilst soloing or comping and an ability to change what I’m playing around what I’m hearing from the rest of the band. This also stems from a greater awareness of the sound that I myself am producing.”

Another kind of listening skill is that in which the music heard is placed within a framework of knowledge, as with Gordon’s ‘audiation’. The students in AET are taught to hear pitches and harmony within the context of tonalities and chord progressions, enabling them to analyse the elements of music that they are hearing. This is quite a big concept for students, but I’m confident that the following students were referring to this idea.

One spoke of learning a “process to break down sounds to double check that what I thought I was hearing was correct”, another spoke of it being “easier to differentiate between sounds and pitches that are heard.” I tend to put these in the ‘framework with which to listen’ category: by continually atomising the materials with which music is made, the student begins to hear music in identifiable modules. Another student put it this way: “I now have better skills at being able to listen more analytically to a melody and transcribe it rather than guessing what the next note might be.” This idea is central to the AET ethos.
Confidence (trust, responsibility).

One of the most commonly used words in all the data gathered was ‘confidence’. Again, the noun is being used in more than one sense. For some respondents, including at least one of the vocalists, it is in reference to actual performance anxiety. Of course many of the instrumentalists were not confident singers when they began the course and most feel that their singing confidence increased; but not only that, many also felt, in the words of one, “a more confident approach to performance” in general. One of the benefits of this that I hadn’t foreseen was the ability to demonstrate by singing during band rehearsal. This is a facility that was mentioned by a drummer and a pianist as being one of the valuable outcomes of AET.

One of the brass players commented, “Having completed this course three times, I believe it has had a good impact on my confidence in performance. I believe this comes down to the fact that I am performing in front of a live audience twice per semester using an instrument that is not my main and is reasonably new to me. Performing with only the voice gives you nothing to hide behind when on stage, for example whenever I have sung in front of a public audience in the past I have always had my trumpet in my hand, ready to bring comfort to me. A small amount of comfort is felt when singing with a choir however as you are not the only one with nothing else but your voice.”

Under the heading of confidence I am also adding the sub-headings of ‘trust’ and ‘responsibility’. After a few weeks of rehearsals and particularly after their mid-semester performance, most students have realised how crucially they are reliant on one another, and a stronger sense of camaraderie is evoked, perhaps a stronger sense than they have experienced in instrumental ensembles before. As one student put it - “Yeah, you probably feel like you’re sort of more a unit, for a lot of the time.” “I think yeah, if everyone – I played with a band that had done that AET probably would be more listening going on, than without.” “… like, ultimately, in the AET class, it’s everyone’s job to be sort of doing everything, um, so it’s definitely high-lighted that.” One student is direct about it “On a more esoteric note singing in a group like this has also increased the amount of faith I place in other musicians.” And another: “I felt
there was an unspoken trust that was created for everyone to do their part correctly and blend to create a good sound.”

The other kind of confidence frequently mentioned is actually aligned with the acquisition of aural skills. As the students bring their knowledge of theory and their aural skills closer together, they feel more confident trusting their ears when they are improvising.

As one student put it: “you learn to trust your own ear.”

**Theory rendered into sound/integration of skills.**

A central aim of AET is to bring theoretical knowledge to practical life by singing. I have been gratified to find that several students have spoken on the subject of understanding one skill in the light of the other. “I appreciate the fact that harmonic concepts in this class were explained very simply. It also helped that these concepts were then immediately realised through singing and listening.” “Making the connection between the theory and the practical. How the two areas fit together and not to isolate one from the other. Eliminating guess work and thinking about what the note could or should be in the context of the harmony and key.”

A respondent to the online survey question: ‘Has AET had an effect on your understanding of music theory? If yes, how?’ replied, somewhat confusingly, “No, but now closer to pairing my theoretical knowledge to tangible sounds.” Another responded, “It has helped me join theory and sound together in my mind.” And another: “…has reinforced what I have already learned.”

**Inner tonality.**

The concept of inner tonality is at the core of the Kodaly method: teach the students to relate the diatonic notes of a key with one another aurally and the process of reading the notes becomes not just a mechanical business of placing one’s fingers in the right place at the right time, but a process in which the music is heard internally before being reproduced instrumentally. Of course this is the skill necessary for sight singing, and….. “I find that I listen more when I’m singing and um, having (some) things mapped out on the guitar means that sometimes you can get away with not
listening.” “…with singing, I don’t know where the things are so I have to listen for them.”

One exacting exercise with the chromatic scale requires each member of the class to sing consecutive notes. This forces the students to sing along silently until it is their turn to sing so as to keep a hold of the sound of the scale even if one of the others misses their note. One student commented: “This exercise had a similar theme to the sight singing scale exercise in that it required the students to have an internal knowledge of (the) scale in their heads so as not to falter from the accurate note choice when their time came to sing.”

Allied to this concept is the idea that music is more thoroughly learnt when sung as opposed to being reproduced by means of an instrument. The music is being produced within one’s own body. This is an illustration of the difference between Helding’s (2014) “know-that” and “know-how”; “know-how is bound to the body” (p. 229).

“I think it’s, it’s more intrinsic, in that it is you who is learning it and you’re becoming familiar with the sounds as opposed to the instrument, where the instrument is creating the sound and you’re a witness to that but you’re not actually, you’re not doing it and I feel that through doing the exercises that you look at – it’s a more wholesome (sic) awareness of the overall sound. (H: “Do you mean holistic? L: “Well, yes, I’d say so, yes.”) “By contributing the majority of the lesson to be attributed to actually singing through parts, scales and arpeggios, I believe that she gave us all a sounder link between the pitching and the mental note knowledge.”

Participation in this kind of choir has special benefits for those who play single note instruments. One commented “After singing in a choir setting with harmonies I feel much more aware of the actual notes I am playing and not just placing my fingers in certain ways to produce a sound.”

One of the online survey questions asked: ‘If you are an instrumentalist, do you find that using your voice instead of your instrument has an effect on the way you learn?’ Interestingly, quite a few skipped this question. Perhaps it was an unfamiliar concept for a few of them. However, some responded positively and articulately, for example: “Definitely. It means you are constantly making connections between what you hear to what you play.” Another elaborated: “I think it is useful because you no longer have a visual reference, such as a fret board or white and black keys; instead, you have [to] hear the sounds in relation to a tonic note as well as what other people
are singing, which promotes a more authentic understanding of music as a series of sounds and not just mechanic actions and patterns.” In the same vein: “Yes, it challenges me to produce a sound without using something I am familiar with.”

Another refers to an idea that is central for me personally as an instrumentalist: I find if I can sing it I can play it. And yet another couple related it directly to my over-arching question about soloing skills: “Yes, it’s allowed me to use my ear to create a solo and improvise, rather than just using theoretical knowledge to create a solo, i.e., using notes that I know will work but am not entirely sure how they will sound.” And: “Yes, I believe that no matter (what) instrument you play, it is essential to have skill to sing, these skills will be passed to your instrument.” In summary, “…the voice is the middle ground between the ears and instrument.” I couldn’t have put it more succinctly myself.

Reading and memorisation.

Interestingly, a couple of students linked this process of learning by singing with memorisation, or an increased ability to retain musical information: “When I use my voice I tend to retain the information of the music more easily.”

It is perhaps somewhat ironic that in this class the students have the opportunity to improve their reading and at the same time learn whole songs without using notation at all. The activity of learning arrangements without the use of notation has become one of the central tenets of the method. One student speaks of the benefits: “While some of the tunes we sang had sheet music provided, in several cases (we) were each given a chord tone to sing, and worked through the progression as a class, figuring out the best way to voice-lead through the harmony. I found this incredibly beneficial. Singing and listening our way through the tunes was the best possible way to learn them. I have had problems in the past where remembering the progressions to tunes has been difficult. I recognised straight away how much stronger my understanding of the harmony was when we learnt tunes this way. “ “I did find the ones that we just learnt without any sheet music are the ones that I memorised better.” “…you’re becoming familiar with the overall sound of the harmony, so it’s……it sort of just fits in to your memory and your head a little bit better.” One student answered the online survey question about learning by singing
for instrumentalists by saying: “Yes, it makes it easier to remember what I am learning.”

The singing of root note movement is another thing that contributes to the memorisation, or better put, internalisation of tunes. One of the assessment tasks for AET students is to sing a tune unaccompanied and then sing the root notes while I play the melody on the piano. I have been using this method myself for a number of years as I find that is enormously helpful in committing new repertoire to memory. One student explains: “As a result of my increased listening ability I am constantly paying more attention to the root movement of a song. I have begun learning songs in a new way by sitting at a piano and singing the root movement to the song. I have found that this has an immense effect on my ability to remember the songs.” And another student on the subject: “I found this activity particularly beneficial to my ability to memorise a tune and internalise it.” “I find it easier to remember/recall progressions and melodies.” This comment brings to light how the two activities are not as separate as often thought: “While singing parts this semester I have started to take note of what I have sung before and if I can use that information in different sections to find notes that are not as easy to hear. This has made my sight singing better but also allowed me to see more relationships that lie within the tunes.”

The class activity that most affects reading ability is the exercise involving singing with scale degree numbers. This is a variation on the solfege idea and enables students to hear diatonic notes before singing them. “Sight reading has improved dramatically.” “It is without question that I can say that I found that my sight singing abilities had improved by the completion of the course…”

Musicianship.

This is obviously a broad heading and many of the questions and responses overlap on this theme. The final question in the online survey was an open-ended invitation to add any thoughts about the AET experience. Inevitably these quotes contain varied themes, such as this one: “I found Helen’s process of listening and understanding music to be great. Pairing the ear with knowledge, finding intervals from scales and double checking with chromatic slides either side, always keeping the tonic in your head, when transcribing think about where all notes sit in relation to the
tonic or chords rather than just poking at random notes.” “I feel better educated to make more musical decisions than I did prior to this class.”

I did not ask any specific questions about the effect of AET on styles of music other than jazz, but as I have previously stated, I am keen to see students applying theoretical knowledge to genres that they have previously played without the benefit of theoretical knowledge. One student responded to the survey question: ‘Has AET had an effect on your understanding of music theory? If yes, how?’ in the following way: “Yes, it’s helped me associate theory that I know and understand with genres (eg. Classical), that I previously would not have applied it too (sic).” I don’t explicitly discuss this with the students but I am gratified to see one of them mention it unprompted.

Again, none of my questions in the survey or interviews mentioned the word ‘Musicianship’, and as previously noted there are many and varied definitions possible for the word, but several students used it to describe the many benefits they felt they had gained from AET. For example: “I chose to enrol in this subject (for the fourth time) because I felt that out of the electives available, this class has and would continue to provide me with the most relevant skills to aid my musicianship and study in other areas, with its combination of aural, theory and performance elements.” And another: “Singing as part of a vocal ensemble this semester made a significant and noticeable improvement in my overall musicianship and aural perception.” “Participating in A Capella Ear Training this semester has proven highly beneficial for my musicianship level, performance confidence, and aural skills.” And: “Overall, I believe this course has boosted my musicality with the aural skills development and heightened my confidence through performing as a group.” Under the heading of musicianship I would also include this comment: “I feel that my aural ability and general musicianship is at a heightened level, I feel that I am now also better equipped to be a valuable and contributing member to any ensemble situation.”

Part of my definition for Musicianship would involve the integration of skills – theoretical, aural, stylistic, performance. Integration was mentioned more than once as well, for example: “Overall it was a very enjoyable experience for the group who had fun learning how to work as a team whilst integrating their aural skills and vocal abilities.”
Improvisation.

Student responses indicate that the AET course leads to a more integrated understanding of theoretical principles, and contributes to the development of aural confidence with musical material. It is my contention that this confidence should facilitate more fluency in improvisation. This aim is not stated at the outset with the students, but the course’s existence in the jazz school hints at this desired outcome, and many students have commented on how it has helped them as jazz soloists.

All of the above categories feed in to this goal. One student noted: “By developing my ear this class has allowed me to hear better lines within my improvised solos.” He goes on to nominate voice-leading skills as a specific advantage and concludes: “Although my progress is slow I am learning to bring out those sounds on my guitar as I hear them in my mind’s eye.” “…I have so far seen a direct influence of the practise in my own playing, which has been opened up to more sounds”. The same student again: “Both times that I have completed this class I have noticed an improvement in my playing regardless of whether or not I am practising at that particular point in time or not. I’ve found that it opens up the awareness of harmonies and how they can be manipulated in a live environment, as opposed to rope (sic)-learning practices and then trying to implement them on the bandstand.” One of the singers said: “This activity (random scale note singing) has potential in helping my performing and confidence as it can help me understand the relationships between notes and hear harder intervals as well as being more sure about my note choices in my melodies and solos.” Another student, a pianist, commenting on the practice of learning tunes by singing the root note movement says: “I have found that I can better hear the changes and improvise more effectively over tunes, as I was always playing rootless voicings with my left hand which made it very difficult to hear the changes.”

The survey question about learning by using the voice elicited this comment: “…in time I think it will make for more melodic soloing.” There was also a direct question on this theme: ‘Do you think that participating in AET has had any effect on your improvisation skills?’ There were several “not yet” responses to this, implying that they feel that it will happen in the future. One responded: “Yes, chord building has improved my knowledge of harmony and broadened my note selection choices.”
Another responded in a broader sense of what is gained from the class: “Yes, it has lead me to start listening to what I’m hearing and try to find it on my instrument.”

The class has different benefits depending on the instrument played by the student, for instance, one of the drummers commented: “Oh for sure, yeah, it helps you internalize the concepts that you’re talking about, especially for me playing drums, because if I’m playing in a band situation and say I want to be hearing the harmony out-lined more, I can’t play it on my instrument, so to be able to sing guide-tones or to be able to sing root movements or even just recognise them…”

Summary

These comments collected from the participants highlight how some of the methods introduced in AET can be used in personal practice, for example, root note singing, guide tone singing and chord building. Many have also noted how practicing scale singing, particularly chromatic scales, has improved their aural skills. It has to be said that some students who have participated have been more ready than others to receive the full benefit of the method. On reflection it seems that these are the students who have already recognised the beneficial effect of aural skills on their improvisational skills, and are preparing to ‘trust their ears’. On the whole however it appears that every student that has participated has gained some musical benefit from the course, in areas ranging from reading skill and harmonic awareness to performing confidence.
Chapter 3: Arranging For “A Cappella Ear Training”: Repertoire Choices and Analyses

In this chapter I am presenting some examples of the arrangements that have been used in the delivery of the AET course, detailing (a) the reasons for the choice of material, (b) the learning opportunities that are present in the pieces, (c) the process by which the group was introduced and led through the arrangement, and (d) the challenges presented by the original versions of the songs and how I have dealt with them in the arranging process. Many of the exercises used in the first part of each class are designed to prepare students for the challenges to be met in the repertoire. These exercises make up the bulk of the 10 lesson plans provided in a separate document.

Approach

Although the AET course is delivered in a jazz context, I start the semester with pop and folk music because of their more simple harmonic material, working up to a jazz arrangement towards the end of the semester.

The arrangements for AET fall into two categories in terms of the way they are presented and taught to the group, that is, with notation and without. Each semester the group learns at least one song without the use of the notated arrangement, which forces them to use their aural skills and memory. Every time a new section starts they have to think about what their starting note is. I encourage them to understand it in the context of the chord and the overall progression, as well as in relation to the last note they sang. One of the added benefits of this choral experience for most students is that they experience a more direct style of performance than they do with their instruments in their hands. As always, when notation is dispensed with, more attention can be paid to group dynamic and performance detail.

Here are excerpts of nine sample arrangements from the AET class.
Analysis 1: **STAND BY ME**

In Semester 2 2013 the group learned to sing *Stand by Me* (King/Lieber/Stoller, 1961). In this arrangement, a soloist sings the lead and the rest of the group provides the bass line and chordal accompaniment. Because both the verse and chorus use the common chord progression I-vi-VI-V-I, I encouraged them to form the chords themselves after giving them some starting notes. This is one of the key activities of the AET method – finding the logical voice-leading pathways through chord progressions. In fact, I hadn’t yet written the arrangement when we had our first look at the song, but after the first session I built on what we had done in class (the first verse and chorus) and arrived the next week with a fully-formed arrangement notated for my benefit only.

![Figure 1. Stand By Me (King/Lieber/Stoller): Verse 1 with accompanying figure.](image)

In verse two the riff background uses B minor as a passing chord, but the starting notes are the same as those they sang in verse one, meaning they merely had to remember that verse two had a different accompanying figure. This figure adds a slash chord element, in that they sing the same figure over the F sharp and D bass notes, the notes of the lowest part adjusted slightly to accommodate the E major chord.
The chorus is differentiated from the verse by a varied rhythmic device. The song only has two verses, and the repetitive harmonic material is varied with a moody half-verse with a tag harmonised with added 2nds and 6ths, with parts building quaver after quaver. I was a little worried that it might be difficult for them rhythmically but it turned out not to be so and they enjoyed singing the more complex version of the chords.
Analysis 2: **BLUE BAYOU**

In semester 1 2013 the class learned *Blue Bayou* (Roy Orbison & Joe Melson, 1961) without the written arrangement. This is a simple, plaintive, atmospheric song with a ‘Tex-Mex’ feel. The lyrics are pleasantly nostalgic and, unusually, are not gender-specific. Roy Orbison is a high tenor and sings the song in F Major, using his low register for the verses and soaring up an octave for the choruses. This is one of the things that the average young male in a choir cannot be expected to do. I chose the key of C, which means the melody of the verse lies between middle C and the G below. It is a completely scalar melody and can be sung easily by a group of males. In the chorus, which begins on the C above middle C, the melody is taken over by the females, and half way through the melody returns to the males in the lower register. The bass part goes as low as G2, which is a safe lower limit for most males.
I have used the bass part from the 1977 Linda Ronstadt version which sets up
the feel and accompanies the first eight bars of the melody.

\[\text{Figure 4. Blue Bayou (Orbison/Melson): Bass introduction and beginning of melody.}\]

(I have used a baritone voice instead of tenor because tenor is traditionally written in
treble clef. This is inconvenient for me as the teacher/pianist in class, and is an
irrelevant custom for these students as they are not classical singers and also need to
learn to read music in both clefs.)

In bar 10 the females enter in two parts using long notes with a chromatic
crotchet pick-up note. The chord progression could not be simpler, two bars of I, four
bars of V7 and back to two bars of I.

\[\text{Figure 5. Blue Bayou: Sopranos and Altos entry mid-way through verse 1.}\]

In the chorus the females sing the melody in $6^{\text{th}}$. All the students first learn
the melody and then are asked to sing the harmony at the lower $6^{\text{th}}$ when they know
the contour of the melody. The melody singers effectively switch roles with the
females at this point, singing long notes. The quaver figure at the ends of the phrases (bar 22) keeps the rhythmic interest going.

**Figure 6. Blue Bayou:** The females sing the melody in 6ths.

At the halfway point of the chorus they switch roles again and the females outline the chords that are at that point making their first appearance, C-C7-F-Fm, which can be done in easy step-wise fashion.

**Figure 7. Blue Bayou:** Mid-way point of chorus, females use voice leading.

In the second verse the quaver figure is expanded and again kept in step-wise motion and in thirds.
In the coda there is a hold on the V7 chord (bars 54-56) and the melody is rendered in three parts for the final, elongated, “Blue Bayou”, and the quaver figure is used again as an ending.
This song can be learnt quickly due to the simple nature of the chord progression, so it is ideal as a piece of repertoire with which to start any group of students.

Analysis 3: *Bim Bom* and *Sweet Happy Life*

A song I have used on two occasions now is the Sergio Mendes and Brazil 66 tune *Bim Bom* (Gilberto, 1958). It is unusual in that the A section consists of a syncopated bass line and a standard bossa nova rhythm for the chords without a melody. I write the chord progression on the white board and divide the part-singers into basses and three parts to spell the chords. I give them their starting notes and let them work their way through it. Most of them would find the rhythms difficult if they had to read them but they learn easily when I demonstrate it on the piano. The B
section has a melody (and throw-away lyric), which the sopranos sing. In jazz and pop harmony, especially for a cappella settings, it is never desirable to double any of the notes in a chord, and in fact one of the skills of jazz harmony is in deciding which notes can be left out of a chord without changing the character of the sound. I often use ‘slash chord’ style voicings, for instance, Dm7 voiced as a second inversion F triad over a D bass. It has a smooth, full sound which the students always enjoy singing and hearing.

Figure 10. Bim Bom (Gilberto): Percussive Bossa Nova rhythm feel in vocalized version.

For semester 2 2013, I used another bossa nova, Sweet Happy Life (Samba de Orfeu) (Bonfa, 1959) with English lyrics by Norman Gimbel. It is in the written key, C, as this is a comfortable key for male singers, the highest note being E above middle C. It has a slightly unusual form, ABA.

I handed out a ‘lead-sheet’ to the class, that is, notation comprising the melody, lyrics and chord progression. Once again, I have written an arrangement but in class I only provided starting notes for the group. The bass part is a typical bossa nova bass-line, with alternating 1st and 5th chord degrees, except where the chords change every bar, the rule then being that they then stay on the 1.

The other three parts sing the chords in a typical bossa nova guitar rhythm, with long notes in the B section, and two male soloists sing the melody. The initial 2-bar groove, which is used as an introduction, moves from CMa7 to C6, with the middle part outlining this change while the other parts stay on G and E respectively.

The simplest harmonization of the A sections would be as six bars of C followed by eight bars of Dm returning to C for the last two bars. I have used a passing chord, C#°7, to travel to the Dm, and put the V chord, G7, in between two Dm chords to keep harmonic movement going. I have also added an A+5 chord as a
secondary dominant between another two Dm chords and added a V chord before the resolution to C.

![Figure 11. Sweet Happy Life (Bonfa): ‘Lead Sheet’ for A section with accompanying feel instructions in first bar.](image)

(I’ve used a trombone for the lead line here because Sibelius vocal sounds are not useful in these styles due to their lack of attack. I have found the brass sounds are the best compromise.)

The middle part provides most of the movement, going from B in the CMa7 chord to A in the G9 chord and then moving from C in the Dm chord to C# in the A+ chord. The ii7-V7-I progressions in the B section are very familiar to the students but there is a less predictable moment where after the second ii7-V7, Fm7 to Bb7, there is a chromatic progression from Em7, Ebm7 to Dm7 which is followed by a G9 to set up the return to the A section (bars 27-28). This is clearly the most difficult part for the singers to pitch so I have tried to smooth the way by having the voicing move up an inversion on the Bb7 chord (and embellishing it with a 13 and a 9), following the melody contour, and setting up all the parts for an easier transition to Em, when they would logically be expecting to hear E Major as the resolution to the ii7-V7. The basses have the most difficult job of getting to the next root note tri-tone away so I wrote in a scale run to get them there - still not easy, but in part-singing it’s always easier to deal with smaller intervals.
Figure 12. *Sweet Happy Life*: B section featuring ii-V-I in F and variation on ii-V-I in Eb.

The arrangement developed into a true jazz arrangement, with the group performing the form three times, the second time with a female soloist scatting over the form and returning to the male soloists for the reiteration of the melody. The introduction and coda simply use the first two bars of ‘groove’, finishing on cue on a CMa7 chord.

**Analysis 4: PLEASE LOVE ME**

As the twelve-bar blues is one of the staples of popular music song writing, I decided to do an arrangement for my students of *Please Love Me* (B.B. King/Jules Taub, 1956) a steady shuffle in Eb recorded with a horn section on his 1956 album “Singin’ the Blues”.

This is really more of a transcription than an arrangement, as I have merely set down the bass line and horn parts that exist on the original recording, taking the advice of Daryl Runswick (1992) regarding arranging for A Cappella groups: “You have to replace the missing rhythm section from the players/singers you’ve got. You need a bass line, rhythm/harmony, the tune and singers can also clap or snap their fingers” (p. 136).

On the recording the horn section acts as the principal accompanist while King plays an occasional fill on his guitar, and the bass spells out the chords in a walking
arpeggiated fashion. This exercise is useful for the students as it forces them to focus on how this music is put together. The singers take the roles of the bass and the horn section, singing a riff comprising two notes a third apart through the progression, using a guide-tone model of voice leading and including 6s in the major chords.

The progression is slightly different from a regular blues progression, having an Ebm6 chord in bar two instead of the usual IV chord, which would be Ab7. It is a logical substitution because the two chords share a Gb and the Bb, as the 5th in the Eb minor chord would be functioning as the 9th in the alternative Ab7 chord. Likewise in the last four bars, the ii7 chord, Fm7, is followed by Fm7 b5 instead of the more usual Bb7 chord, the V7 chord. The walking bass line is the classic 1-3-5-6 blues pattern.

![Figure 13. Please Love Me (King/Taub): Accompanying figure featuring bass line and horn parts for vocalization.](image)

The blues melody is to be performed by a soloist, which is really a necessity in the case of a blues because the melody is treated very freely.

This style of blues is representative of the link between jazz and rock and roll. As such it is not something that they would generally play in their repertoire for the jazz course, however, it is a stylistically significant sound that they need to be aware of as well-rounded contemporary musicians.

Following the custom of blues performance, the entire twelve-bar form is used as an introduction before the soloist begins. I have not written down the melody as there is really no pressing need to do so: a singer of popular music can improvise a 12-bar blues melody and there is no reason why it has to be exactly the same as the way B.B. King sings it although it makes sense to use his recording as a model.

After two verses the horn section plays a unison line that uses repetition, adapting notes in the phrase according to the underlying chord. This is a very good
device for outlining harmonic movement. In my arrangement the soloist takes this line. The basses continue with the bass line and the other three parts sing their chords on the last of each group of triplets, which is a great test of the steadiness of their rhythmic feel.

I am using the customary jazz shorthand here of writing swung quavers, which are actually quaver triplets with the first two tied. This is often expressed by a legend at the beginning of the piece where the tempo and feel are indicated.

![Figure 14. Legend indicating swung quavers.](image)

Figure 14. Legend indicating swung quavers.

![Figure 15. Please Love Me: Featured horn section line with off-beat accompaniment.](image)

Figure 15. Please Love Me: Featured horn section line with off-beat accompaniment.

**Analysis 5: WALK AWAY RENEE**

In class there is an emphasis on learning to spontaneously harmonise a melody by learning to use logical voice leading through common chord progressions. I also set an assignment for the class that involves writing a second and then adding a third harmony line to a given melody and chords. The preferred style of this harmony is close, as used in most country, folk and pop music. This assignment naturally leads to discussion of other styles of harmony, such as the wider voicing of chords, and this is one of the reasons why I have chosen to use *Walk Away Renee* (Lookofsky/Sansone/...
Callili, 1966) as a repertoire piece. The other major reason is that it features one of the many variations of the descending bass line harmony. I think it is important for students to be familiar with this idea as it encourages them to think of using inversions rather than always playing chords in root position. It also works well for A Cappella singing because of the step-wise movement, which is easier to sing than parts involving leaps of larger intervals.

This is an arrangement for which the notation is given to the students. However, before handing it out, I write the first six chord symbols on the board, those being: G - D/F# - F - C/E - Cm/Eb - G/D. Then I nominate three different groups to sing the first chord with G3 the lowest, D4 in the middle and B5 at the top. The students can then be guided through finding a logical note in the next chord using a general downward direction.

Rather than having a soloist for this song, I have given the baritone part the melody in the verses. This works well because it is a fairly ‘neat’ melody in that there is very little difference in phrasing from verse to verse, and unlike many pop songs it does not feature the use of melisma, which can make melodies difficult to sing as a group. The verse accompaniment is always in the form of the widely voiced chords. Hence the baritones are not needed for the introduction.

One of the teaching opportunities from this tune exists in the original harmonisation. As originally written, the last chord of the verse is an A7, which while being functionally wrong on the face of it, creates more of a sense of tension before the chorus begins on the I chord, G. In my arrangement I’ve used the original A7 chord but followed it with a D7sus4 chord (bar 12) as a gesture towards correct functionality.
In the chorus the melody leaps between the top three parts, starting with the sopranos because it is the highest part of the melody. The baritones shadow the melody a 6th lower. In the second two bars the melody goes to the altos and interestingly their note in bar 15 is the 9th of the C chord, creating an opportunity for a less obvious voicing with the sopranos a whole tone higher on the 3rd and the baritones a 5th lower on the 5th. The “Ooh” notes sung by the sopranos and altos in bar 16 create movement between this phrase and the next, a gesture towards replacing the missing instrumental accompaniment. The melody reverts to the baritones for the last phrase.
Figure 17. Walk Away Renee: Chorus melody shared between sopranos, altos and baritones.

The simple ‘verse-chorus’ form is enlivened by the addition of a third section, an instrumental break that goes to the relative minor and uses a chromatically descending progression. My experience of teaching this arrangement to the class bears out the theory of step-wise motion being easier to sing in that the altos had a little trouble pitching their notes in bars 25 and 26.
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After this section the song returns to a chorus, there is another verse and another chorus and it ends simply at the end of the chorus with a very small ritenuto.

I have found that the students find this kind of harmony satisfying to sing and although none of them previously knew the song they all came to enjoy singing it.

Analysis 6: SWEET GEORGIA BROWN

*Sweet Georgia Brown* (Bernie, Pinkard, Casey, 1925) is one of the best-known jazz standards in the wider community, due largely to the use of the song by the Harlem Globe Trotters exhibition basketball team (with a recording by Brother Bones) that toured the world during the 1970s and 80s. I have used the rhythmic idea from that version, a swing feel with a strong rhythmic figure, as an introduction on the first chord of the form, D7.
EFFECTS OF HARMONY SINGING ON IMPROVISATION SKILLS

Figure 19. Sweet Georgia Brown (Bernie/Pinkard/Casey): Rhythmic figure used as accompaniment.

The song has an interesting chord progression in that, although in the key of F major, it begins with four bars of D7, followed by 4 bars of G7, followed by C7, which brings us at the resolution of the first half to the tonic, F major. The second half begins the same way but goes to D minor after the G7 (Dm-A7-Dm-A7) and then uses a chromatic run to lead to the final II7-V7-I. The tune has similarities to the original 12-bar blues in that it uses dominant 7s in preference to diatonic chords, which means that in essence it travels through several keys before resolving to F. This can also be characterized as ‘back-cycling’ using the Vs of Vs in a row of secondary dominants.

This song provides a good opportunity for jazz/blues style guide tone singing. This is another arrangement that the group learns without notation. I do give them a lead sheet detailing the melody, lyrics and chords. From this, using the simple rhythmic pattern as in figure 19, an arrangement can be pieced together using the singers’ own knowledge of guide tones. In practise, I begin without the soprano part, as the notes that it adds are the less necessary ones. All the song really needs is the bass notes, the 7ths and the 3rds. When there are resolutions I have used Ma6 chords, meaning that in practise whoever would normally sing the 7th sings the 6th instead.

Before embarking on any of the chordal work though, I use this song as an opportunity for deep melodic learning. Many people have heard the melody reinterpreted in several ways and when asked to sing the melody find that they don’t actually know it well at all. I found this to be the case in class. For this reason we took a detailed look at how the melody is constructed. For example the first 4 bars delineate the D7 chord using both step and arpeggiated motion. In this instance, the
numbers refer to the root note of the chord, meaning that the students think carefully about the notes relationship with one another and in relation to the root note.

Figure 20. *Sweet Georgia Brown*: Melody notes given chord numbers.

In several instances when I have taught students arrangements, the melody has proved to be the least solid element, as I have wrongly assumed that in the case of jazz standards, they already know the melodies, or in the case of pop songs that are often only vaguely familiar to them, that they listen to the melody carefully in order to learn it. (This is actually an important side issue to my study, that in jazz education melody has been relegated in importance several steps below harmony, when it is in fact a source to be mined for harmonic information as well as its lyrical qualities.) I also ask the students to sing the root notes for most songs that we look at, believing that it is impossible to start ‘hearing’ the changes in a song unless you first know the bass line movement. I would conduct both of these activities with “Sweet Georgia Brown” before continuing with the guide tone parts.

A root, a 3rd and a 7th is a perfectly useful and stylistically acceptable way to voice a chord in the jazz tradition. In my class there is always a session spent on 12-bar blues progressions, beginning with the simple rock & roll blues with the last four bars being a V-IV-I progression and all chords being dominant 7s, working our way through to more complex jazz blues harmonisations including diatonic chords. For this exercise I will ask them to sing first the root notes, and then the guide tones, starting on either the 3rd or the 7th. Thus they can easily work out their own parts in *Sweet Georgia Brown* until bar 13 when the F6 appears and I have given them linear parts in order to get back to their starting notes for the second half of the tune.
The last 4 bars is relatively easy in itself because there is a chromatic sequence of dominant 7 chords from F7 to D7 followed by a II7-V7 I. However in practise the difficulty was in finding the notes to start this chromatic run on from the A7 chord that precedes it. In order to get back to the starting notes for the repeats they use the same chromatic run (bar 36).

Note that the soprano part here is providing the 5th, the least necessary note of the chord. This arrangement is modular in that it can work with or without the soprano part. In class I split a few females from the alto part and guided them to adding mainly 13s and 9s to the chords already formed, for instance, in bar 35 with the soprano part added the chords are more accurately G9, C13 and F9.
This tune, like *Sweet Happy Life*, functions as a regular piece of jazz repertoire, in that once the melody has been stated improvisation can follow before restating the melody at the end.

**Analysis 7: NO MOON AT ALL**

*No Moon at All* (Mann/Evans, 1947) is a lesser-known jazz standard that features an AABA form. I chose it as a repertoire piece mainly because it features a chord-progression where the bass notes descend chromatically. I have used semi-tone movement as much as possible, adhering to the ‘small interval’ theory. The song is arranged in three parts, the melody with two accompanying voices, using mostly ‘root-less voicings’, which are an important harmonic concept in jazz.

In broad terms, there are three arrangement ideas in the song. Firstly, the 2-bar introduction, which also functions as a turnaround and is later adapted to suit the different harmonic change in to the B section. It is also re-used in the repeats (tags) in the coda.

![Introduction figure](Image)

*Figure 23. No Moon at All (Mann/Evans): Introduction figure.*

Secondly, the A sections, as discussed, have the chromatic descending pattern. The song is in B minor, and starts on the tonic chord. The next chord is F#. Therefore the accompanying parts, which began on B and D, can drop to A# and C#. In the third bar of the A section the chord is A°, so the two parts can drop another semitone. I have given an alternate name for this chord, B7b9. This is a common chord substitution issue and consequently is one of the learning opportunities from this arrangement. The following chord is E (bar 6), so in chord function terms it is correct
to precede it with a B7 chord. If a b9 is added to a B7 chord, and the root note is omitted, we are left with an A° chord, hence these chords can substitute for one another. There is an F# in the melody, which supports both chords. The next chord I have designated as G° (bar 7), only because the G is in the lowest part, and the parts continue on the chromatic track and down again in the next bar to create D, at which point they both drop a whole tone for F#7b9 (bar 8), which seems like a complicated chord, but it gets them directly to where they need to go as the upper part drops to F# for the resolution to Bm (bar 9), and the lower part takes the role of the bass and goes to a B, which is the start of an arpeggio run that I have composed as an introduction motif.

Figure 24. No Moon at All: A section

Thirdly, the B section brings a soloist in to sing the melody so that three parts can be devoted to creating the rootless voicings. The section starts on a B7 and continues through the cycle of fifths with dominant 7 chords until it arrives at D, the
relative major in this key. This is a common chord progression, most often heard in
the bridge, or B section, of ‘Rhythm Changes’, a progression that has been used over
and over again with different melodies by jazz players ever since Charlie Parker wrote
his first contrafact over the chord changes of I Got Rhythm (Gershwin, 1930).

I have not written basic dominant chord voicings, using instead the kind of
voicings that a jazz pianist might choose. The first two chords (bars 13-16) are voiced
3-5-9 and all parts move in parallel. The melody is useful here because it spells out the
basic B triad, so the absence of a root note in the chords is not problematic. At bar 18,
to add movement, I have used the common jazz tactic of preceding a dominant chord
with its corresponding iim7 chord, in this case inserting an Em9 chord in between the
two A13 chords, achieving a ii-V-I progression as the bridge resolves to the relative
key of D Major. This can be achieved by just one part moving by a semitone. I have
avoided some possible complexity in the last two bars of the bridge, in which a
turnaround back to the minor key is normally executed, by using a more contrapuntal
idea followed by a return to the use of semi-tones.
Figure 25. No Moon at All: B section with added soloist.

Possibly the most difficult lines to sing are those in the ending: both the accompanying parts have a descending semi-tone followed by a whole tone. Accuracy of intonation here relies largely on the singers understanding the sound of the Bm6/9 chord, (voiced here as 3-6-1 in the tags and 3-6-9 for the final chord), which we must of course practise doing in our rehearsals.

Figure 26. No Moon at All: Coda section with tags and final chord.

I write the chord progression in to the chart so that at any point the students can see what role their note plays in the sound of the chord, and this is constantly reiterated in the learning process.

In subsequent jazz arrangements I have also used the 4-part model, which is in some ways easier because the bass notes can be present, however, it tends to make the inner parts a little more difficult. A decision about this would often rest on how large
the group is that semester. The optimum size is twelve, because a fairly good result can be achieved in four or three parts, without putting too much responsibility on any one member.

Analysis 8: *BABY DON’CHA GO ‘WAY MAD*

This is another not-so-well known standard (Stilman/Jacquet/Mundy, 1950) that has been chosen for its structure, both melodically and harmonically. It is in the key of Eb, easily sung in a female chest voice. The first four bars travel diatonically up the scale from I to IV and then in bars 5-8 move chromatically down from the bIII back to the tonic. The melody is largely made up of arpeggios and encompasses some large intervals in the first four bars, then stays around one arpeggio for the next four. The bridge goes to the relative minor with a ii-V-I in C minor that happens twice in four bars. Then the Cm becomes the ii chord in a ii-V-I in Bb major, which happens again with the F chord becoming minor as the ii chord in the original key.

The A sections utilise a female soloist who sings the melody over 4-part root-position chords. This is not a voicing that is commonly used in jazz, although it sounds better in major and minor 7 chords than it does for dominant 7 chords. In this instance the basic voicing is embellished by using chords a semitone away to create rhythmic interest. One of the activities we do in class is to build a chord, sometimes quite complex jazz chords, and then move the whole thing up or down by a semitone. In this way the students become more aware of the notes’ relationships to one another. This arrangement builds on that skill.
This relentless unity of contour and diatonicism is relieved somewhat in the next four bars as the altos stay on one note throughout the next three bars while the other parts descend chromatically.

The bridge as I have mentioned uses ii-V-I harmony but in keeping with my small interval policy, also to keep the register singable for the basses, I have decided...
to use tri-tone substitutions. As this is a common practice in jazz, the students are familiar with the idea but in the first instance (bar 14) it works slightly differently to the usual way due to the fact that it is a minor ii-V, with a b5 in the ii chord. This is a learning opportunity for the group due to the nature of the parts movement as the basses and altos move down a semitone but the tenors do not, because their starting note was the b5\textsuperscript{th}, which becomes the perfect 5\textsuperscript{th} in the following chord. This chord substitution means that the chord becomes a dom7#11 because the melody stays on the same note as in the first chord.

![Figure 29. Baby Don' cha Go 'way Mad: Tri-tone substitutions used in B section.](image)

The chromatic quaver movement in the alto and tenor parts keeps the swing feel going through the ends of phrases.

The second half of the bridge is a more standard usage of the tri-tone substitution. In keeping with the generally close style of harmony used in the rest of the arrangement, there is one rootless voicing in bar 20, the basses going up to the 7\textsuperscript{th} of the F13 chord instead of down to low F, which is too low for most of them.
The arrangement continues very simply with the third A section, repeating from the bridge again and ending simply with the last four bars repeated twice.

**Analysis 9: IMAGINE**

This arrangement was originally written for a more traditional style of small choir. I was able to use it with the AET class in the final semester of the project because the class had five females, six including myself as against seven males, one of whom volunteered to sing alto. This is a very well-known song, written by John Lennon in 1971 and sung in his idiosyncratic style. The arrangement is strictly in four parts, with no soloists, which has made it necessary to re-interpret some of his phrasing. I have also changed the key from C to Ab major. The melody moves from the altos in the verse, the baritones in the pre-chorus, to the sopranos in the chorus. A simple arpeggio idea is used in the introduction, keeping the contemplative mood but doing away with the original pianistic introduction and accompaniment.
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The chords are basically I-V-IV, but this arrangement contains slash chords, for instance, the V chord is actually a IV triad over a V bass. This is a common pop and R&B use of harmony, arising in the 1970s and occurring extensively in pop and rock music ever since. I have also added a suspended 2\textsuperscript{nd} in the I chord in bar 1.

In the verses the sopranos and baritones continue with the arpeggio idea while the altos sing the melody. The basses meanwhile are providing a very simple root note part moving from I to V and IV. In the last crotchet of the first bar of the verse a Cm7 is added. This can also be conceived as another slash chord, that is Eb/C.

In the chorus I have taken some liberties with the chords as originally written. In the first bar of the chorus I have kept the Db in the bass while voicing the V chord, Eb, in the other three parts, allowing the basses to drop to a C to create a 1\textsuperscript{st} inversion.
Ab chord in the next bar with a suspended 2\textsuperscript{nd} in the tenor part resolving to the root on beat two. The second half of the bar contains the original C7 chord but I have added another suspension from the b6, also in the baritone part. I have also added a 2/4 bar enabling a longer time spent (without having to pause the tempo) on the penultimate chord of the chorus. This then repeats right back to the introduction, which resets the calm mood.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{example.png}
\caption{Imagine: Chorus, featuring re-harmonisation and added 2/4 bar.}
\end{figure}

The introduction figure is repeated twice between the second chorus and the third verse, again used to pull back the dynamic and calm the mood. After the third verse there is a double chorus and the song ends with the introduction figure. It has been instructive to explore the use of the quiet dynamic with the group, they seem to become more aware of their blend and their overall sound.

\textbf{Other repertoire}

In keeping with the idea of reproducing instrumental music, I have a couple of times taught the class an arrangement of J.S. Bach piano pieces. As these require some vocal agility on top of the usual harmonic requirements it is not an essential element of the AET method, but if a particular group is able to take on the challenge, I have found that they greatly enjoy the achievement. It is my belief that students of
jazz should be taught some Bach as a matter of course: one of the essential skills for a jazz musician is creating a single line that delineates a harmonic progression, and Bach is a universally celebrated exponent of this skill.

Another song I have used is *For No One* (Lennon/McCartney 1966). It is a reasonably simple descending bass-line composition and the arrangement features the tenor section singing the melody, with a bass part (the basses sing one line of melody in the chorus) and two accompanying chordal parts. This song illustrates one of the ongoing challenges of arranging popular songs for groups, that is, that male pop singers tend to sing in much a higher register than the average male choir member. This arrangement, written quite some years ago for another group, serves to illustrate how I have now adapted my arranging technique. For the AET group I would either change the key or have the girls sing the parts that were too high for the boys. In this case, I was lucky to have a few young men who were brave enough to venture in to their quite presentable falsetto ranges to reproduce the melody as Paul McCartney sang it.

In a previous semester when there were four females in the group I used another of my previous arrangements, *Close to You* (Bacharach/David 1963). I would hesitate to use this ordinarily because it does not necessarily appeal to young men; however the harmony style is attractive to the students and they learned very easily and enjoyed the experience.

**Summary**

Over the seven semesters since my very first AET class I have experienced very different levels of part singing skill and aptitude with the student groups, often within one group, which is when it becomes difficult to pitch the classes to an appropriate level. Commonly there are half a dozen strong part singers who are relied upon by other members of the group. By having students sing together, the student with a less developed ability is more likely to perceive harmony simply by participating in the same harmony-finding task with a more developed student (Johnson, 2013). This ‘peer learning’ activity is recognised as an effective way for students of non-classical music to gain skills (Lebler, 2008).

I am still formulating ways in which to promote a strong individual responsibility for singing parts correctly. In practise it can be difficult to keep a close check on what some of the less forthcoming students are singing without intimidating
them by coming close to them to hear what is actually issuing from their mouth.

I think I have gained enough experience now to begin grading the arrangements from simple to more difficult and choose them to suit any given cohort.
Conclusion

It is clear from my research that there are many resources for use in ear training programs and that they cover many contexts and musical approaches to the undertaking. My own surveys have shown that teachers and students in the Australian context believe aural skills training to be of vital importance in the learning of jazz improvisation. It would appear from the information gathered from the AET participants that the method is effective in helping students to integrate their theoretical knowledge with their aural perception and giving them a framework with which to listen to music in order to learn.

My investigation of the literature shows that many scholars have shown that aural training, especially as integrated with theoretical knowledge, is of vital importance to all musicians and especially jazz players. Questions arise then, why does there not appear to be evidence of these methods being applied more generally in music education in Australia? Of course asking and answering this question invites a different study, but it seems to me that too many music teachers in general are still avoiding placing a high degree of importance on aural skills and emphasizing instead reading and technical skills. In high school music, stage bands, big bands, and orchestras are the main focus for students in the music program. In itself this is not a problem but as Swanwick (1999) points out, these bands generally present a narrow concept of performing and in most cases don’t promote musical understanding, usually being focused on performing to schedules and winning competitions. Teachers who themselves have not been encouraged and taught to rely on their ears are hardly likely to promote this skill with their own subsequent students.

Writers such as Covington (1997) and Plude (1996) posit that improvisation should be part of any musical education. When a student improvises, they have the opportunity to demonstrate understanding of musical materials and how they fit together. This is routinely asked of jazz students. In the AET course, students are also constantly being asked to demonstrate their harmonic knowledge vocally. The AET method takes the students away from their comfort zones; for instrumentalists, using only their voice, and for vocalists, operating as accompanist. This leaves students no opportunity to lapse into established patterns, and thought is constantly given as to...
how to achieve a musical objective. The students that have so far participated in the course have come to understand how important aural skill is for their improvisational abilities and have articulated here many ways in which the AET processes have enabled them to build their musicianship.
Reference List


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EFFECTS OF HARMONY SINGING ON IMPROVISATION SKILLS


EFFECTS OF HARMONY SINGING ON IMPROVISATION SKILLS


Appendix A

SAMPLE QUESTIONS FROM SEMI-STRUCTURED INTERVIEWS WITH STUDENTS

Tell me about your playing experience before enrolling at JMI.

Did you do any theory exams? Or theory at school?

How does the experience in this group differ from what you’ve done before?

Why did you enrol initially in the course? What did you expect?

What’s different about singing the musical material rather than playing it on your instrument?

Do you find that in this group you’re approaching information from different angle than you do in your other classes?

Do you think it’s helped you in your theory subject and your aural subject?

Do you think it’s made you think differently when you’re learning music by listening to it?

Do you think that feeds in to your ability to improvise?

What exactly do you mean when you say you ‘know ‘ a tune?

Do you think it helps you to retain or to understand information? To sing it?

Do you think it has any effect on your sense of yourself as a performer? Singing with the group?

Is there anything that you hoped to do in AET classes that we didn’t cover?

Do you think the experience in this class has had any effect on your sight-reading ability?

Do you have anything else just to say about your experience as a member of this group?

Did you learn anything in particular from our final performance?

Do you think you feel a different kind of responsibility to the other people in the AET group than you do in an instrumental band?
Appendix B

Survey Monkey questionnaire for Students of AET

1. Before enrolling at JMI, what were your musical experiences? Choose all that apply.
   (a) Formal instrumental training including examinations.
   (b) Garage/indy band.
   (c) Church band.
   (d) Choir.
   (e) Other (please specify).

2. What kind of music did you spend time listening to? Choose all that apply
   (a) Pop.
   (b) Heavy Metal.
   (c) Jazz.
   (d) Classical.
   (e) Folk.
   (f) Other (please specify).

3. Do you think that your aural perception has improved after a semester of AET? If yes, how?

4. Do you find that your ability to learn music by listening has improved after AET? If yes, in what aspects?

5. Has AET had an effect on your understanding of music theory? If yes, how?

6. If you are an instrumentalist, do you find that using your voice instead of your instrument has an effect on the way you learn?

7. If you are a vocalist, have you found that performing as part of an accompaniment for other singers has affected your understanding of musical material?

8. Do you think that participating in AET has had any effect on your improvisation skills?

9. Is there anything else you would like to add regarding your experience of AET?
Appendix C

Questionnaire for Teachers of Aural Skills

Do jazz students have particular needs with regards to aural training?

Is your aural skills training bundled in with another course, ie. Ensemble or Musicianship/Theory? If so, what and how?

To what degree do you use singing as a way of assessing student learning? Please give details.

Do your jazz students share any part of their aural training with classical stream students?

Do you use any examples of other styles of music (eg. pop, folk) in your course?

Does your course contextualise interval recognition using musical examples? (Not including the use of the first 2 notes of well-known tunes ie. “My Bonnie” for major 6ths.) If so, how?

What opportunities are there at your institution for students to practise their aural/vocal skills outside of aural training class? Ie. Choir, vocal group, transcribing.

Do you use a textbook? Or model your course on any particular method or theory? Please describe.

How important on a scale of 1-5, with 5 being most important, is aural skill development (in your view) considered by your institution?

How important (on the same scale) is aural skill development (in your view) considered by your students?

How important (on the same scale) is aural skill development considered by yourself?

Is the importance of aural skills reflected in credit point allocation?

What is YOUR definition of musicianship?