

Playing the Field

**An Australian Case Study of
Student Popular Musicians' Informal Learning in
Senior Secondary Classroom Music Education**

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ABSTRACT

This thesis explores the field of classroom music education with the aim of foregrounding the learning experiences of students with established performance practices in popular music. The Australian context is well able to contribute to the global discussion that is underway in popular music education. Here curricular acknowledgement of the ‘non-literate’ musician at the senior secondary level dates back to the late 1970s (Board of Senior School Studies, 1977). Yet to date, these students’ experience of classroom study has not appeared to warrant research investigation, due in part at least to flexible curriculum structures facilitating practical learning, and generic frameworks for organising musical knowledge known as music ‘elements’ or ‘concepts’ that are believed to meet the needs of those with “informal learning” backgrounds (Board of Studies, 2009c, p. 6).

Over the past decade, research has sought to qualify the nature of informal music learning, and develop classroom pedagogies that are believed to be more relevant to the study of popular music. Utilising these as a starting point, this thesis examines the complex relationship between such students’ informal learning and the dynamics of the formal classroom, through the lens of a multi-dimensional case study. The context of the study is the upper or senior secondary school level in New South Wales (NSW) Australia, where two separate pathways for students are maintained: one preserving the traditional knowledge and skills associated with Western Art Music (WAM), and the other (noted above) providing broad access to music learning which is inclusive of the student popular musician. To fully contextualise the case, research was undertaken on three levels: historical, through an investigation of curriculum documents, reforms and matriculation trends over a sixty year period leading to the present set of circumstances; empirical, through a 10 week classroom research project integrating the courses in order to explore a range of informal and formal tasks; and theoretical, via an overarching explanatory tool known as Legitimation Code Theory or LCT (Maton, 2014), which helps to tie together findings from the first two levels.

The research revealed that the curricular pathways and classroom pedagogies employed result in the maintenance of a ‘code’ distinction: cultivating the traditional

knowledge and skills for WAM according to an *élite code*, but not providing adequate knowledge-building opportunities for student *knowers* who participate in popular and other vernacular music learning practices. Considering the range of cross-genre music-making evident in the study, and the delineation of a spectrum of knowledge and skills spanning the code distinctions, findings highlight the need for a re-evaluation of NSW curriculum and pedagogy appropriate for senior secondary students. Given that the issues raised in the research exist in many Western educational systems, such a re-evaluation has relevance beyond these shores. A recognition and theorisation of the relationship between different forms of musical knowledge across the informal-formal range is believed to be key to providing both socially relevant, and epistemically challenging classroom music education that includes all students in the future.

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DEDICATION

This thesis is dedicated to Bridie, and to musicians who like her struggle to be seen and heard in classrooms. Thank you for teaching me many things.

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This thesis contains reference to ideas that were included in the following publications:

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Carroll, C. (2014). Music in the gap: Creative synergies in formal and informal approaches in the senior secondary classroom. *Musicworks: Journal of the Australian Council of Orff Schulwerk* 19(1): 37-46.

Carroll, C. (2015). How did we get here? A teacher/researcher's perspective of curriculum change and effect upon NSW senior secondary music education. In J. Rosevear & S. Harding (Eds.), *Proceedings of the Australian Society for Music Education XXth National Conference: Music: Educating for life*, Adelaide, South Australia, Australia.

As no verbatim passages, other than interview data and classroom transcript excerpts from these publications appear in the thesis, permission is not required.

DECLARATION

This is to certify that to the best of my knowledge the content of this thesis is my own work. This thesis has not been submitted for any degree or other purposes.

I certify that the intellectual content of this thesis is the product of my own work and that all the assistance received in preparing this thesis and sources have been acknowledged.

Signature:.....

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CHAPTER 1: INTRODUCTION

Background to the Study

The field of school music education has changed markedly over the past century, so that, increasingly, Australian music classrooms are catering for students with interests and learning orientations relevant to popular music forms. In the state of New South Wales (NSW) where this research was undertaken, senior secondary curriculum acknowledging the inclusion of the ‘non-literate’ musician dates back to the late 1970s (Board of Senior School Studies, 1977).¹ But these students’ classroom learning experiences have not yet been the subject of research investigation, as flexible curriculum structures which have changed little over this time are still believed to “meet the needs and interests of students with varying degrees of both formal and informal learning in music” (Board of Studies, 2009c, p. 6). Despite such inattention to curriculum innovation at the senior secondary level offered in the final two years of high school, the number of tertiary institutions offering degrees in popular music in Australia and abroad has grown markedly (Bjornberg, 1993; Hannan, 2005; Karlsen, 2010; Powell, Krikun, & Pignato, 2015). Along with widening access to tertiary music study, students today live in a world of plural musical practices, with digital and online tools enabling new and hybrid forms of musicianship and music creation, challenging the ongoing distinction between formal and informal modes of learning (Webb, 2008, 2010).

School music education struggles to stay abreast of these changes, as classroom practice to varying degrees looks two ways: outwards towards music industries, and inwards, to curriculum and assessment bodies that define the terms for educational success. As a result of this tension, classroom music has been criticised for lacking authenticity, producing a kind of ‘pseudo’ music (Swanwick, 1999). Students have reported experiencing a disconnection therefore between the musical worlds they inhabit outside the classroom, and that presented to them within (Lamont, Hargreaves, Marshall, & Tarrant, 2003).

¹ NSW senior secondary curriculum (Stage 6) caters for students in the final two years of high school, who are typically between 16-18 years of age.

These are long-standing issues that have origins in the 1950s at least, with the emergence of rock n roll and the rise of youth culture as a new market force, not just in Australia but in all Western nations and beyond (Arrow, 2009). Yet at the time, music instruction inside schools solely focused on Western art music (hereafter WAM) (Comte, 1988; Pitts, 2000; Rainbow, 2006). Music was studied in relatively objective terms, with the intention that students appreciate its aesthetic qualities through the gradual acquisition of music literacy skills (Goodman & Jacobs, 2008; Small, 1977).

The student-centred educational initiatives of the 1960s and 1970s—foreshadowed in the work and philosophy of John Dewey (2016)—proposed more democratic classroom pedagogies (Glaserfeld, 1995a), which for music classrooms resulted in a gradual shift away from teacher, to learner-led practice (Jeanneret, McPherson, Dunbar-Hall, & Forrest, 2003; Pitts, 2000). Although still based in WAM, practical music-making pedagogies were introduced to facilitate discovery and invention (Paynter & Aston, 1970). Over time these initiatives, and broadening cultural diversity in society at large, led to the inclusion of content outside the WAM tradition. Jazz, popular and non-Western musics were studied at school, and unilateral frameworks for organising musical knowledge known as the Elements or Concepts of music were introduced to assist in negotiating this new diversity (Cain, 2004; Dunbar-Hall & Wemyss, 2000; Jeanneret & McPherson, 2005; Mark, 1986; Rose & Countryman, 2013).

Curriculum writers had looked to the world—or rather worlds—of music in an attempt to make classroom learning more relevant, democratic and authentic. However, pedagogies appropriate to these musics were not developed at the same pace (Green, 2001), nor did teachers come equipped with the requisite knowledge and skills with which to teach them with authenticity (Jeanneret, 1993 and Chapter 4 of this thesis). This was particularly problematic for students interested in playing and creating popular music as the skills they acquired were often deemed antithetical to the nature of formal schooling (Small, 1983). ‘Informal learning’ pedagogies have been developed to address this problem; as they offer models aimed at replicating the real-world learning experiences of popular musicians in classrooms (D'Amore, 2011; Green, 2001, 2008a; Jeanneret, 2010 and Chapter 2 of this thesis). These pedagogies

are a relatively new development however, and do not constitute a complete classroom package, nor do they claim to address all curricular needs for all students. Rather, their introduction has resulted in further broadening the range of available classroom pedagogies to teachers. This situation has both the potential to enlarge teaching practice, or conversely, may polarise students according to an increasingly divergent set of learning pathways deemed relevant to different kinds of student musicianship. One pathway seeks to foster and preserve the knowledge and skills associated with WAM (McPhail, 2016), and the other leans towards musical practices aimed to facilitate the needs of the student ‘knower’ (Elliott, 1995).

Today, music classrooms in NSW and elsewhere display the legacy of these changes and as a consequence, are arenas of struggle over seemingly conflicting agendas and competing claims (McPhail, 2012b). In ideological terms, these manifest as opposing approaches and emphases. Some practitioners seek to preserve formal disciplinary knowledge, while others acknowledge everyday music and musical practices including the ‘popular’, which they believe caters best for diversity and inclusion. As might be expected, tension results. Few studies have explored this tension from the inside out, through the eyes of students and teachers navigating the complex terrain of classroom interactions, which is where this study is situated in its focus.

NSW Senior Secondary Music Education and the Student Popular Musician: Relevance of the Case

Music curriculum documents for NSW senior secondary classrooms are structured in such a way as to address both conservative and progressive pedagogical agendas, and therefore facilitate learning for different kinds of music and musicians. The school education system of NSW therefore provides a compelling context in which to examine the experiences of student popular musicians—the newest entrants to the field—through the lens of a multi-dimensional case study. As a research context, it is also one with which I am familiar given that my schooling, tertiary music training, and secondary school teaching experience has all been undertaken there, albeit through pathways focused solely on WAM study and practice.

Today, NSW schools offer senior students separate pathways of study, together aiming to cater inclusively for the needs and interests of students. Not all schools offer both pathways, as the general candidature for music remains small—hovering around 8% of the total number of students matriculating from high school. The first pathway encompasses the Music 2 and Music Extension courses, which maintain focus on the traditional knowledge and skills associated with WAM (Board of Studies, 2009d). At present, this pathway is pursued by approximately only 14% (approximately around 840) of a total music cohort averaging around 6000 students.² The second pathway is the relatively recent and aforementioned addition now called Music 1, which makes room for much of the groundswell of change in musical and pedagogic diversity that exists at this level. Here the majority, many with orientations toward popular music, are provided with a curriculum designed for general ability and beginner level musicianship (Board of Studies, 2009c). The structure and focus of these courses have changed very little in the past thirty years, despite the numeric growth in Music 1 candidates state-wide now averaging around 84%, and, the incorporation of popular music studies into tertiary education.

Research Questions

With NSW senior secondary music education providing the research context, the following questions were posed:

1. At what points historically did NSW music curriculum documents begin to take into account popular music and musicians, and in response to what broader educational trends?
2. In what ways do student popular musicians' 'informal' knowledge and skills align with, or diverge from, the 'formal' knowledge and skills traditionally cultivated in classrooms?
3. To what extent are the needs of student popular musicians catered for by informal and formal classroom pedagogies?

² 2015 Matriculation statistics for NSW BOSTES HSC Music courses accessed August 8, 2016, from http://www.boardofstudies.nsw.edu.au/ebos/static/EN_SX_2015_12.html

4. Are current curriculum structures and assessment practices adequate in meeting the educational needs of student popular musicians?

Overview of the Thesis

These questions necessitate both a wide-angled overview and a more focused study. Current literature pertinent to the learning modes of the student popular musician, as well as recently developed informal classroom pedagogies are surveyed in Chapter 2 against a backdrop of skills and knowledge practices traditionally fostered in schools. The survey of literature provides the basis for a multi-dimensional case study proposed and outlined in Chapter 3 undertaken within the context of NSW, Australia (Stake, 1995).

In Chapter 4, the first research question is addressed. This entailed an historical examination of music curriculum and practice in NSW senior secondary music education during the period 1955 to 2015. Particular attention is paid to the events leading to the entry of popular music and musicians into the domain of classroom music education. Relevant literature and matriculation statistics from the period supplement the historic narrative. These resources are foundational to the presentation of findings addressing questions two, three and four above, which are set out in Chapters 5 through 9. There the thesis zooms in to observe the dynamics of a specific classroom research project exploring a range of informal and formal approaches adhering to an experimental case study design (Cobb, Confrey, diSessa, Lehrer, & Schauble, 2003; Stake, 1995). This portion of the research required close and detailed observation, so research was conducted within a qualitative framework with a range of data types collected as outlined below. Analysis of these data employed grounded theory (Corbin & Strauss, 2008), and, an overarching explanatory tool known as Legitimation Code Theory (LCT) from the sociology of education (Maton, 2014). LCT provided a way of drawing together the historical and classroom-based research. Chapter 10 comprises a concluding summary, with a set of recommendations for the NSW context, and potentially, to school music education elsewhere.

Overview of Research Methodology

The classroom study was carried out in 2012, at a Sydney independent senior secondary college where I was employed as a music teacher. The classroom research took place over a 10-week period, with two additional teaching staff and 30 newly enrolled senior secondary music students representing a range of learning backgrounds and prior skills. Due to the specific orientation of the school, the majority of these students reported established skills and interests in performing and producing popular music. For the purposes of the research, the teaching and learning program addressed both NSW senior music curricular streams concurrently, and hence manifested within the same classroom a range of activity characterised by the terms ‘informal’ and ‘formal’ learning and pedagogy (Green, 2001, 2008a). An entire teaching and learning cycle was implemented, using practical music-making as the basis for the construction, transmission, and assessment of knowledge and skills.

The classroom research project gathered data through various means in order to provide a holistic view of events from both student and teacher perspectives. These included an initial student survey to establish prior learning and current music interests, and subsequent filming of classroom music lessons over the ten-week research period. In addition, student and teacher interviews were undertaken and transcribed, student work samples collected, and field notes made (Denzin & Lincoln, 1998). Extensive recorded lesson footage, which included both verbal and musical interactions among and between students and teachers, was transcribed. The transcripts, interviews, and work samples were then subjected to a grounded theory analysis to generate a body of emergent themes (Corbin & Strauss, 2008). As the research was exploratory in nature, additional literature searches were undertaken to investigate the nature of learning and music-making unfamiliar to me at the time. The classroom learning occurred in student groups, with each treated as a distinct entity within the context of the broader case study. However, when the transcripts from each group were cross-analysed, a broader series of themes emerged. These overarching themes highlighted the need for an additional level of theoretical appraisal, which was undertaken using LCT. This theoretical framework provided a useful explanatory tool capable of bringing together the analysis of curriculum documents 1955-2015, and the findings from the classroom research project undertaken in 2012.

Much of this thesis is presented as a classroom ethnography (Krueger, 1987), for accessibility and as a means of communicating a sense of the chronological flow in the classroom case study. Due to my position as teacher and researcher, personal pronouns ‘I’ and ‘my’ preface many explanations. This is in keeping with the nature of ethnographic writing, which acknowledges the researcher as instrumental in both processing and interpreting the findings (Krueger, 1987; Stake, 1995). My voice is however only one of those featured, placed alongside the voices of students and colleagues, who have been given pseudonyms so that they cannot be identified.

The issue of the timing of the phases of this study requires explanation. The classroom case study was undertaken in 2012 at the beginning of my research candidature. I undertook the analysis of historical curriculum documents and state-wide matriculation trends later, in 2014 and 2015, when a clearer picture of what was happening in the classroom had begun to emerge from the transcription and coding process. As I was able to identify themes from the analysis of the case study data, a series of educational questions arose. When grounded theory is coupled with the multi-dimensional and experimental or action-oriented approach described by Stake (1995) and Cobb et al. (2003) and others, theorising of the data needs to go beyond description. To assist in answering these questions, I also familiarised myself with LCT because it offered theoretical tools capable of bridging the gap between the ethnographic moment and the broader educational issues of the field.

Legitimation Code Theory (LCT) and the Sociology of Music Education

Research praxis in the sociology of music education is a rapid growth area; its ability to bring fresh insights to long-standing issues within the field of school music education internationally is increasingly being taken up by researchers (Wright, 2010; Wright & Davies, 2010; Wright & Finney, 2010). Social realist perspectives have recently been employed in studies undertaken in New Zealand (a country with a similar culture and history of education to Australia), to explore the relationship between music curriculum, pedagogy, and the structuring of musical knowledge in the classroom (McPhail, 2012a). Originally allied to social realism, LCT provides a theoretical lens that by design pays attention not only to the way *knowledge* is

structured, but also to the way *knowers* structure and use that knowledge, and the complex relationship between these—themes central to the review of literature in Chapter 2, and which resonate throughout both historical and classroom levels of research conducted in NSW.

LCT is being used in an increasingly diverse array of fields, with its use in music education having already provided a valuable analytical and explanatory tool (Lamont & Maton, 2008, 2010; Martin, 2016). As a practical, multi-dimensional toolkit, LCT extends and integrates Pierre Bourdieu's field theory and Basil Bernstein's code theory. It recognises that each field (of which classroom music education is one) is relatively distinct, yet connected to others through an underlying set of principles. The game that ensues is therefore one of "competing claims to legitimacy" and its practices are known as "languages of legitimation" (Maton, 2014, p. 17). Actors, including curriculum writers, teachers and students, their dispositions and their positions within fields are conceptualised according to what Maton describes as *legitimation codes* (ibid. p. 18). Acknowledgement of the codes underlying practice provides insights into the internal dynamics of a field. These dynamics tend to manifest as either a *code match* when play is successful, or a *code clash* when players asserting different codes meet to contest their positions. Recognition of the codes underpinning play is key to revealing why tensions and synergies occur in classrooms such as my own, and by implication, those affected by similar dynamics beyond this immediate context.

Currently there are five dimensions to LCT, each conceptualising a different form of legitimation code. Two dimensions feature in this thesis: *Specialisation* and *Semantics*. These dimensions provide different ways of viewing similar empirical phenomena, but with contrasting explanatory potential. Specialisation conceptualises knowledge practices in relation to knowers' positions within fields. This dimension features in the historic review of curriculum and practice in classroom music education in Chapter 4, in the exploration of informal learning and teaching interactions in classroom music-making in Chapters 5 and 6, and in summary statements in Chapters 7 through 10. Semantics provide a means to view changes in the way musical knowledge is organised and expressed by these actors, in both curriculum documents, and in teaching and learning interactions. The Semantics

dimension is introduced briefly in Chapter 4 with regard to changes in the representation of musical knowledge in NSW curricula, but features more prominently in Chapters 7 and 8, where the focus of classroom learning turns to address knowledge practices involving music transcription and written analysis tasks. Both LCT dimensions are used in Chapter 9, where the classroom research concludes with separate activities designed to reflect the two separate NSW streams for senior secondary students. The first of these is a collaborative group improvisation, and the second, a more teacher-directed composition activity. The dimensions also summarise the research findings made in Chapter 10, and underpin the set of recommendations presented for future research investigation. But first, a description of my music background is provided in order to further contextualise the research design, and, the connections made through subsequent theoretical analysis.

Personal Background

My music learning background is marked by two distinct yet intersecting paths. As a student at a Sydney comprehensive high school during the 1980s and subsequently, as a performance major studying in the music department of the University of Sydney in the early 1990s, my education was characterised by immersion in the study of the WAM tradition. This included many years of private tuition in classical flute and progression through the now fairly standard sequence of externally accredited performance examinations.³ Importantly, both my choice of instrument and the school and university I later attended afforded me the opportunity to participate in many different kinds of performing ensembles that operated outside the assessed curriculum. It was there that, despite the formal nature of concert band, choir and orchestral rehearsals, I became aware of the intrinsically social nature of group performance, albeit one that was mediated by the teachers, conductors and scholars within the school and university music departments I attended.

While I followed this path, another passage of learning was also taking place. This began at a young age before any formal lessons were offered, where I taught myself

³ The system of examinations I refer to here are designed and implemented by the Australian Music Examinations Board (AMEB). The system of grades and exams are roughly equivalent to those undertaken by similar national examining bodies in Great Britain, the USA, and further afield.

to sing and play the piano for fun. Later these aural learning skills became invaluable during my involvement with a local church worship band, where I joined others in playing music by ear from recordings, also creating original songs for use in the congregation. By now, the diatonic harmony skills I learnt at school helped me to realise chord charts and improvise. At the same time, my ability to ‘hear’ harmony, rhythm and feel was enlarged, assisting my ability to improvise on the flute—despite never officially being taught how.

It was my success as a classical musician however, that allowed me to complete a Bachelor of Music and Diploma of Education, with which I began my teaching career in a Sydney comprehensive high school during the late 1990s. My teaching was one marked by the assumption that success was defined by helping students to progress through the same acknowledged and legitimate path of learning I had completed, but by that time, the terms for success were undergoing change and re-negotiation.

Unlike my own experience of high school music, which had been relatively narrow and highly specialised, a wider range of syllabus topic areas and a greater variety of music interests dotted the landscape of my classroom. Committed to maintaining the path of learning I had taken, I emphasised the use of staff notation and music theory skills but found that I had to use these to address a broader range and different kinds of music genres than those representing WAM alone. At the same time I became keenly aware of the usefulness of my ‘other’ musical skills, finding my ability to sing and improvise valuable in the classroom especially in the study of popular music and jazz. Importantly, I remained committed to the provision of rich, student-centred classroom experiences, assuming as do most educators today, that knowledge construction would take place as a natural consequence of providing engaging and practical learning opportunities, and that further learning would be built upon those opportunities and that motivational foundation.

At the senior secondary level, I maintained a commitment to teaching the WAM-based Music 2 course and its additional unit of study, Music Extension. Some of my students went on to tertiary study in music and in time also became classical performers and teachers of music. However, enrolment numbers for this course were challenged by the growing popularity of the Music 1 course, which, by the time I left

the school in 1998 necessitated that I teach both courses concurrently in the same classroom, a juggling act that was difficult to manage so early in my teaching career. It was this challenge, and the dialogue that emerged from having to integrate the different curricula, musics, and different student musicians that provided the initial inspiration for the classroom research project discussed in this thesis, but implemented many years later.

My next school, Arrow Music College (AMC), became the site for this research to take place. AMC is a small, relatively unique educational community specialising in music and facilitating the development of student musicians. Operating as an independent school that caters exclusively for senior secondary students, its intake is approximately 30 enrolments per year. The school is attached to a larger tertiary music school offering Bachelor and Diploma level courses in contemporary music performance, sound production and composition, arts management, music theatre and classical performance. The majority of AMC's music teachers and tertiary students to varying extents maintain a career in the music industry as performers, producers, sound engineers and songwriters. AMC provided a context in which to investigate a music classroom positioned at the intersection of music industry and educational field contexts, where student musicians representing both informal and formal learning backgrounds, and combinations of the two, were enrolled.

Justification, Significance and Parameters of Research

Case studies are intimate in scope and hence only capable of truly speaking within their own parameters (Stake, 1995). At the same time, this study is positioned to contribute to broader debates within the field of school music education both historically and globally, if discussion herein reflects situations beyond those presently described. One such issue hotly debated in the recent research literature is that of informal and popular music pedagogies for school classrooms, now included in many pre-service teaching programs (Davis & Blair, 2011; Finney & Philpott, 2010; Jones, 2008; Westerlund, 2006), and supported by *Musical Futures*

(<http://www.musicalfutures.org/>)⁴, a United Kingdom (UK) based organisation with connections in Australia (<http://www.musicalfuturesaustralia.org/>)(Jeanneret, 2010), Canada (O'Neill & Besspflug, 2011, Wright et.al., 2012) and Singapore (Costes-Onishi, 2013; Ho, 2013; Ling, 2013), with similar initiatives emerging recently in the United States of America (USA) (Powell et al., 2015).

Green's (2001, 2008a) informal learning research (reviewed in Chapter 2) provided the empirical foundation for Musical Futures, and was used as a springboard for the present research study (see Chapters 3, 5 and 6).⁵ However, Green's model does not claim to be a complete school music curriculum, with this research intended to contribute to scholarly discussion on informal learning pedagogies, particularly for students at the upper or senior secondary level hence possessing more established musicianship skills and interests in popular music.⁶ The use of LCT is also new to classroom ethnography and provides a powerful explanatory tool capable of bringing together multiple levels of investigation. Due to my immediate position within the study, LCT has provided valuable perspective on, and clarity in, the analysis of data, and, provides an additional level of transparency to the presentation of findings.

On the surface, this study explores different kinds of classroom discourse that surround the meeting of popular and classical music and musicians. At a deeper level, the research revealed not only connections between these modes of music-making, but more importantly, a hitherto obscured spectrum of knowledge and skills bridging learning boundaries. Stylistic and aesthetic distinctions remain between popular and classical music forms, as music is and will remain a personal and collective identity marker. However, a central finding is that the development of the student popular musician is only possible through recognition of the knowledge accompanying her or his learning. Recognition of knowledge in all of its manifestations is key to building empowering classroom dialogue with students. There is still much work to be done;

⁴ At the date of writing, Musical Futures has signed over 4000 members with connections in over 80 countries worldwide (Ms Clarke, Musical Futures (personal communication, September 21st, 2016).

⁵ Green's research has initiated a near tsunami of research publications and now second and possibly third waves of academic discussion surrounding informal and popular music pedagogies worldwide. See (Abrahams et al., 2011; Allsup & Olsen, 2012; Augustyniak, 2013; Cain, 2013; Clements, 2012; Evansa, Beauchampa, & John, 2015; Karlsen & Väkevä, 2012; Lill, 2014; Lines, 2009; Mans, 2009; Mantie, 2013; Rodriguez, 2009; Väkevä, 2009).

⁶ As evidence, subsequent teaching resources published by Musical Futures reference UK curricula alone, and, only to GCSE level (or the UK equivalent of NSW Stage 5)(D'Amore, 2011).

this research is more a diagnosis than a set of proposed solutions pertinent to teachers and curriculum writers. Future studies may lead to the development of more complete and relevant solutions. First, a better understanding of the dynamics and nature of 'play' within the field of classroom learning is needed for these students, before that work can be successfully undertaken.

CHAPTER 2: LITERATURE REVIEW

Introduction and Scope

In order to distinguish between enculturated or real-world popular music making forms and the newly devised pedagogies designed to incorporate these in school classrooms, this literature review is presented in three parts. The first defines and contextualises the skill traits of popular musicians as outlined in the recent informal learning and popular music education literature, against a broader backdrop of enculturated music-making aligned with the ubiquitous and problematic term ‘popular music’. Here a series of tensions are outlined between school and real-world learning cultures, providing an important foundation for the chapter. In Part 2, the music transmission strategies of musicians who ‘play by ear’—the skill attribute most often cited in association with popular musicians is explored, and then juxtaposed with notation-based learning practices traditionally aligned with school music education programs. Part 3 then provides an overview of research conducted in schools implementing ‘informal’ and popular music pedagogies, and highlights gaps within this body of literature pertinent to the research design and theoretical framework presented in the next chapter of this thesis.

An historic account of the events and reform initiatives leading to the entry of popular music into NSW classrooms is presented in Chapter 4. A broader discussion of the many variations in practice that are found internationally is excluded, as is an exhaustive analysis of global trends, due to the sheer complexity of the topic (Mantie, 2013). The present thesis must remain a study of the NSW case, albeit with implications for the wider context. Although studies documenting informal and popular music pedagogies for digital production are mentioned, performance based musicianship and pedagogy features more centrally here as it is arguably more relevant to the classroom research discussed in Chapters 5 through 9 of this thesis.⁷ Reasons for this will become evident in the course of this chapter.

⁷ For a sample of studies documenting informal learning with digital, online and game based technologies see (Cain, 2004; Erstad, 2012; Folkestad, Hargreaves, & Lindström, 1998; Stowell & Dixon, 2014; Väkevä, 2010)

PART 1: Popular Musicianship and the School Classroom

The title of Lucy Green's publication: *How popular musicians learn: A way ahead for music education* (2001), and her subsequent *Music, informal learning and the school: A new classroom pedagogy* (2008b) are landmark publications in the field of school music education research and popular music pedagogy. Yet as scholarly discussion in this area is still gaining momentum, further work is needed to deepen Green's definitions for 'popular' musicianship and 'informal learning'. Fairchild (2008) notes, "there are no unifying processes, principles or materials that all versions or iterations of what we call 'popular music' share" (p. 100). Similarly, Bowman (2004) asserts popular music as "not an 'it' but a 'them'—a vast, multifarious, and fluid range of musical practices with remarkably different and divergent intensions, values, potentials, and affordances" (p. 34). Considering the differences between Green's fairly recent definition of informal learning, and the vast array of fluid creative activities that, for many years have fallen under the umbrella term 'popular music', this portion of the review seeks to establish what kind of musicianship traits distinguish Green's (2001) 'informal learner' now accommodated in classrooms against this broader contextual backdrop.

Green's (2001) publication acknowledges her empirical base in qualitative interviews conducted during the 1990s with fourteen mostly self-taught musicians living in and around the London area. Ten of her participants were male, all aged between 15 and 50 years and all performing guitar based rock and pop music at the time in professional or semi-professional settings. From these interview data, Green characterised their self-acquired musicianship skills as 'informal', and contrasts these traits with those acquired in 'formal' settings. Her discussion of formal learning is thus: music learned with the assistance of staff notation; in institutional settings (from primary or elementary through to tertiary/conservatory levels); and in conjunction with graded assessment and written curricula. Her formal learning also includes most forms of Western instrumental and vocal pedagogy involving professional teachers or master musicians, and, the use of teaching texts—learning practices typically associated with the Western classical tradition (2001, pp. 3-4).

Green's framing of 'informal' learning aligns with vernacular music-making skills acquired outside institutional settings, such as musicianship developed through watching and imitating peers or family members and through copying music from audio recordings. (p. 5). Informal learning is therefore enculturated or socially contextualised; is aural rather than notation-based; is solitary or group situated; features experimentation, and, a holistic integration of skills in listening, discussion, playing, singing, improvisation and composition (or song writing) throughout the music-making process (ibid). The central characteristic of Green's informal learning is self or peer direction (such as the kind of learning which might occur in a garage band), as distinct from the teacher-directed learning typical of formal contexts. The terms and definitions for informal and formal music learning are maintained in Green's later publications (2005, 2006, 2008a, 2008b, 2009), and are supported by Jaffurs (2004), Jenkins (2011), O'Flynn (2006), Thorpe (2009), Westerlund (2006); Woody and Lehmann (2010) and Wright (2008), although variations exist in these scholars' use of the terms, foci, research contexts, methodologies and theoretical underpinnings.

Stemming from Green's (2001) initial ethnography, and echoed in the earlier work of Campbell (1995); S. Cohen (1991); Finnegan (1989) and Bennett (1980a); a caricature has emerged within the informal and popular music pedagogy research literature (reviewed in Part 3 of this chapter) which sees informal learning through the lens of performance orientated musicianship from Western pop and rock genres. This caricature has been identified and subsequently challenged not only by Green herself in later writing (2009) but also in publications by Mans (2009), O'Flynn (2006), Rodriguez (2009), Sexton (2012) Väkevä (2009, 2010), Waldron (2012), Allsup and Olsen (2012), Erstad (2012), and Downey (2009). These scholars all acknowledge the presence of a broader range of genres (Western and non-Western) occurring under the banner term 'popular music', along with a very diverse array of digital and online music-making, learning, and sharing activities (Folkestad et al., 1998; Salavuo, 2006; Stowell & Dixon, 2014; Waldron, 2012; Webb, 2010).

Clearly therefore, there is some disparity between the popular musicianship traits Green and others have sought to facilitate in school classrooms, and that which may occur outside of them. For example, skills associated with music production:

recording, engineering, mixing, and so on, have only recently entered discussion within the music education research literature, but have been integral to music industry practices since the inception of sound recording technologies over a century ago (Kealy, 1979; Tobias, 2013). To accommodate these and other real-world production practices in classrooms necessitates a process of recontextualisation, whereby activity, skills or knowledge in one field is appropriated or used within another. The recontextualisation of production skills in classrooms although increasingly possible, entails with it an expanded view of composition (the skill area typically associated with music creation), which is at odds with score centric modes of composition still prevalent in many schools. Should teachers and curriculum writers make provision for such an expansion, a roll-on effect then comes into play. For example, assisted by the prevalence of recording technologies, many popular musicians blur the line between performance and composition altogether to encompass hybrid forms of musicianship or self-production (Tobias, 2012, 2015).

Aside from the skills, know-how and equipment needed to facilitate these new and expanded forms of musicianship, the pace in which these practices adapt and change challenge existing classroom norms which tend to view and assess composition and performance skills separately, in keeping with pedagogies developed for the study of WAM. This separation inadvertently maintains a hierarchy between these skills, and, when combined with the third and less well-defined area of curriculum—listening or appraisal, only serves to complicate things further. To explain, Cook (1998) states:

It is in the nature of things that activities of composing, performing and appraising represent a chronological sequence (you can't perform something until it's been composed and most people can't appraise it until it's been performed). And what begins as a chronological priority somehow turns into a hierarchy of value—a hierarchy that is reinforced by the way it maps on to different individuals or social groups (p. 17)

Contrary to this, Middleton (1990) writes that for popular music: “Composition and performance are the same; anyone can take part; music-making is not objectified into ‘works’ but is the result of improvised variation of collectively owned resources” (p. 70).

Therefore, a tension must be acknowledged which distinguishes the kind of popular music-making recently and tentatively accommodated in classrooms by Green and others, and that which may more likely occur outside of them. The implication is therefore, that research undertaken examining ‘real-world’ musical practices including the ‘popular’ cannot be replicated in classrooms without acknowledging some level of change and compromise. This compromise can work on a subtle and even aesthetic level, for as Small (1983) states: “Popular music does not encourage stillness, isolation, and intellectual consideration, but movement, group involvement and ecstasy—all of which are considered out of place in the classroom” (p. 332). Although arguably dated, Small’s statement is echoed in Bowman’s more recent sentiments:

Schools by their very nature are artificial, controlled environments. Whether or not this amounts to a seriously stultifying factor, it does entail the creation of musical cultures that differ in fundamental ways from those in the ‘real world’. School cultures are no less ‘real’ than cultures outside of school—but they are different (2004, p. 41).

Discussion within music education research needs to more readily acknowledge and state these differences. The case of hip-hop serves as a pertinent example. Not only does hip-hop involve a range of cultural activities: breakdance, graffiti, mc-ing and deejaying and so on, which are inseparable from music-making, but these activities are more at home with street rather than school culture (Kruse, 2016; Lamont Hill, 2009; Söderman & Folkestad, 2004). Turntablism—arguably hip-hop’s most clearly performance orientated musical activity—displays no clear line between compositional, performative and theatrical elements (Fairchild, 2008, pp. 109-112) making it challenging to utilise, integrate and assess in classrooms. Hip-hop musicianship has only very recently and tentatively been accommodated in schools and is rarely mentioned in publications emerging from classroom-based research. As evidence, Lamont Hill’s (2009) hip-hop publication, although discussing music-making, is situated in an English rather than a music classroom.

Acknowledging then that Green’s (2001) definition of ‘informal learning’ represents a narrower set of skills perhaps more compatible with normative practices in school music, the relationship between her ‘informal’ skills and those aligned with ‘formal’ learning both require clarification. Most of Green’s (2001) popular musician interviewees reported valuing their self-directed informal learning experiences in

popular music over their earlier experience of formal music education, including private classical tuition. However, when employed as instrumental teachers within institutional settings these same musicians tended to adopt more teacher-centred pedagogy even when teaching popular music (ibid. p. 179), a point also made by Robinson (2012). Hence, the context in which learning takes place directly affects pedagogy, regardless of the music style being learned or taught. In addition, Green's interviewees attested to the long-term advantages of possessing knowledge and skills learned across both classical and popular arenas. To this end, Green proposes theoretical connections between informal and formal learning (2001, p. 6), but in terms of pedagogy and music transmission strategies, differences between the two are not clearly distinguished in her later publication (2008a).

Feichas (2010) explored connections between informal and formal learning in her study examining the relationship between informal and formal knowledge and skills in first year tertiary music students. Through participant interviews, Feichas found students' prior music learning fitted not two but three categories. These included those with backgrounds solely in either popular or classical music, and a larger 'mixed' group with varying degrees of both kinds of prior training and skills. Feichas concluded that the mixed group was most adaptable in the Brazilian degree program, with varied exposure to a broad range of prior music learning considered an asset within the higher education context.

Acknowledging therefore that the development of popular music pedagogies for schools could exhibit a range of both informal and formal learning traits, practitioners and researchers might well look to jazz as fostering an equally mixed set of skills and competencies spanning both aural- and notation-based learning modes. Jazz, although originally described as a form of popular music with associated informal learning traditions, is now taught within the vast majority of formal music institutions. Here pedagogies have been developed for ear playing and improvisation along with specialised notation systems, and theory and analysis methodologies (Berliner, 1994; Gatien, 2009). Even classical performers are now required to embrace notions of musical plurality, including bi- and multi-code musicianship (Webb, 2008), with cross genre musical competencies required of them over the period of their professional working lives. As Cottrell (2004) states: "Economic expediency dictates that

musicians must be competent in a number of different performance styles, leading to some overlap between musical genres, which frequently prevents the rigid categorisation of a particular musician as being of one type or another" (p. 57). Rodriguez (2004) concurs: "fully realised musicianship requires both kinds of knowledge" (p. 13). On this basis, the skills associated with classical, jazz, folk, popular or any other kind of musical craftsmanship need potentially interact in music institutions, despite the fact that in social fields these may be perceived as separate musical 'spheres' or 'worlds' (Adorno, 1941; Becker, 1982).

Ethnomusicologists have long explored the connections between musical practice and social groups. They have however only relatively recently turned their attention to Western contexts and to popular music in particular. Finnegan's (1989) ethnography is an important example of this kind of research and constitutes a comprehensive survey of amateur music-making within a single, middle class English town. Her research makes an account of social distinctions between popular and classical musicians with the former choosing to withdraw from the visible, legitimate, and consensual world of classical music in order to establish one counter to it. She writes:

On the one hand, there was the hierarchical and highly literate classical music training, with its externally validated system of grades and progress, entered upon primarily by children and strongly supported by parents, schools and the local network of paid teachers, with the aim of socialising children into the traditions of classical music theory and compositions through instruction in instrumental skills via written forms. Against this was the *other* [emphasis added] mode: embarked on as a *self-chosen* [emphasis added] mission primarily by adults and teenagers; not necessarily approved or encouraged by parents or school teachers; lacking external official validation, central bureaucratic organisation or any 'career' through progressive grades; resting on individual aspiration and achievement in a group music-making and 'oral' context rather than a hierarchically organised examination system; leading to skills of performance and variation by ear rather than the execution of already written-out works; and finding expression in performance-oriented rather than written forms (p. 140).

In social fields therefore, musicians participate in these divergent musical worlds for very different reasons. However, the knowledge and skills acquired through participation in each may in fact not be as distant or uncomplimentary in the long term. Further, although distinct in respect of context, these studies highlight something of a progression. Finnegan's study of amateur musicians reports distinctions between popular and classical musicianship on the grounds of self-

imposed distancing and inclusion in order to project individual and collective musical identities (later further substantiated by MacDonald, Hargraves, & Miell, 2002).

Feichas' study of musicians at first year tertiary level however reports benefits to accrue from both informal and formal learning, resulting in advantages for those with a mixed background. Webb, Cottrell and Rodriguez's accounts of professional level musicianship also report advantages in bi-modal and multi-code musicianship, in terms of adaptability and potential employment opportunities. At the senior secondary level therefore, there could likely be a range of positions expressed along this identity and skill continuum, with advancement from one level of competency to the next necessitating the opportunity for expansion, experimentation and challenge, regardless of where any musician may begin their learning.

Summary

This portion of the literature review has identified a number of conceptual problems in current definitions of informal learning and popular musicianship within the context of school music education. As not all musical skills from the non-school context are represented here due to factors limiting their classroom recontextualisation, the defining qualities of school popular musicianship have leaned towards performance-based models developed in urban settings within mainstream rock and pop genres. Accommodating only this narrower skill set within classrooms may be at odds with the skills required of tertiary music students and which may, limit students' progression and success in professional arenas where less rigid style categories may apply. Although the Finnegan quotation identifies a social binary—a kind of 'us' and 'them' scenario—implying a set of axiological stances held by classical and popular musicians according to a literate/non-literate binary, the literature reviewed thus far supports the presence of a continuum of knowledge and skills, potentially connecting the two music traditions. As student musicianship at the senior secondary level is likely to constitute a variety of informal, formal and mixed learning backgrounds, skills, interests and aspirations, the next portion of this chapter will review studies documenting music transmission practices in 'aural' and 'literate' traditions within Western contexts in order to examine the relationship between the two.

PART 2: Aural and Literate Modes of Music Transmission

In reviewing the body of literature addressing both aural- and notation-based musicianship, limitations must be noted, as the pace with which technological changes have affected musicians in the 21st century has proven difficult to document and address. Accordingly, absent from earlier publications including Green's (2001, 2008) are references to online resources including video platforms now integral to all forms of musicianship, but particularly relevant to those who learn and share ideas by ear. At a base level, the Internet or World Wide Web now provides free access to guitar tablature, chord charts and lead sheets, which can radically enhance the speed of learning and the distinction between aural and visual learning mediums. YouTube has increased access to teaching material featuring live demonstration, amplifying strategies previously occurring only through face to face interaction or through copying audio recordings alone (Webb, 2010). Social media platforms have also radically changed the way music is shared from one social context to another (Ruthmann, 2007), redefining the nature of musical communities as moving between online and offline situations (Waldron, 2012).

These realities naturally have potential implications for classroom practitioners (Haugsbakken & Langseth, 2014), but their reach is new, and will depend upon the resources made available to students in schools and again, the learning cultures fostered within them. Many research studies documenting ear playing or aural-based learning in Western contexts pre-date this era, and hence do not mention the use of such resources. Notwithstanding their limitations in present day application, this 'pre-web' era literature needs to be discussed, because it contains valuable information concerning the knowledge and skills acquired by ear players. The summary that follows contextualises these findings against studies discussing musicianship developed with the assistance of Western staff notation. Recent studies examining ear-playing pedagogies designed for the one-on-one formal instrumental lesson have been omitted, as their intended focus is mainly for teachers and students already accustomed to learning with staff notation (see Baker, 2013; Baker & Green, 2013; Green, 2012; Varvarigou, 2014; Woody & Lehmann, 2010).

‘Playing by Ear’: Popular Musicians’ Aural-Based Learning

Against the numerous studies examining learning assisted by staff notation,⁸ studies documenting learning without it have only more recently become the focus of music education research. Many studies discussing popular musicians cite ear playing as a marker of authenticity to ‘informal learning’ (Allsup, 2003; Cope, 2002; Green, 2001; Jaffurs, 2004; Karlsen, 2010). Yet herein, detailed discussion of the skills and processes involved in playing by ear are often embedded within or subsumed by research context, or may be oversimplified in an intended comparison with notation-based learning practices. Studies with an ethnographic orientation addressing popular musicians are not primarily pedagogic in focus, but can still provide useful information in teasing out the relationship between vernacular music-making and the literate learning traditions of 20th century Western classical music. As these studies are numerous, an overview is provided before examining in detail the typical learning processes involved in ear playing, along with the memorisation skills developed in association with these strategies.

To begin, Patricia Sheehan-Campbell’s (1995) ethnography of learning by garage-band musicians provides one of the earliest cited within the music education literature. The study was undertaken in Seattle in the early 1990s. Two groups of young, white, male rock musicians aged between 14 and 16 years constituted her nine research participants. Campbell’s study foregrounds the sociality of the garage-band setting. The members chose to meet frequently to listen to heavy-metal and grunge music, and through copying recordings acquired skills as a consequence of interacting with “their music” (p. 15). Their learning is self-defined as “getting-songs” including—but not easily differentiated from—writing songs (or composing) without the use of staff notation (ibid). Corresponding with Green’s (2001) study, Campbell correlates song-getting with skill building, with imitation from recordings and peer modelling the primary learning strategies. Like Green’s study, seven of Campbell’s nine participants reported having received classical instrumental instruction earlier in their musical development, but later abandoned these studies in preference for self-initiated learning on rock band instruments. In both studies, the relationship between

⁸ For a sample of studies examining music cognition in conjunction with the use and acquisition of music notation skills see Sloboda (2005), Gudmundsdottir (2010), and Hodges (1992).

the development of ear playing skills and those acquired as a consequence of earlier formal training do not feature in discussion, which raises questions as to whether one set of skills had or had not benefited the development of the other.

Holism is a feature of learning in these ethnographies, with creative and re-creative practices difficult to distinguish. A study by Davis (2005) confirms these connections. Among high school aged rock musicians, Davis reports a seamless integration of copying, playing, improvisation and composition skills. She describes how new songs were generated through ‘fiddling’ (playful experimentation with known riffs or progressions) and layering strategies used to adapt these patterns into cyclic grooves. Similar processes are reported by Cohen (1991), who undertook research with rock musicians in the Liverpool area. Cohen’s account describes how original songs would germinate from existing guitar riffs, over which various chords, rhythmic ideas and lyrics would be trialled experimentally and collaboratively (p. 136).

Each of these studies situates learning to play as of equal importance to the generation of a desired sound or tone. The generation of this sound or tone requires rock musicians develop an in-depth knowledge of technical equipment (effects pedals, amplifiers, microphones etc), and a discerning ear in order to adapt these tools to meet the sonic aesthetic of the band. This aesthetic is coined by Bennett (1980a) as “recording consciousness” (p. 126). Davis (2005) also accounts for this in detail:

The members of *Our Delay* were aware of the nuances defining these individual sounds and worked to achieve these exact representations through their own music. This required a disciplined and sensitive ear and repeated listening opportunities. Sound effects and timbre were very important to this group, and to Jack in particular. They regarded timbre as part of melody. They considered melody to be more than just contour, but rather a fusion of contour and sound effects partnered with the texture of the song to generate a harmonic structure as well as depict the mood they were trying to establish (Guideposts, Timbre and Technology section, paragraph 1).

Findings by Gullberg and Brandstrom (2004) support Davis’ observations concerning the importance of generating a desired sound aesthetic. The Swedish study was comparative. Two rock bands, one consisting of college age music students, the other, a group unaffiliated with the music school were independently asked to write and record a rock song based on minimal input: an unfamiliar audio recording provided by the researcher containing a single vocal melody with lyrics. Both groups used

collaboration, and vernacular rather than technical language to organise the material, however the non-college affiliated group spent as much if not more time setting up equipment and mixing the song as composing the actual material.

Naturally the recontextualisation of these practices within music classrooms presents problems and some level of compromise. Schools may not be equipped with the requisite technical equipment to facilitate such a nuanced approach to sound, nor be prepared to allow music to be heard at the desired volume. Furthermore, a creative process that integrates new with old material collaboratively stands against established norms for WAM where as stated, performance and composition are typically regarded as distinct activities, usually undertaken by different people and at different times. Without staff notation to script performance, music-making works to meet immediate and personal goals, the roles musicians play working in flexible alliance. Another skill set requiring flexibility and adaptation, are those required to copy existing recordings. Literature defining these skills is addressed next, accompanied by studies outlining the strategies used to memorise copied or adapted material.

Copying strategies from recordings

Green's (2001) ethnography cites 'aural copying from recordings' as a relatively recent phenomenon, emerging only since the invention and mass production of audio recordings over the past century. Green calls the practice "purposive" listening, or listening with the intention of replication on a live instrument (p. 61). Purposive listening attends to nuances of style and feel along with pitch and rhythm content, musical structures (verse/chorus forms etc), at both foreground and background levels of the recording. Green notes that ear players, who work without the assistance of notation, frequently develop skills in transposition in order to adapt what is learned to meet their specific needs, and develop technical facility to play the music they choose to learn. Green notes most ear players do not learn to read staff notation, with only a small number of professional session players acquiring this skill (p. 38-9).

While Green's study is situated with individual musicians, Bennett (1980b) provides an earlier and more situated account of aural-based learning in the rock band rehearsal

context. Bennett notes that trial and error and high levels of repetition are required to learn new songs. He makes insightful connections concerning the tools employed to do this learning (audio recordings/instruments etc), and the music learned, with technical facility acquired only as needed and rhythmic awareness preceding pitch accuracy. He writes: “that it is possible to learn to play this way attests to the simplicity of The Music [*sic*], but it also is indicative of the result of a private human-machine [audio player] interaction where the human is in precise control of the stimulation that the machine gives” (p. 225).

As a consequence of this level of control, Bennett attests to the use of learning sequences in the copying process where the performers select single lines from the recording and break these down for replication, often on their own first, then with the rest of the band. Once learned, the whole performance is reconstructed layer-by-layer to form larger structures or sections of music, and in time, entire songs. This discussion contrasts with Green’s (2001) characterisation of informal learning as ‘non-sequential’ (p. 60). Clearly learning sequences exist, but they may serve less explicit objectives, involve longer periods of time, or be subsumed by other activities occurring over the same time period.

A consistency however between each of the studies mentioned thus far concerns the role of staff notation. Although available as marketed sheet music for chart hits (Bennett, 1980b), and now ever more so due to access to online resources, visual aids are rarely used in performance and remain secondary to the ultimate authority of the recording (*ibid*). Further, Bennett notes rock musicians view theoretical knowledge and verbal communication as secondary in importance to musical and physical gestures, with players inventing terminology or vocables (nonsense syllables imitating drum riffs etc) as needed to communicate during rehearsals—an observation equally noted decades later by Davis (2005). Bennett summarises these observations, along with the democratic nature of rehearsal and group learning:

What is determining these musicians’ music, however, is not a body of knowledge—a theory of music—but the aural experience of the recording. The conflict about who was right—that is, whose interpretation of the recorded sound was to be considered legitimate—did not admit a consideration that varying interpretations can be derived from various ways of listening (1980b, p. 226).

Bennett here attests here to “varying interpretations” resulting not only from the process of collaboration, but equally, from natural variations in listening perception unguided by a body of music theory, scoring, or teaching. Drawing from Ong’s (1982) distinctions between ‘orality and literacy’, Lilliestam (1996), concurs, emphasising the changeability of music passed on by ear. He states:

In oral culture there is no original and there *can* be no original. A song a poem or a story exists only in performance. There is no tool apart from the human memory and its limitations to preserve it. An orally transmitted folk song does not have an ‘Urtext’, it cannot be a physical object, a musical work that is owned and copyrighted (p. 198).

Lilliestam’s observations refer to live aural learning or music transmission practices. With the invention of sound recordings, the vast majority of music learned in this way now has such a “tool” or “physical object”: the recording. Lilliestam’s comparison of early American bluesmen with later British blues performers bares testimony to this oversight in his publication. Lilliestam writes: “the patterns used by black as well as white blues musicians of today—regular twelve-bar choruses with even phrasing, distinct chord changes and so on—do not occur as frequently in the work of the older bluesmen, who often employ irregular choruses and diffuse chord changes” (ibid). Lilliestam attributes these contrasts due to differences in the oral and literate learning cultures of the older bluesmen compared to the later educated urban blues players. However, the latter musicians had learned the blues from the recording as a model rather than first hand, and hence, were limited to a more standardised and marketed version of the blues potentially more palatable to a white audience and paying customers.

Irrespective of these cultural and transmissional differences, some level of change to the music learned by ear is inevitable and in some cases even intentional. Bennett (1980b) describes this process of change as the natural outworking of copying strategies. Johansson (2004), supports Bennett’s observations, but attests that these changes may be deliberate, especially when the material is relatively straightforward, or the players “feel safe” to embellish a song (p. 99). Lilliestam (1996) describes the practice as creating a *version*, citing this as common to musicians who play popular music by ear (p. 204). He writes: “Suppose that we, for some reason, want to do a version of ‘Hound Dog’. All of us who are playing are familiar with the Elvis Presley version of the song, but we want to do our own version, not just copy Elvis” (p. 204).

So, when ear-playing skills become more advanced, copying skills may work in conjunction with deliberate interpretative and arrangement choices (note ‘copying’ is expressed as “just copying” above), for the purpose of making a performance one’s own, and, potentially enhancing known material.⁹

Hence, varying levels of change, whether intentional or not, can be expected when music is learned by ear. The chief factor determining the level of variation in performance is the use of recordings (now including video recordings) in learning, which may serve to standardise vernacular traditions such as the blues. More importantly, performing without the assistance of visual aids, the learning process involves sophisticated patterns of memorisation, which require specific address.

Mnemonic aids and formulae

Lilliestam (1996) explores in detail the crucial importance of memorisation skills in music learned without staff notation. Cognitively, he cites five interrelated thinking skills required involving auditory, visual, kinaesthetic, verbal, and abstract forms of memory. Lilliestam’s, ‘auditory memory’ involves processes of audiation (hearing music in one’s head); ‘visual memory’, which associates auditory memory with the visual layout of instruments or forms of tablature; ‘kinaesthetic memory’, which ties auditory and visual thinking to patterns of physical touch (finger patterns etc); ‘verbal memory’, which associates these skills with new or learned terminology, and lastly; abstract memory, which allows a synthesis of all previous types into internalised structural ‘maps’ in readiness for performance. The combination of these five memorisation skills develops in time a plethora of musical formulae in keeping with a music style or genre of performance. These include melodic riffs, chord sequences, rhythmic formulae or grooves, structural and lyrical devices and so on, constituting a toolkit for ensemble playing and improvisation (p. 203-204). Once combined these

⁹ Although the terms ‘arrangement’ and ‘version’ are at times used interchangeably throughout this thesis some initial clarity is required in order to explain distinctions between the two. An arrangement usually involves the practice of re-organising music from one notated medium to another to meet the needs of a new live performance situation or to adapt the music for a different kind of ensemble frequently larger in size. The term version is more often associated with vernacular performance traditions, where a new performance is created from a pre-existing recorded song, changing not only the featured artist, but also, possibly adapting the musical material to meet the new performers’ specific needs or tastes. This practice is distinct again from ‘mixing’ or ‘remixing’, where existing recorded music is manipulated directly via digital sampling or studio production processes to generate a new recording, often combining new with previously unrecorded material.

formulae constitute the basis of a musical vocabulary, resulting in consistencies between groups of musicians working within a particular genre, and possibly further, in ways of distinguishing individual performer traits within these. Lilliestam writes:

Every musician is thus a carrier of a repertoire of songs and formulas that is more or less unique and dependent on the style(s) the musician is working within. If you change a musician in a band you change not only their playing style, sound and personality but their personal repertoire of formulas as well. And a switch of a musician will affect the sound and style of the whole ensemble too (p. 204).

Johansson's (2004) research reveals further insights concerning this 'repertoire' of mnemonic aids and formulas. Six participants accustomed to playing standard rhythm section instruments by ear were each asked to learn three songs from recordings, each of which increased in complexity and unfamiliarity. Johansson then interviewed the participants to discuss the strategies they had employed. Like Lilliestam (1996), Johansson found that musicians learned to play by ear by acquiring clichés, harmonic formulas and other style traits intrinsic to specific genres. When working to learn music less familiar, a number of trial and error strategies came into play. These involved listening for familiar sonic cues (the sound of open strings, or the timbre of a particular chord voicing), processes of deduction from the melodic or bass line (guessing the chord by listening from the top voice down or the bottom up), to "faking it", where uncertainty is masked through strategies used to cover up mistakes during live performance. In all cases the strategies employed were different for the guitarists, keyboardists and bassists involved in the study. Each of these strategies generated knowledge of a specific kind that was implicit to the learner or was *tacit*, defying explanation. Tacit knowledge is a feature of many forms of music learning, but is a salient feature of music learned by ear. When informal and popular musicianship skills are recontextualised in classrooms, tacit knowledge accompanies these skills, and hence, research defining tacit knowledge needs to be examined.

Tacit Knowledge

Tacit or implicit knowledge accompanies most forms of music learning but particularly that undertaken by ear (Lilliestam, 1996; Polanyi, 1962). It results in imprecise ways of verbalising and theorising how complex tasks are learned through the simultaneous integration of smaller subsidiary skills. Polanyi (1962) highlights the

importance of tactile sensation upon the tools used in acquiring tacit knowledge. Although not writing expressly of music learning, his description resonates with the processes involved in learning an instrument. He writes:

The skillful use of a tool actually identifies it to an important extent with our own body. The rower pulling an oar feels its blade tearing the water; when using a paper-knife we feel its edge cutting the pages. The actual impact of the tool on our palm and fingers is unspecifiable in the same sense in which the muscular acts composing a skillful performance are unspecifiable; we are aware of them in terms of the action our tool performs on its object, that is, within the comprehensive entity into which we integrate the effective use of a tool (p.7).

Polanyi's explanation sheds light upon the human body to instrument relationship in music. Hence the tools used by learners affect not only how learning takes place, but also what skills are acquired and hence what learners know as a result of these processes. As a consequence, tacit knowledge may remain embodied (and therefore difficult to articulate), meaning that knowledge and skills may not easily transfer from one situation or context to another. For example, the knowledge and skills acquired by one musician playing by ear alongside another, even in the same ensemble, will be different. In turn, these musicians' knowledge and skills will be affected by what instruments they play and the repertoire chosen over time. The significance of tacit and context specific knowledge has been problematised within the discussion of informal learning (Folkestad, 2006; Gamble, 2001; Green, 2009; Mans, 2009), and remains the subject of current debate in the research literature (McPhail, 2013). However, as yet research strategically examining the relationship between tacit and more explicit, or what Polanyi describes as 'focal', knowledge often prioritised in formal contexts such as music classrooms requires further investigation.

As a natural consequence of the tacit dimension involved in most music learning situations, it is of no surprise that visual aids such as staff notation have provided a valuable platform through which teachers have been able to anchor discussion and measure progress in formal music instruction. However, notation also involves a shift in focus, away from intuitive and tactile processes towards the outward representation of thinking on paper. Guitar tablature can be viewed as a kind of intermediary between traditional staff notation and tactile knowledge. Yet surprisingly, its use as a visual aid and transmission tool has not featured prominently within the informal

learning literature. Rather, when notation is mentioned, the inference is that notation implies the use of staff notation, the defining accessory to contemporary Western classical musicianship. The next portion of this review will conclude with an outline of the learning attributes of classical musicians, which when aligned with the original definitions for informal and formal learning outlined at the beginning of the chapter, show further limitations in the use of these terms within the music education research literature.

Classical Musicians' Notation-Based Learning

As established by Green (2001, 2008a), competence in music reading is frequently seen as a marker of having received a formal music education in contemporary society, sometimes at the expense of more holistic learning. Finnegan (1989) describes the path of classical musicianship as a relatively consensual passage through graded performance examinations, and participation in school music programs where performance in large ensembles requires these skills. Creech et al. (2008) concur, asserting that staff notation causes a diametric shift in learner focus in classical musicians.

In North American schools, models of learning and pedagogy orientated towards performing in large ensembles such as concert bands, choirs and orchestras requires fluent music reading (Allsup, 2004; Jones, 2008). As a consequence, students learn to focus on the acquisition of these skills at the expense of others, prioritising for example skills in sight reading and technical precision over the ability to improvise (Woody & Lehmann, 2010). Waller (2010) notes that the acquisition of music reading skills may even negate skills in music writing (or composing) in the North American context. When skills in composition are imparted in schools, a solitary focus on notation may inhibit a fuller development of creative potential where sound and score operate in a flexible alliance (Green, 1990; Paynter & Aston, 1970).

Formal music education of this kind makes several assumptions. Chief among these is the authority of the score in performance and pedagogic situations. Cook (2014) critiques this position: "To think of music as writing is to see its meaning as inscribed within the score, and accordingly to see performance as the reproduction of this

meaning" (2014, p. 2). Cook debunks the notion of 'reproductive' performance, along with the commonly held assumption that classical music exists as a distinct entity or reified artistic 'work' (Cook, 1998; Strohm, 2000; Wolff, 1987). Before 1800 or thereabouts, Western music learning even with staff notation was seen more as craftsmanship rather than artistry, and was conducted according to local, familial and apprenticeship models of learning (Gamble, 2001; Hultberg, 2002). Hence, Cook re-focuses present music scholarship upon the importance of performance as the enduring musical reality, rather than the scores that merely script them. As evidence, Cook discusses the scores of Italian Baroque composer Antonio Corelli as revealing connections between performance and composition in Baroque music—with the scarcity of detail in Corelli's scores only realised through extemporisation, ensemble interaction and improvisation. Cook notes correlations here to jazz, where performance never rests solely upon the written 'standard' or 'chart' (p. 229). Walser (1992) concurs rather insightfully: "classical music is a relatively recent cultural construct" (p. 265).

Benson (2003) proposes a spectrum of musicianship skills spanning notated through to completely aural-based types, all of which according to him encompass varying degrees of improvisation. These involve eleven planes: the literal realisation of scores (1); the addition of ornaments (2); adding measures for a cadenza (3); skills involving deliberate transcription (4); arrangement or variation in orchestration (5); deliberate structural changes (6); versioning (7); free improvisation over set harmonic structures (such as twelve bar blues) (8); idiomatic composition (9); composition involving borrowed material (10); and eventually, free composition within a style or genre idiom (11). With this range in mind, he writes:

Applying this musically, one way of thinking about a musical work is that it provides a world in which music-making can take place. Performers, listeners, and even composers in effect dwell within the world it creates. And their way of dwelling is best characterised as 'improvisation', in one or more senses of improvisation given above (p. 32).

In classical instrumental pedagogy today, a focus on only the first few of Benson's skill types has worked to negate all other related improvisational skills once integral to performance prior to the 18th century. The importance of Benson's 'spectrum' therefore has relevance in teasing out the relationship between notation- and aural-based musicianship in classroom learning.

As such, distinctions between present day classical and popular musicianship according to literate or non-literate or rather informal or formal binaries, appear difficult to substantiate historically. However, it must be emphasised that the use and ability to execute performances using staff notation also has distinct advantages pedagogically. Due to its scale and complexity, the aesthetic and academic value of WAM requires staff notation and musicians fluent in reading it in order to preserve and extend its existing trajectory (McPhail, 2012a; Small, 1977). However as Middleton (1990) asserts, its use also involves a shift in focus:

It emphasises the eye, not the ear; it therefore encourages the ‘rational’ calculation of complex, rather, unique structures and effects and the manipulation of hierarchies of textural parts, formal units and performing roles. It objectifies the work, storing it in tangible form, and is therefore potentially personal property (and commodity). It leads to division of labour (between composer and performer, for example) individualism and specialisation, and production *for* a market rather than *by* a community (p. 70-71).

Summary

The musical practices currently associated with classical and popular musicianship require redress, as the differences between them appear not so much due to fundamental divisions in learning styles, but rather, determined by what is either emphasised or excluded from pedagogy. This has natural implications for the recontextualisation of these associated pedagogies in schools as outlined in the next section of this chapter. To this end, learning both with and without staff notation implies shifts in emphasis between different kinds of musical thinking. When learning occurs with notation, this serves as a mnemonic aid enabling the creation and realisation of complex ideas and structures, which when intended for large ensembles or longer forms is only manageable with the assistance of scoring. However, to focus pedagogy solely upon the literal realisation of works, excludes much that might enable a fuller and more dynamic understanding of what it means to be musically educated.

All music learning is affected by a number of variables encompassing both aural and notation-based strategies (or combinations of the two) including the instrumental tools

employed and hence by implication, extending this to the presence of scores, recordings, live demonstration, instruments, technologies, and so on. When working without notation, two transmission strategies affect learning: live and recorded demonstration. When assisted by live demonstration, music may take on less standardised practices, reflecting vernacular learning and localised traditions. These practices are communal or collective. When working from recordings, musicians may either replicate the recording or deliberately vary it through versioning practices. When aiming for replication, the ability to stop the recording may compartmentalise and sequence this process for the learner.

What is learned by ear is twofold. Within the copying process, the learning of mnemonic aids may generate auditory maps of song structures, and tactile memory of fingering patterns and so on. Importantly, a repertoire of formulae is acquired: riffs, licks, chord sequences, structural devices and so on, constituting the basis of a musical language equally important to the learning of actual songs. When songs are composed or ‘written’, these reflect this known language of existing formulae, which are communal in nature. Hence, the notion of music composition by a sole individual is the exception rather than the rule when music is composed by ear, and particularly so when composed for ensembles. Equal in importance is a coalescence between sound and structure requiring an in-depth knowledge of sound technology. Many of these learning processes may involve only minimal verbal communication resulting in tacit or assumed knowledge—requiring physical rather than verbal demonstration.

The majority of these learning practices although complex and distinct, have only recently and very tentatively been accommodated within music classrooms. In doing so, specific pedagogies have been devised to recontextualise some of these processes. As outlined in Part 1 of this chapter, this shift has resulted in subtle modifications to enculturated music learning, such that it aligns with the aesthetic and institutional norms of the classroom—however subtle or overt these changes may be.

PART 3: Research Studies in Informal and Popular Music Pedagogies

Lastly, I review research utilising informal and popular music pedagogies for the classroom as foreground to implementation in the present research context of NSW senior secondary music. Importantly my use of the ‘informal learning’ approach provides a starting point only (outlined in Chapter 3 and also in Chapters 5 and 6), in encouraging an alignment between the performance based learning of student popular musicians, and the formal curriculum and pedagogy typical in this research context.

Three bodies of literature are relevant to discussion. The first centres upon Green’s (2008a) UK publication and those stemming directly from it; the second, upon studies emerging from the USA; and the third, upon studies from Sweden and other Nordic countries. Special attention is given to developments in the UK, as for historical reasons the Australian education system is more closely aligned with practice there (see Chapter 4). To begin, two points require clarification. Firstly, Green’s (2008a) informal learning classroom pedagogy was developed with junior secondary students in mind (equivalent NSW Stage 4-5), not for students with more established musical skills and interests as might typify those at the senior secondary level (NSW Stage 6), and those involved in the present study. Secondly, Green does not apply the term ‘informal learning’ explicitly to the study of popular music, but rather, to the enculturated learning traits of popular musicians.

To begin, the ideological and philosophical foundations of Green’s approach will be outlined before her findings are critiqued. Five themes are then identified in association with the learning traits promoted in Green’s study and other related studies. These include the effects of enabling students’ musical choices, the role of creativity in such learning, the kind of assessment practices that may be appropriate, the role of the teacher as ‘facilitator’, and finally, the knowledge and skills acquired by students as a consequence of recontextualising ‘informal learning’ processes in the classroom. These five themes provide impetus for the first phase of classroom research undertaken for this thesis, with discussion in Chapters 5 and 6 intended to further contribute to discussion on these five themes.

Foundations

Current classroom pedagogies developed for informal and popular music education including Green's highly influential publication (2008a), have their origins in much earlier thinking and scholarship. Green's work builds upon foundations established by Swanwick (1968) and Vulliamy and Lee (1976) in the UK, and also Vulliamy and Shepherd (1983, 1984) in Canada. Further afield, popular music was incorporated into school and university curricula as early as the 1960s and 1970s in Sweden and other Nordic countries (Bjornberg, 1993; Evelein, 2006; Georgii-Hemming & Westvall, 2010; Tagg, 1998; Väkevä, 2006; Westerlund, 2006). In Australia, its inclusion dates from the 1970s onwards (see Dunbar-Hall (1996); Dunbar-Hall and Wemyss (2000); Wemyss (2004) and Chapter 4 of this thesis).

Graham Vulliamy's work stemmed from his personal background as a rock musician and sociologist. His critique of music curriculum was influenced by Young's (1971) publication: *Knowledge and Control: New Directions for the Sociology of Education*. Young gave voice to broad changes within education that were farther reaching than Vulliamy's challenges to school music curricula (Vulliamy, 1977). Young claimed that student failure in education was due to a culture-clash between the 'habitus' (normative beliefs and behaviours) of disaffected working class youth and a school curriculum biased towards the transmission of middle class culture and cultural values. This justified anti-institutional stances critical of traditional pedagogies, proposing learner-led practice, sidelining the role of the teacher, and ultimately, any form of specialised knowledge not accessible or deemed relevant to all (ibid). Young now rejects many of his earlier claims and his association with such radicalism (Young, 2008, 2010). However, considering the climate of sociological discussion Vulliamy and other popular music pioneers were party to in the 1970s, it is conceivable that traditional classroom pedagogies devised solely for WAM could be demonised as elitist, bourgeois, and anti-working class. Popular music offered a more utilitarian alternative—as both culturally relevant to the lives of youth and seemingly accessible to all.

The story is however not one merely of musical content. The introduction of popular music within the music curriculum was concurrent with a series of student-centred

initiatives emerging during the 1960s but now encompassing ‘inquiry-based’, ‘discovery’, ‘situated’, ‘authentic’, ‘non-linear’, ‘enterprise’, ‘project-based’ learning and so on. These pedagogies draw primarily upon the philosophical foundations of educationist John Dewey (2016), the research of cognitive physiologist Jean Piaget (cited in Glaserfeld, 1995a; and Glaserfeld, 1995b), and developmental psychologist Lev Vygotsky (Vygotsky, 1978). Piaget’s research examined the cognition processes of young children, asserting that the child individually constructs reality from experience. Piaget’s central claim therefore asserted there could be no separation between knowledge and the processes involved in knowing. Vygotsky’s work emphasised that knowledge is social in origin, and therefore constructed through human interaction (Blair & Wiggins, 2010). Foundational to *constructivism*—the educational ideology and movement embracing these findings, was the premise that concepts could not “simply be transferred from teachers to students—they had to be conceived” (Glaserfeld, 1995a, p. 5).

In practice, it was thought, that the building of conceptual knowledge which constructivist pedagogy aimed to facilitate was best done using problem-solving strategies. These initiated self-reflective thinking in the learner who constructed abstract concepts from learning experiences over time. Fundamentally, the process requires strong identification and ownership of learning processes for students to move towards higher levels of cognitive abstraction. Teachers on the other hand—as external to this process—need to take a critical step away from their former role to become observers and facilitators in order to assist and assess learning processes. This requires high levels of empathy and more interactive classroom dialogue with students in order that teachers successfully scaffold and oversee each individual’s progress. Aside from the challenges in implementing this approach, the reforms also instigated a power shift in classrooms: challenging, perhaps even undermining, teachers’ traditional status as possessors of authority and knowledge (Glaserfeld, 1995b).

Behaviourism is the term often used to describe traditional classroom practice pre- or counter to constructivist reform. Behaviourism is characterised by formal teacher-centred pedagogies where knowledge and skills are viewed objectively, with teachers responsible for the transmission of canons of historically tested content and related

skills. Behaviourists were said to view knowledge in regulative rather than relational terms, resulting in a focus on controlled testing and assessment practices to ensure content had been successfully passed on from the teacher to the learner (Glaserfeld, 1995a, 1995b). In music, a behaviourist curriculum as described by Garnett (2013), may feature the acquisition of a fairly narrow yet specific set of musical ‘behaviours’ or skills, such as those required for classical instrumental examinations. In classroom teaching, the impartation of skills in music theory, score analysis or imitative counterpoint would serve as examples. Pedagogy may employ questioning strategies such as three-part initiation-response-evaluation sequences where the teacher (typically already in possession of the ‘correct’ knowledge) initiates learning by asking a series of questions designed to both state and then validate (as either correct or incorrect) the teacher’s existing knowledge (Glaserfeld, 1995a). Cain (2013) refers to the same technique as ‘initiation-response-feedback’ (or IRF) sequences used in the ‘formal’ music classroom (p. 82). The practice reinforces a power asymmetry, as classroom talk functions to assess and therefore legitimise specific knowledge over others, potentially limiting learning to a single official discourse. It also tends to cut across student-to-student interaction and to redirect attention to student-to-teacher exchanges.

In opposition, constructivists aimed to position the learner at the centre of authentic, real-world learning activities. Herrington and Oliver (2000) articulate eight criteria for enacting authentic learning including simulating real life contexts and activities, modelling by experts, flexibility in learning roles, opportunities for reflection in order to articulate tacit knowledge, coaching and scaffolding where required, and lastly, authentic assessment practices (p. 26). Many of these same criteria can be noted in Green’s (2008a) publication.

Enacting ‘Informal’ Learning in the Music Classroom

From her (2001) ethnography, Green formulated a seven-stage action research project intended for 21 secondary schools in the UK (2008a), conducted between 2002 and 2006. The research was based on the premise that the school curriculum could be adapted to simulate popular musicians’ informal learning in the classroom (2001).

The design of the research was founded on five themes central to her definition of ‘informal learning’. These included allowing students to choose the music they learn; facilitating aural copying strategies from recordings; using friendship groups and peer-modelling; allowing for haphazard non-sequential learning processes with whole pieces of music; and lastly, encouraging an integration of activities in performance, improvisation, listening and composition (Green, 2008a, p. 10). The research was conducted with classes of junior secondary students who were aged around 13-14 years, yet to decide whether to continue study on to the GCSE level. The project moved the students through seven stages of activities, each taking approximately 4-6 lessons of roughly 50 minutes each. The stages can be summarised as follows (2008a, pp. 25-27):

- Stage 1: Students form friendship groups and choose music they will attempt to copy using any combination of instruments and/or voices. This stage is described as the ‘heart of the project’.
- Stage 2: The Stage 1 process is scaffolded using a pre-selected recording and a simple lead sheet. Students are provided with both the whole recording, individual tracks and written out riffs using note names to assist them in the copying process.
- Stage 3: Stage 1 is repeated in order to assess whether students have benefitted from the preceding phases.
- Stage 4: Informal composition or songwriting.
- Stage 5: Modelling composition from a ‘real’ band. Professional musicians act as mentors for student songwriting.
- Stage 6: Informal learning with classical music. Stage 1 repeated with the provision of five accessible classical music recordings.
- Stage 7: Stage 2 repeated with classical music. Again, a semi-structured recording and lead sheet scaffold learning without staff notation.

By structuring the learning in this way, a degree of order is superimposed upon the ‘informal learning’ process. Green acknowledges this but maintains most if not all of her original five tenets of ‘informal learning’ remain present during each stage. Teachers were asked to operate as facilitators of learning, to establish ground rules for student behaviour and then “stand back” to observe, empathising with student needs

and goals and later stepping in only to diagnose ongoing problems, or offer modelling or demonstration as required (p. 24-25). The research employed a mixed methods design ranging from questionnaires, semi-structured interviews, field notes, and importantly, the transcription of audio recordings capturing group learning at each stage (p. 14-20).

Findings

In Stage 1 Green notes that students chose music with which they personally identified although she does not provide comprehensive data on these choices. In lesson transcripts, all references to the recordings chosen reflect various genres of popular music. The level of choice promoted student ownership over the learning process central to authentic learning. The music chosen by Green for Stage 2 was a funk recording ‘Word Up’ by the band Cameo. As a consequence of the scaffolding provided in Stage 2 the student performances of this song adhered more closely to the content of the original recording than for Stage 1. By Stage 3 there were signs that students’ aural awareness had deepened. As a consequence, the practicalities of realising performances from recordings affected their choices in music and whom they wished to work with in groups. Until this midway point, learning progress had been difficult to measure in terms of pitch and rhythmic accuracy and ensemble cohesion (p. 52-54). However, once immersed in each learning stage Green noted evidence of Csikszentmihalyi (1996)’s flow states, with students able to focus for extended periods on a single task without teacher input (Green, 2008a, pp. 56-59). At all times the recording acted as the central authority in the learning process with performances reflecting stylistic feel and fluency as a consequence of working by ear rather than with staff notation (p. 59-62).

In Stages 4 and 5 (the composing – songwriting stages), Green presents only a general summary, providing scope for follow up research into the relationship between aural copying processes and original ensemble based composition. In the remaining Stages (6 and 7) the students utilised the Stage 1 approach with a selection of classical music recordings. Green noted a motivational benefit as students once reticent toward classical music remained positive toward learning in these later stages. This finding was supported by her observation of flow states, improvisation, and deliberate

arrangement strategies involving both changes in instrumentation and occasional restructuring of the material from the classical recordings (p. 170-171).

Green offers this final appraisal: “it is possible to provide challenging curriculum content that authentically reflects the world outside the school, and effective pedagogic strategies based on observation and analysis of how learners learn best” (p. 185). She is clear in maintaining the approach does not offer a “complete music education” (ibid), and that future research need address ways of integrating the informal learning approach with existing formal curriculum content, teaching strategies and assessment procedures—an aim addressed in part through the research undertaken for this thesis.

Critique: Informal and Popular Music Pedagogies

Green’s informal learning classroom pedagogy is now critiqued with follow up research replicating or extending upon her model included within the discussion. These will reference resources produced by Musical Futures (D'Amore, 2011), although these resources were not employed in the research project undertaken for this thesis (see Chapter 3). In order to widen the frame further, parallel research initiatives involving performance based popular music pedagogies are referred to. The focus remains pedagogical, with studies examining popular music study from an historical, musicological, cultural, gender and/or sociological focus being omitted due to limitations in scope.¹⁰ Five themes frame the critique: enabling student choice; musical creativity; issues surrounding assessment; the role of the teacher as facilitator; and lastly, the knowledge and skills constructed by students as a consequence of engaging in informal classroom learning processes.

¹⁰ For a sample of studies outlining approaches to the study and analysis of popular music see Dunbar-Hall (1991); Frith (1987); Frith and Goodwin (1990); Hennion (1983); McClary and Walser (1988); Middleton (1990, 1993); Moore (2003); Walser (1993); Whiteley (1997) and Fairchild (2008). Oehler and Hanley (2009) provide clues as to the potential of popular music as a cross-disciplinary tool in secondary schools and in scholarship.

Enabling musical choice

Green's 'informal learning' (2008a) enables students to choose not only the peers they will work with, but also the music they will learn and hence aligns with a Vygotskian social constructivist pedagogic model. The principle of enabling choice is believed by Green to be of central importance to the success of her approach, and pivotal in stimulating engagement, inclusion and student participation. Enabling student choice remains central to Musical Futures initiatives and the content of their resource materials (D'Amore, 2011). In allowing the voices of students to drive the learning process, Green addresses an often cited criticism of school music education as being out of touch with students' experiences of music outside the classroom (Lamont et al., 2003). Choice allows students to express personal and collective identity through their classroom learning, with the use of popular music providing avenues in which to engage even disaffected students (Cutietta, 1991; Green, 2008a; Seifried, 2006). However, what possible drawbacks might occur in affording students such a high degree of autonomy, especially over time?

Georgii-Hemming and Westvall (2010) offer insights based upon their long-term appraisal of classroom music education in Sweden. Following the reform initiatives of the 1960s and 1970s as mentioned, radical changes were introduced to compulsory level music instruction aiming to enhance inclusivity and student engagement. The result was a curriculum structured around approaches similar to Green's, replicating the real-world learning of popular music through garage band style models. In hindsight, the authors are critical of the approach claiming it homogenised learning culture, limited musical diversity and the representation of cultures associated with ethnic minorities. In addition, they believe the outcome limited creativity and the impartation of critical skills in listening, as students most frequently chose music in line with trends in popular culture. They conclude:

For music educators it is an important challenge to reach out and include students in active musicianship within the frames of compulsory music education. Functions and uses of music should no longer mean simply a socialisation into a dominant culture—either lofty or everyday—but should instead contain a dialogue, and an exchange organised, initiated and guided by the teacher (p. 31).

Therefore, central to the longevity of the approach are matters of balance and teacher guidance. Balance involves the initiation of “dialogue” as Georgii-Hemming and Westvall (2010) suggest, meaning expanded frames of facilitation require investigation. By including classical music within her informal learning schema (2008a), Green attempts something of this kind of exchange; a feature retained in the structuring of Musical Futures resource materials (D'Amore, 2011, pp. 158-163). However, this latter phase of the research requires further investigation, as the use of aural-based copying strategies with classical and ‘other’ musics dangerously assumes a same size fits all approach. As evidence, Green (2008a) makes the following observation of the classical stages of the approach: “pupils altered the music either by inserting or omitting a few notes, slightly changing a melodic contour, playing a note that was different to the original, playing in a different mode to the original, or consciously adding an introduction section” (p. 164). Does Green’s informal learning approach therefore challenge notions of authenticity with these musics? What part might notation play in expanding frames of potential learning dialogue between teachers and students involved in this kind of teaching and learning exchange?

Creativity and composition

Green’s work is centred primarily on the copying processes involved in creating ‘cover’ versions of popular music recordings—a valuable skill, and one of critical importance to working performers of popular music (Blom, 2006; S. Cohen, 1991; Green, 2001; Pulman, 2014). Yet, degrees of flexibility, creativity and individuality remain underrepresented in Green’s (2008a) publication, begging the question as to what kinds of arrangement or versioning strategies were encouraged or employed? Further, to what extent did students separate the skills acquired in performing covers in Stages 1 to 3 from those required to compose original music in Stages 4 and 5? Did the copying process promote or inhibit creativity? How similar were these later compositions to the copied covers, and what might the implications be for these findings?

Of central importance to notions of creativity and originality in popular music are collaborative synergies connecting skills in performance and composition—as

discussed at length in Part 2 of this Chapter, along with now digital and online technologies available to enhance these processes (Folkestad et al., 1998; Humberstone, 2015; Väkevä, 2010). In Musical Futures resources, non-formal songwriting includes reference to both digital and live creative practices in composition and songwriting within popular idioms (D'Amore, 2011, pp. 101-115). Unfortunately, subsequent research publications listed on the Musical Futures website mention digital composition infrequently (Ling, 2013), with a focus maintained on documenting the development of live performance based musicianship (<http://www.musicalfutures.org/>). Although predating Green's study, Winter's (2004) Australian research implementing aural-based classroom pedagogies cite activities in 'experimenting', 'recording', 'jamming' and 'arranging' all under the banner term 'performance'—despite the creative and re-creative nature of these ensemble strategies. Questions remain as to how best to distinguish between creative and re-creative based learning, particularly as popular music-making is both a collective and individual creative endeavor.

Assessment, power and the 'democratic' classroom

Research publications are yet to address effective assessment models for popular musicians at the senior secondary level. Yet, no single factor is often so influential, in determining the direction of classroom pedagogy either stated explicitly or otherwise, affecting notions of value and legitimacy in the minds of teachers and students. At the heart of the problem lie formative school assessment procedures, counter to authentic learning rationales upon which informal learning pedagogies are based. Popular music is frequently collaborative in nature, is at times subversive, remains socially contextualised, and promotes communal thinking that may be impossible to compartmentalise and grade numerically (Thorpe, 2009). Despite this dissonance, studies by Allsup (2003) and Jaffurs (2004) claim popular music pedagogies are capable of 'democratising' the classroom by enabling and empowering student voice. Unfortunately, these publications make no reference to formative assessment processes that might be employed.

As Green's (2008a) research documents data across multiple schools, it is not surprising that her publication does not include reference to assessment. Resource

materials provided by Musical Futures address assessment, outlining multiple, flexible models including ‘peer’, ‘self’, ‘formal’, ‘informal’, ‘target setting’, ‘formative’ and ‘summative’ models, all in line with nationally set directives and expectations (D'Amore, 2011, p. 20). Research publications are yet to report findings from these directives.

At the tertiary level, multiple and flexible models for assessment have been trialled empirically to meet individual needs and address vocational models for adult learners, including self- and peer-assessment, goal setting, personalised curricula and group assessment models (Hunter, 1999, 2006; Karlsen, 2010; Lebler, 2008). Yet even at the tertiary level, Harrison, Lebler, Carey, Hitchcock, and O'Bryan (2012), note difficulties in maintaining consistency where institutional demands may encroach upon student autonomy, resulting in “confusion and lack of transparency” in the assessment process (p. 27). In the final years of high school the ‘democratic’ classroom may remain something of a lofty ideal if teachers and students remain subject to the enduring reality of external examinations and tertiary entrance testing beyond their control, to which classroom assessment so frequently aligns. Clearly, research is required which places assessment practices for popular musicians in view, and balances flexibility in approach against the underlying realities of schooling.

The role of the teacher ‘facilitator’

The role of teacher as facilitator draws from pedagogical frameworks based in ‘culturally responsive teaching’, ‘socio-cultural learning theory’, Deweyan ‘pragmatism’, ‘critical pedagogy’ and ‘autonomy supportive’ teaching (Ho, 2013; Karlsen & Väkevä, 2012). As already stated, these call for a radical shift from teacher-led to learner-led practice. Research documenting the ‘facilitation’ role has outlined its benefits in allowing teaching to meet individual needs (Ho, 2013; Sexton, 2012), and also reported challenges in balancing learner autonomy against outcomes-based curricula (Gower, 2012). Despite the frequency with which the ‘facilitator’ role is mentioned in the literature, few research publications critique facilitative strategies directly, and a wide variety of different approaches are included under this umbrella term, from mere observation through to direct intervention (Costes-Onishi, 2013; Ling, 2013). In Green’s (2008a) publication, the teachers reported that their

facilitative role was a challenge and one very different to their typical mode of instruction (p. 30-37). Beyond this however, no examples of student and teacher dialogue are provided in the published lesson transcripts, nor are facilitative strategies critiqued directly in her publication.

In contextualising this role, high levels of social interaction and empathy are clearly required. Yet Cain's (2013) examination of formal instruction also reveals a rich social dimension demanding care, empathy and flexibility. In kind, Allsup (2004) describes the school concert band—a central fixture of formal classroom music education in the USA—as a social 'community' and a place of 'evolving identity', positing that these environments are neither "fixed, neutral or objective" (p. 208). Therefore, formal and informal pedagogies like the equally problematic 'classical' and 'popular' learner typologies appear too rigid to adequately define or typecast facilitative pedagogy.

Currently the informal learning approach has been implemented in pre-service teacher training, with informal learning experiences believed to be capable of expanding future teachers' meta-cognitive and meta-pedagogic capacities (Finney & Philpott, 2010; Heuser, 2008). Wright (2008) believes informal learning experiences may have the potential to challenge the habitus of teachers with sole experience in WAM, with facilitative pedagogies potentially initiating new knowledge discourses with students in classrooms over time (Wright, 2014). However, if informal learning pedagogy is to realise this aim, then the knowledge practices at the centre of both informal and formal learning need to be brought into clearer view.

Knowledge construction

In her (2008a) publication, Green makes no reference to the acquisition of formal, or theoretical knowledge during the study. Quoted here in full, Green summarises the significance and relationship of formal or theoretical knowledge in relation to more practical forms of musicianship:

It is important to stress that there is no *necessary* disjunction between informal music learning and the acquisition of such theoretical knowledge. Rather, informal music learning practices as they occur in the world outside school, are likely to involve a long period—in many cases a period of years—during which

learners engage with music primarily as music-makers and music listeners. Later on, and in most cases only later on, many such musicians go on to develop theoretical knowledge, to a greater or lesser degree depending on individual circumstances. This theoretical knowledge comes about through a variety of means, and may involve formal education, personal study, or simply continued contact with other musicians and with music itself. Such knowledge is more readily assimilated, and more meaningful, because as it is acquired, it can be put to immediate use within music-making or music listening activities, rather than remaining an abstraction (p. 181-182).

Green here describes the haphazard acquisition of formal knowledge, at the tail end of a music learning process focused on developing personally relevant practical skills. As Green describes the value of formal knowledge only in relation to the perceived needs of the knower, she aligns herself with Elliott's (1995) and Small's (1998) philosophical position of musical knowledge as synonymous with doing or 'musicing'. Elliott writes:

Beginning from the self-evident principle that music is a human activity, we have arrived at the more elaborated view that music is a multidimensional human phenomenon involving two interlocking forms of intentional human activity: music-making and music listening. These activities are not merely linked; they are mutually defining and reinforcing. Let us call the human reality formed by this interlocking relationship a *musical practice* (1995, p. 42).

Elliott (1995) is highly critical of formal theoretical instruction whenever such knowledge is decontextualised or replaces practical musicianship. Swanwick (1994) acknowledges both forms of knowledge but cites difficulties in constructing theoretical concepts from practical know-how, which instead tends to generate intuitive and affective 'meaning' for the knower, relative to personal and social experience. Considering these challenges, how are abstract concepts acquired and assimilated by the knower? Is it possible to acquire abstract or theoretical knowledge without at the same time, losing the motivation generated by 'musicing'? What kinds of classroom instruction might make this transition more seamless especially for older students intent upon pursuing formal tertiary study in music? Would a curriculum solely focused on the acquisition of informal knowledge and skills work against such progression?

Studies by Feichas (2010) and McPhail (2013) revealed that musicians with sole access to informal knowledge and skills during their early secondary and tertiary training experienced difficulties acquiring formal knowledge later on. Hannan (2005,

2006) conducted Australian research with popular musicians at the tertiary level and found they placed a high value on formal knowledge previously unavailable to them through their self-directed means. These findings highlight the need for teachers at the senior secondary level to find ways of distinguishing and connecting everyday with abstract or conceptual knowledge, with pedagogic models needed in order to direct the connection of the two.

Such a model requires firm theoretical grounding, which has begun in the work of Folkestad (2006) who proposes a dialectic between formal and informal spheres of music-making and thinking. He provides four criteria with which to conceptualise an informal – formal continuum. These include the orientation of the learning context or situation (institutional or social), the style of learning (aural- or notation-based), ownership of the learning process (learner or teacher) and lastly, mental “intentionality”. This is articulated as follows:

From this, a distinction between formal and informal ways of learning with respect to intentionality is presented: towards what is the mind directed during the process of the activity? In the formal learning situation, the minds of both the teacher and the students are directed towards learning how to play music (learning how to make music), whereas in the informal learning practice the mind is directed towards playing music (making music) (p. 138).

In proposing a relational coupling between informal and formal learning, Folkestad’s final criteria—the object or ‘what’ to which the mind is directed—provides clues to a complementary relationship between both embodied musical skills (music-making or ‘musicing’) and more abstract or conceptual musical thought. Unfortunately, Folkestad’s (2006) publication provides only brief vignettes with which to elucidate these connections further, aligning examples of tacit or situated learning (‘playing music’) to the informal, as contrasted with a method or concept focus (the ‘how’) aligned to the formal. This leaves the reader at a loss as to how to differentiate between various kinds of ‘how’—typically either procedural or conceptual thinking, and what connections may exist between the two. Further, in positing the interactional nature of informal and formal learning, there is a danger that surface level similarities may negate underlying differences in the knowledge practices emerging from these different kinds of learning situations.

Extending upon Folkestad's fourth criteria, McPhail (2012a, 2013) undertook qualitative research with New Zealand classroom teachers examining their role in recontextualising various forms of musical knowledge across the informal – formal spectrum. In this process, McPhail found the teacher to be key in accommodating a tension between the different kinds of knowledge typically associated with popular and classical music learning. He claimed these tended to manifest on the one hand as “socially contextualised informal knowledge” associated with everyday music-making experiences and on the other, as “socially developed but formally acquired disciplinary knowledge” typically associated with WAM (2012, p. 1-2). McPhail's thesis employed social realist frameworks from the sociology of education, and in particular, the work of theorist Basil Bernstein (2000).

Key Bernsteinian concepts explored in McPhail's work are the *pedagogic device*—processes affecting the transformation of knowledge into pedagogic discourse; *recontextualisation*—processes affecting curriculum and pedagogy as knowledge moves from one field or location to another; and *knowledge structures*—ways of differentiating between forms of knowledge as they manifest in classroom discourse. McPhail (2012a) asserted that musical knowledge may exhibit properties of Bernstein's vertical or horizontal forms, with ‘conceptual’, ‘abstract’, ‘coherent’, ‘theoretical’ ‘formal’ *vertical discourse*, frequently seen to be at odds with the ‘oral’, ‘local’, ‘tacit’, ‘context-dependent’ *horizontal discourse* typical of informal learning (p. 27-28). As a consequence, teachers can either reinforce the boundaries between these forms of knowledge by emphasising one at the expense of the other, or create valuable links between them, allowing learning to cross “knowledge boundaries” (p. 1). McPhail's findings concerning the permeability of boundaries between vertical and horizontal knowledge, require further investigation, and, a more nuanced theoretical lens in order to view in detail how different kinds of knowledge may connect in classroom learning.

Conclusion

This chapter has surveyed literature outlining the nature of popular musicianship skills, and subsequent pedagogies developed to make provision for these within the field of classroom music education. Owing to the series of tensions between school

and popular music cultures explored in Part 1, a caricature has emerged within the informal and popular music pedagogy research literature which gives preference to performance orientated musicianship in select Western pop and rock genres, rather than representing a multiplicity of music styles, technologies and practices associated with the ubiquitous and problematic term ‘popular music’. Within this narrower frame, the music transmission strategies typical of musicians who ‘play by ear’ were explored with reference to the skills and knowledge acquired through enculturated learning processes. These revealed the importance of memorisation skills in aural-based learning, and the degree to which skills and knowledge remain tacit and context dependent in orientation.

In the final portion of the chapter, studies exploring informal and popular music pedagogies for school classrooms were examined with regard to their ideological foundations, with five themes identified in response to their findings. These concern the need to provide balance in student choice, the provision for creativity in the classroom, the development of workable rationales for managing formative assessment especially later in high school, the need to problematise the role of the facilitator, and lastly, the need to manage the construction of formal knowledge typically valued in formal education from informal learning encounters.

These themes have been raised due to the problems encountered in recontextualising authentic learning models developed in real-world contexts for the classroom. This process has resulted in subtle modifications to hitherto informal learning practices as they are aligned with and compete against normative practice established to cultivate 20th century classical musicianship and its associated canon of knowledge. In order to explore this complex relationship further, the next chapter begins with an outline of the sociological concept of *field* before introducing a set of theoretical and empirical tools that are useful in exploring the tension in the classroom between informal and formal learning cultures and practices. Senior secondary classroom music education in NSW Australia then provides a pertinent case through which to explore this complex relationship, through an ethnographically grounded, but dynamic, or ‘experimental’, case study.

CHAPTER 3: THEORY AND METHODOLOGY

Introduction

This chapter begins with a brief outline of the sociological concept *field*, in order to frame the arena of school music education in NSW and foreground the examination of a single classroom case study positioned within it. As outlined in the preceding chapters, school music education is underpinned by foundations in two larger fields: the field of education and the field of musical practices, the latter embracing industry, community, personal and online music-making activities. The internal dynamics of classrooms are therefore informed by multiple sets of organising principles. The first reflects the field of education, its regulatory structures, and importantly their ideological foundations. The second is socio-cultural, and operates largely without institutional systems of control or regulation. The experiences of students and teachers in music classrooms such as my own meet at the intersection of the two.

The review of literature undertaken in the previous chapter revealed that current discourse within the field of music education internationally is fuelled by a number of oppositional stances. These tend to manifest as a series of ‘either’ ‘or’ positions including: constructivist or behaviourist approaches, classical or popular pedagogies, aural- or notation-based learning, and the ever-problematic, informal or formal learning typologies. Yet close examination of these types revealed inconsistencies and inadequacies in the use of these terms between contexts and over time. Research is needed to address these differences more critically, in order to reveal the ‘rules of the game’ outplaying for student musicians in classrooms such as my own, recognising the effects of previous play within the field more broadly situated, and, the structure of the field itself (Maton, 2014, p. 17). Such a task is well beyond the scope of the present study, but without a preliminary theoretical overview, this research investigation runs the risk of producing only a surface level description of classroom events, with no explanatory potential beyond the immediate case.

With senior secondary level classroom music education in NSW providing context, the following research questions were posed:

1. At what points historically did NSW music curriculum documents begin to take into account popular music and musicians, and in response to what broader educational trends?
2. In what ways do student popular musicians' 'informal' knowledge and skills align with, or diverge from, the 'formal' knowledge and skills traditionally cultivated in classrooms?
3. To what extent are the needs of student popular musicians catered for by both informal and formal classroom pedagogies?
4. Are current curriculum structures and assessment practices adequate in meeting the educational needs of student popular musicians?

These questions require a research design embracing empirical and analytical tools bound together by an overarching theoretical framework. This encompasses a detailed historic account of practice within the NSW context from the years 1955-2015, using available music syllabus documents, relevant literature, and matriculation trends to support discussion. Particular attention is paid to the events leading to the acknowledgment of the student popular musician at the senior secondary level, and developments at the senior secondary level in general. The remainder of the research operates within a qualitative frame of enquiry, and focuses in on a single classroom adhering to an experimental case study design (Cobb et al., 2003; Stake, 1995). The classroom study employed a teaching and learning program designed to strategically tease out a spectrum of informal and formal pedagogy and learning from the teacher and student participants. The research utilises student surveys, video footage of classroom activity, interviews with teachers and students, and samples of both assessable and non-assessable student work as empirical tools. Each of these data types were subject to a grounded theory analysis in order to generate a body of themes (Corbin & Strauss, 2008).

Legitimation Code Theory (LCT) (Maton, 2014) was employed as an overarching theoretical and interpretive framework for the entire study. LCT, with its foundation in the sociology of education, is being used in an increasingly diverse array of research fields. As a practical multi-dimensional toolkit, LCT extends and integrates Pierre Bourdieu's field theory and Basil Bernstein's code theory, with a general overview of these theories providing foundation to the introduction of LCT tools pertinent to this research enquiry. In design, LCT allows for both *knowledge* practices and *knowers* dispositions to come into clearer view—two themes central to the review of literature presented in the preceding chapter. LCT is a powerful explanatory tool, capable of tying together findings on each level of enquiry; from the analysis of curriculum documents both past and present, down to the internal workings of the classroom case study featured in this research thesis. As a way of foregrounding and explaining the relevance of LCT to this study, some preliminary sociological concepts and terms are introduced in order to position the field of school music education, and provide rationale for the research undertaken within the NSW context.

The Field of School Music Education

Bourdieu (1985b) described the sociological concept of *field* as a kind of social space. His original word for this metaphorical rather than physical space was *le champ*, which is closer in translation to a field of battle or contest, rather than a meadow or paddock (Thompson, 2012). The concept implies such a space not only contains actors involved in a game of sorts, but one involving struggle underpinned by rules known either explicitly or implicitly to the players. The concept of *field* works in tandem with two of Bourdieu's other key concepts, *habitus* and *capital* (Bourdieu, 1985a). Habitus conceptualises the dispositions and predispositions of the actors involved in play, which in turn determine the outworking of their choices as behaviours, actions and interactions. Habitus works in conjunction with capital. Capital delineates notions of value or worth within a specific field—either cultural, symbolic, social, economic and so on, over which the contest is fought (Bourdieu, 2005). Together, the effects of habitus and capital combine as driving forces determining the outworking of actors' positions within a field, affecting its practices and their trajectory over time (Maton, 2012). These are not static but fluid concepts,

with each, field, habitus and capital, being subject to external and internal change, which impacts the rules of the game, how it is played, notions of what counts as capital, and by implication, the actors' relative positions to each of these concepts over time.

As stated, the aim of this research was to explore empirically and position theoretically student popular musicians' experience of learning within the field of classroom music education at a local level in the state of NSW, Australia. Chapter 2 outlined the body of literature addressing popular musicianship in classrooms. A series of dissonances were noted between school and popular cultures, with curriculum structures and modes of pedagogy for school music designed with WAM in mind. Bresler (1998) describes school music as its own genre, and one that is subject to marginalised disciplinary status. She asserts three interconnected planes of influence therefore operating at 'micro', 'meso' and 'macro' levels, which affect "both what teachers teach and how they teach, shaping explicit and implicit messages and values" (1998, p. 2). From the perspective of students and teachers, these messages and values tend to manifest most visibly at the micro level of classroom interaction, with specific individuals in specific school contexts, at specific times. Most of the research studies addressed in Chapter 2 were situated at this level. The micro level of the classroom is however underpinned by Bresler's description of meso influences, which include curriculum structures and rationales, along with accompanying assessment practices controlled at institutional, state, and national levels. Panning out further, Bresler states that both micro and meso levels are contingent upon influences on a macro level, including broader societal, political, economic, cultural and ideological factors underpinning all activity on each preceding level. Bresler's description somewhat reflects Bourdieu's concept of field as a "multidimensional space of positions" (1985b, p. 724), but she does not discuss how each of these levels intersect operationally.

As substantiated by the review of literature undertaken in Chapter 2, the field of school music education operates at the intersection of two different but considerably larger fields, the field of education and the field of real-world musical practices, heuristically portrayed here in Figure 3.1:

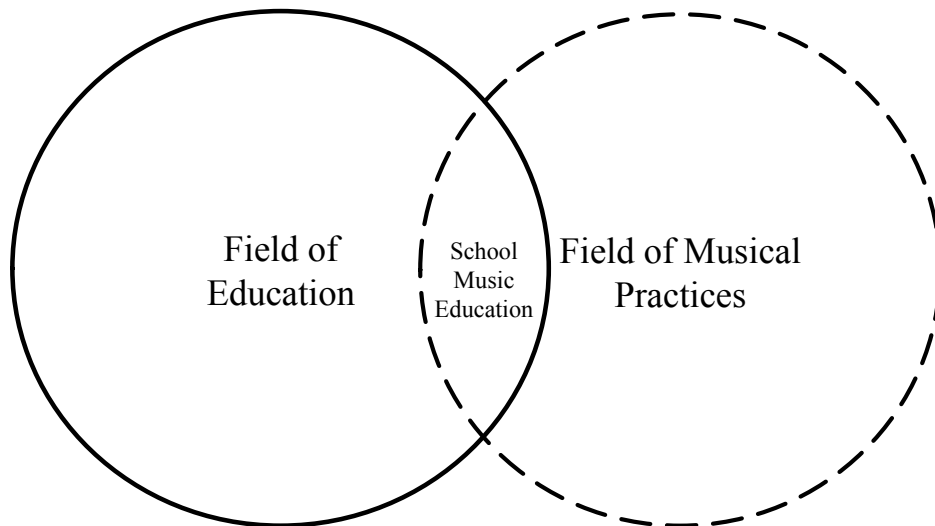


Figure 3.1. Heuristic representation of the field of school music education

Importantly, each of these larger fields operates under a different set of rules or logics, and is structured by them accordingly. They are not the same. One has borders that are more clearly defined by institutional oversight. The borders of the other are more permeable, the product of processes involving cultural exchanges of various kinds, operating mostly without regulation or oversight from governing bodies or large institutions. The players participating in each of these larger fields operate under different conditions, according to multiple and varied notions of what counts as value or capital. Problematically for the field of school music education, the state of play and the actors who inhabit it are situated within both of the larger fields or spheres. They are thus playing two different yet intersecting games concurrently. This being the case, each of the larger fields requires separate examination, before proposing a set of features distinguishing the field of school music education, and a research design pertinent to the present case study.

The field of education

Along with Bourdieu, British sociologist Basil Bernstein spent a considerable portion of his career formulating sociological theory applicable to education. Where Bourdieu's concepts worked to define the nature of fields and their relationship to one another in terms of the actors within them, Bernstein developed theory capable of

addressing the organisational features of educational fields in terms of their intrinsic rules or codes. This led him to address this field's primary form of symbolic capital: *knowledge*, both in terms of its constituent features and how it is regulated through pedagogic discourse.

Bernstein's code theory works to explain the processes by which knowledge practices in education become focussed through his key concept: the *pedagogic device*. Bernstein argued that the pedagogic device created an 'arena of struggle' spanning three sub-fields: *production*, *recontextualisation* and *reproduction* (Bernstein, 2000). Bernstein described these educational sub-fields as being in an operational hierarchy. The field of *production* is the site where knowledge is created or refined typically through research in intellectual fields (p. 33). Then a process of filtering and selection takes place in the field of *recontextualisation*, where this new knowledge is reorganised both by recontextualising agents (government departments, but also teachers) and through curriculum, official texts and so on (p. 34). This process of knowledge transformation becomes the basis for pedagogic discourse in the field of *reproduction* (school classrooms and other teaching and learning sites) (p. 35).

The different kinds of actors and agencies involved in Bernstein's recontextualisation field above are naturally not the same, with different agendas potentially creating tension. In the case of Green and others, teachers (and in this case researchers) have acted as recontextualising agents in order to instigate new kinds of learning and classroom pedagogy. However, tensions result due to a wider range of forces (curriculum writers, official assessment agencies, and so on), also holding positions of power in the recontextualisation field. Naturally, there is then a flow on effect to the field of *reproduction* (the classroom), should these differing agendas not be openly acknowledged and addressed.

The three fields within education as described by Bernstein are represented in Figure 3.2:

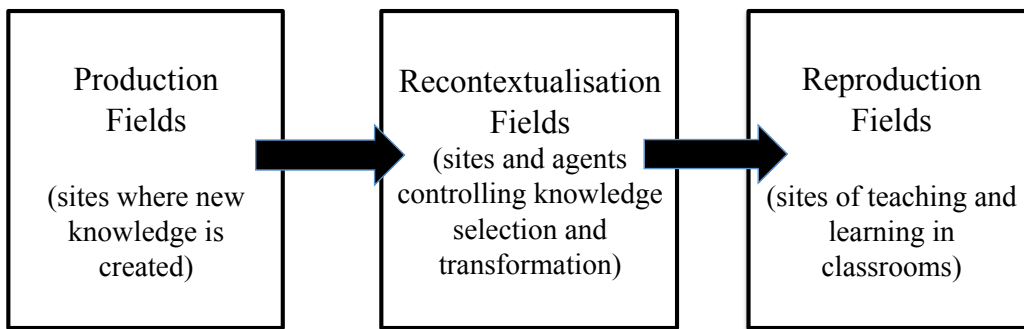


Figure 3.2. Bernstein's arena created by the 'pedagogic device' (2000, pp. 25-39)

Maton's epistemic-pedagogic device (foundational to LCT) builds on Bernstein's model significantly, by recognising that the process of influence and transmission works not one but potentially two ways, as is depicted in Figure 3.2:

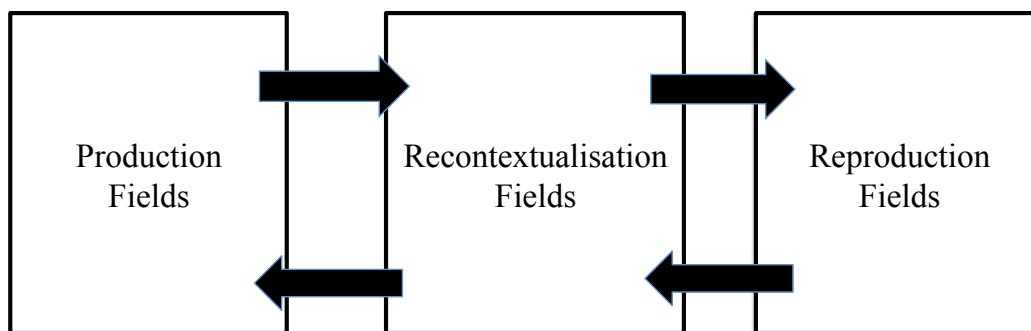


Figure 3.2. Maton's arena created by the epistemic-pedagogic device (2014, pp. 50-52)

The arrows from left to right depict how in classrooms, knowledge is transformed and 'pedagogised' according to Bernstein's existing model. According to Maton, knowledge and influence can work to transform these fields in other ways as well, from right to left, and potentially in other directions. For example, changes in the nature of classroom discourse in the field of reproduction can influence curriculum review and development or new teaching pedagogies in the field of recontextualisation, which may then become the subject of research investigation in the field of production. Acknowledging this reality, the relationship between the classroom (the field of reproduction) and the external world of real world or

enculturated music-making now needs to be addressed, as this tension underpins problems within recontextualisation fields, which then influence classroom practice. Hence a brief outline of the field of musical practices or real world music-making is outlined next. Discussion draws upon recent discourses within ethnomusicology and other areas of music scholarship, as operationally this field, or rather ‘fields’ represents a range of socio-cultural activity, rather than a single entity or space.

The field of musical practices

As outlined in Chapter 2 the field or fields of real world music-making, are inhabited by actors representing a multifarious and fluid range of activities and skills. In Western contexts these extend across what Turino (2008) describes as four kinds of musical experience including: *participatory performance*, involving informal and inclusive community music-making and dance; *presentation performance*, where an audience receives music presented by live performers; *high fidelity recording*, where presentational performance is captured and manipulated for later use, or sale; and *studio audio art*, where sound is generated, manipulated and organised digitally without reference to real time performance. Naturally there is a degree of overlap between these areas or experiences and also different kinds of capital involved, with actors or ‘musicians’ (involving every possible adaptation of this term) moving between them, each possessing a particular kind of habitus or disposition. A musician’s habitus—their tastes, choices and musical interests—is also naturally a product of their culture, class, ethnicity, gender, beliefs, education, political persuasion and so on.

For musicians, notions of capital are varied. The most obvious form of capital is naturally economic or monetary—getting booked for ‘work’ (‘gigs’ or studio recording ‘sessions’) (Cottrell, 2004), or in the case of composers, arrangers, producers and studio audio artists ‘commissions’. However, capital may also be symbolic or artistic, involving notions of authenticity, cultural integrity or credibility, proving a musicians’ value or worth on different grounds especially in the eyes of potential audience members. Both forms are usually acknowledged, and can be mutually beneficial.

In the field of musical practices, musicians organise themselves according to activities often defined by outsiders under music style or genre categories with significant crossover between them. Concerning the ‘popular’, Middleton (1990) asserts the need to respect the active tendency of the field, with internal relationships “never still” and “always in movement” (p. 7). Musical practices produce boundaries that are therefore more social than specific, and loosely correlate with the concept of musical ‘worlds’ discussed in the previous chapter (Becker, 1982; Finnegan, 1989). These worlds are fluid rather than fixed as mentioned—permeable and interchangeable—with members inhabiting often several worlds simultaneously, perhaps to the benefit of the members within, allowing for increasingly intricate and diverse forms of musical play to emerge.

Within both participatory and presentational performance practices, Elliott (1995), goes so far as to propose that each style or genre boundary constitutes a space or arena where players create meaning. Here capital is not knowledge of an explicit kind, but rather, the ability to embody the qualities necessary to prove one’s legitimate status for inclusion through what one does and creates: a condition he describes as *knowing*. He writes: “During the continuous actions of singing or playing instruments *our musical knowledge is in our actions; our musical thinking and knowing are in our musical doing and making*” (p. 56, emphasis in original). Elliott’s *knowing* requires a combination of both music-making and music listening which together constitute the basis of a musical practice (p. 42). These practices are multiple, and are interconnected through various kinds of transmission strategies across both notated and aural-based mediums as outlined in the preceding chapter.

The field of musical practices (including all four of Turino’s experiences) therefore occupy not a singular space, but a range of spaces. Some musical practices are larger and more visible than others. Some interconnect; others are more distantly related. Some have highly specialised knowledge only available to insiders. Others maintain more permeable and open access. Each employ musical tools, terminology and modes of making and transmitting ideas specific to its speakers. Such a field is organic, and defies external organisation. Yet as outlined in the preceding chapter these practices are not devoid of knowledge, but rather, knowledge is embodied and subject to the

needs of *knowers* operating within them. This range of interconnected musical practices is heuristically represented in Figure 3.3:

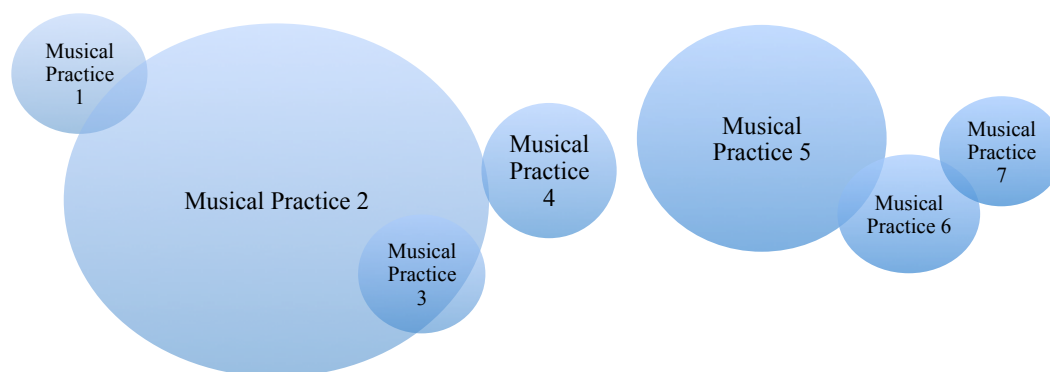


Figure 3.3. Organisational features underpinning the field of musical practices¹¹

Despite the obvious contrasts between the organisational principles affecting the field of education and the more fluid field of real world musical practices, the two intersect in the field of classroom music education. Here, the rules of each game meet in dynamic contestation. Tension is the result. More importantly, as many of the players inhabit a range of positions across the two larger fields concurrently, they may remain unaware of the double game, with their relative position to the inner field of classroom music education often dependent upon their position within the larger fields overriding the general state of play in classrooms.

The field of classroom music education

Classroom music education is a highly problematic field drawing upon pedagogic practices reflective of both real world musical practices, and knowledge practices common to the field of education. Therefore, an appraisal of music knowledge practices is key to understanding the dynamics of this field. As outlined in Chapter 2, McPhail's theorisation of musical knowledge is based on two distinct yet interconnected types of knowledge: historically tested knowledge addressing the WAM canon reflecting a more explicit hierarchy or 'vertical' design; and practical or

¹¹ Diagram based but extended upon a similar heuristic representation in Elliott (1995, p. 45). Elliott's representation depicts each practice as separate, but here practices are represented as both distinct and interconnected social and cultural realities.

embodied knowledge reflecting a series of ‘horizontal’ segments, accumulated in specialised and distinct contexts (2012a, 2013). Hence, elements of both theory (hierarchical knowledge) and practice (horizontal knowledge) are pedagogised in music classrooms. According to McPhail (2012b), school music thus exhibits some attributes of what Bernstein (2000) describes as a subject *region* (p. 52).

Subject *regions* are complex. They accommodate both the properties of *singulars* (such as mathematics or physics which maintain strong classification and framing of content and hierarchies of knowledge), but look additionally to the real world ‘field of external practices’ (ibid) as the basis for the construction of pedagogic discourse over time. Any form of vocational education adopts the properties of a subject *region*. These applied areas of education by necessity face two ways—inwards towards disciplinary knowledge, and outwards toward external real world activity (Shay & Steyn, 2016). In the case of classroom music education, this invariably involves tension, between preserving strongly framed canons of historic knowledge accompanied by systems of theory and analysis developed over many hundreds of years for WAM (arguably reflecting a singular), and more recently, including and reflecting an increasingly broad array of real world music-making skills and practices including popular music reflective of music industry practices and enculturated forms of learning (McPhail, 2012b).

School music is thus a contest between different kinds of *knowledge* and different kinds of *knowers* concurrently. To understand the internal dynamics of classrooms therefore requires a set of theoretical tools, which by design address both *knowledge practices* and *knowers’ dispositions* concurrently. Such a tool is available in LCT.

Overarching Theoretical Framework: Legitimation Code Theory (LCT)

As a multi-dimensional conceptual framework, LCT is being used in an increasingly diverse array of fields allowing knowledge practices to become more transparent, and their organising principles and effects to be explored with greater clarity. It recognises that each social field is relatively distinct, yet connected to others through an underlying set of principles (Maton, 2014, p. 17). Within a field, actors position themselves to attain capital (status and resources) and so in turn shape what defines

status and resources within fields. The game that ensues is therefore one of “competing claims to legitimacy” and its practices are known as “languages of legitimation” (ibid). Actors, their dispositions and their positions within fields are conceptualised according to what Maton describes as *legitimation codes* (p. 18).

There are currently five dimensions to LCT, each conceptualising a different form of legitimation code. The dimension of Specialisation is pertinent to this research enquiry as it reveals how *knowledge practices* relate to *knowers' positions* within fields, which in this case is senior secondary classroom music education in NSW. Both *knowledge* and *knowing* are represented as two key concepts: the first depicts *knowledge* claims or objects of study (what is being learned) in terms of epistemic relations (or ER), and the second, depicts the position of *knowers* in relation to these knowledge practices (who is determining the nature of teaching and learning) as social relations (or SR) (Maton, p. 29). Each of these can be conceptualised on a continuum of strengths and weaknesses (ER+, –), and (SR+, –) respectively.

The key concepts of epistemic relations and social relations generate four specialisation codes: a *knowledge code* (ER+, SR–) when claims to legitimacy depend more or less upon an actor's position to an object of study; a *knower code* (ER–, SR+) when individual and collective claims to legitimacy are based instead upon possessing a particular disposition or quality necessary for inclusion in a social group or in this case classroom music practice; an *élite code* (ER+, SR+) where the terms for legitimacy are based not only on possessing specialised knowledge but also on being the right kind of knower; and a *relativist code* (ER–, SR–), where legitimacy is based neither upon possessing specialised knowledge nor acquiring a particular disposition or set of knower attributes (Maton, 2014, p. 29). Represented diagrammatically using a Cartesian plane, the four codes can be depicted as follows:

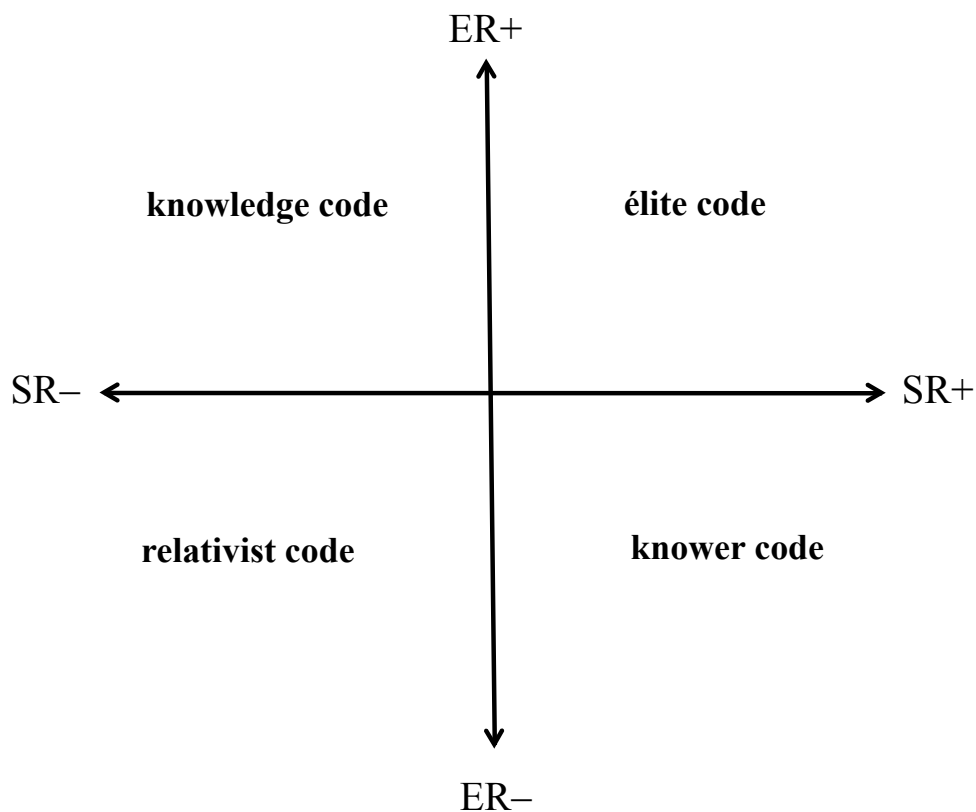


Figure 3.4. Specialisation codes (Maton, 2014, p. 30)

Importantly, relative strengths and weaknesses in epistemic relations and social relations may vary both ways simultaneously, generating an infinite continuum in positions of play. In this study, Specialisation provides a way of distinguishing between both *who* is speaking in the classroom and *what* is being said, learned or taught in regards to music.

However, the review of literature revealed the need for theoretical tools also capable of exposing the way musical knowledge is structured according to an ‘informal-formal’ spectrum or continuum (Folkestad, 2006). Failure to do so would negate the importance of an aural – literate spectrum as outlined in the preceding chapter, deeply affecting modes of learning and pedagogy in the classroom for the student popular musician. In order to analyse knowledge along this spectrum an additional dimension of LCT is required. This dimension is known as Semantics, and involves two interdependent key concepts: *semantic gravity* (or SG) and *semantic density* (or SD).

Semantic gravity provides a way of describing how meaning relates to a specific learning context, and is therefore tied to its social or symbolic origin (Maton, 2014, p. 106). Musical knowledge of this kind may be intuitive, situated, or even tacit. As outlined in the previous chapter, McPhail (2013) described this kind of knowledge as horizontal, and Swanwick (1994) terms it ‘first-hand knowledge’ or ‘know-how’ (p.16-17). Like all LCT concepts, the semantic concepts operate on a continuum of strengths and weaknesses. It is therefore possible to describe knowledge as exhibiting properties of strength (+) and weakness (–) in relative terms. As such, meaning displaying high degrees of context dependence (SG+) if applied to multiple learning contexts may begin to exhibit less context dependence (SG–), and become the basis for generalisation.

Equally expressed on a continuum of strengths (+) and weaknesses (–), semantic density encapsulates the degree to which meaning is condensed in order to signify abstract, conceptual or theoretical ideas or practices (Maton, 2014, p. 129). For example, knowledge specific to music involving strong semantic density might be described as ‘theoretical knowledge’ and require technical terms, forms of notation, and systems of analysis which due to their abstraction can entail or be used to address multiple specific musical examples. McPhail (2013) described this kind of knowledge as vertical or hierarchic in design. LCT provides a way of representing degrees of condensation in meaning, with specific and singular meanings (SD–) the foundation for more complex symbols or higher order concepts if synthesised, condensed or combined (SD+). Often used in conjunction, the two semantic concepts are capable of describing the same kinds of phenomena, but allowing gradations to be plotted between them: from knowledge and understanding bound to a concrete context with weaker levels of abstraction (SG+, SD –); to that utilising broader explanatory powers through the overlay of terms, rules or symbols applicable beyond an immediate concrete experience or situation (SG –, SD+).

When the semantic concepts are used together, insights into the relationships between different classifications of knowledge often viewed as a practical (or context specific) and theoretical (or condensed meanings) binary coupling, may be teased out and more explicitly theorised. By placing the concepts on a vertical axis, strengths and weaknesses in semantic density and semantic gravity may be mapped and plotted

progressively over time generating a semantic profile. This profile can plot teaching, learning, or both (Maton, 2013). When displayed in profile the semantic concepts provide keys to observing what Maton describes as ‘cumulative knowledge building’ (2013, 2014). When plotted over time, changes in the relative strength and weakness of each semantic concept potentially generate wave formations, as is depicted by the dotted line labelled B in Figure 3.5:

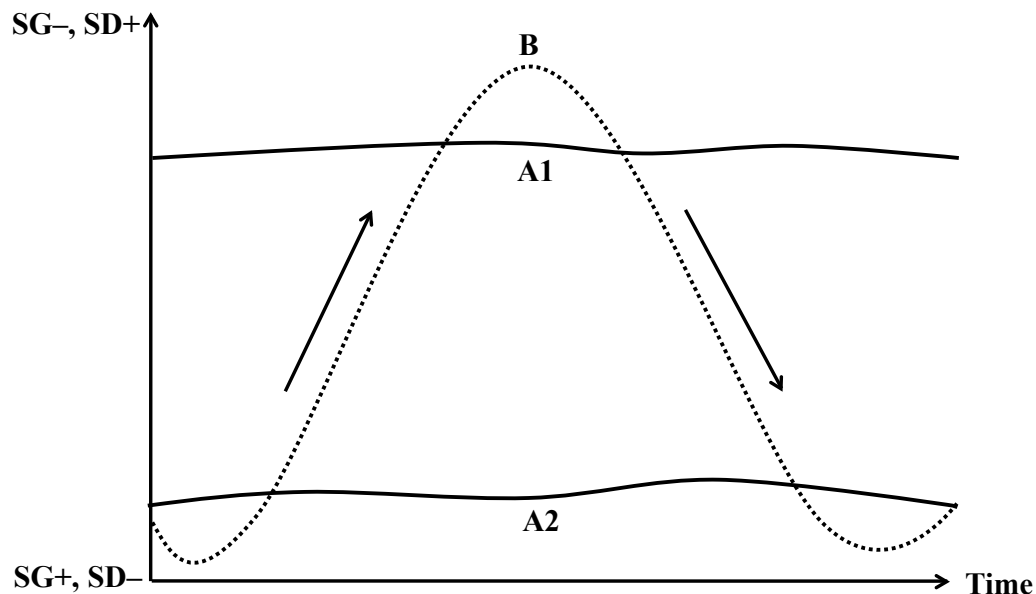


Figure 3.5. Three examples of semantic profiles (Maton, 2014, p. 143)

The wave profile depicted in Figure 3.5 as B stands in contrast with two semantic ‘flat lines’ marked as A1 and A2. A1 could depict a teaching discourse that remains abstracted, and disconnected from students’ experiences. In terms of the present study, this might typically involve teaching theoretical concepts or systems of musical analysis without potential application to a practical learning encounter. A2 is also a ‘flat line’. This hypothetical outcome might depict student learning that remains embedded within a specific activity or immersive activity, but fails to engage abstract concepts or ideas capable of speaking back to the immediate learning situation, failing to empower new learning or creative possibilities beyond the immediate context. The dotted line B depicts a potential ‘semantic wave’, where classroom dialogue connects practical learning encounters with less familiar abstract or theoretical knowledge, thus enabling more general or abstract knowledge to be built from experience, and abstract concepts to be introduced and then connected with practice.

When both Specialisation and Semantic dimensions are used in combination, the nature of play concerning both *knowledge* and *knowers* comes into clearer view. It allows the positions of actors within a field to be seen more clearly, which in turn reveals how the game of legitimacy is played out within (ibid. p. 17).

Overview of Research Methodology

As established in Chapter 2, the dynamics underpinning the field of school music education vary markedly at international, national, and local levels, and from one curriculum level to another. Teaching and learning may vary from one classroom to the next even within a single school at the same curricular level. Thus, a broad scale enquiry traversing the specificities of multiple research contexts may not be the most appropriate choice for this study, which is primarily concerned with the internal workings of the classroom. Therefore, a holistic enquiry investigating the specificities of a single classroom from multiple vantage points was decided to be the most effective way of designing this study. However, this classroom needs to be placed in context, especially in terms of the preceding theoretical overview.

With regard to Maton's epistemic-pedagogic device, the classroom is situated within the field of reproduction. Within this context teachers' play a role as recontextualising agents. Curriculum and external assessment bodies, however, are also situated in the recontextualisation field, and impact significantly upon classroom interactions. This study also seeks to investigate to what extent students play an active role within the classroom or reproduction field as importers of their enculturated or real-world learning. This kind of examination requires a range of immediate and contextual data, placing present day classroom events firmly within a historic and geographic context with regard to these two educational sub-fields. As the focus of this study is exploratory in nature, the qualitative research paradigm was believed the best model in which to conduct this kind of research.

Qualitative research is interactional in nature, and allows the researcher to generate findings inductively from a range of data types focusing on the experiences of participants (L. Cohen, Manion, & Morrison, 2007). Denzin and Lincoln (1998)

define qualitative research as “multi-method in focus” involving the study of a variety of “empirical materials” including “case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts” (p. 3). Through these empirical materials both emic (internal/subjective) and etic (external/objective) positions may be explored, with external validity gained only by making the nature of the context under examination explicit (Bresler, 1992). In order to make clear the boundaries of enquiry, case study research constitutes the focus methodology (Stake, 1995), with NSW senior secondary music education providing the curricular and geographic context in which to locate investigation.

Stake (1995) describes case study as “a specific, complex, functioning thing” (p. 2) of which there are two basic forms. One, ‘intrinsic’ which is self-bound, and the other ‘instrumental’, chosen for its ability to examine not only phenomena within a context, but to have implications beyond the boundaries of the particular case (p. 3). With the latter in mind, a classroom research project was designed and implemented, with a broader investigation of historic and statewide trends for NSW providing essential background context. NSW school syllabus documents for music were acquired by contacting the NSW Education Standards Authority (NESA) the curriculum and assessment authority responsible for school education in NSW, the State Library of NSW, and rare books at Fisher Library the University of Sydney. Matriculation statistics from the period 1955 – 2015 were available online at the NESA website (<http://www.boardofstudies.nsw.edu.au>). This period represents the same time period in which popular music rose to cultural dominance in middle class Australia, and simultaneously, reform initiatives would take place within education leading to the eventual inclusion of this music in classrooms, and with it, increasing numbers of students enculturated in popular music-making experiences gained largely outside the field of education.

My own classroom at Arrow Music College (AMC) in metropolitan Sydney was chosen for the classroom case study, with a research project implemented in 2012 early in the general scheme of this research. As a teacher of the school with a history of over ten years of employment, I had already gained intimate working knowledge of the AMC community, providing me with a depth of context specific knowledge difficult for an outsider to obtain. With the support of the entire school body, I was

able to design and implement a teaching program exploring a spectrum of informal and formal music learning activities within the entire curricular parameters in operation in NSW at the Stage 6 or senior secondary level. The classroom case study which integrated both Stage 6 courses therefore adhered in a general way to an experimental design. Cobb et al. (2003) describe design experiments in education as providing a means to address the complexity of the classroom, initiating problems for students to solve, documenting classroom discourse, norms of participation, and the tools and materials by which “teachers can orchestrate relations among these elements” (p. 9). Importantly, they are interventional in nature, with the intent of “instigating new forms of learning” (p. 10).

The teaching program I designed in an attempt to generate this learning was thoroughly embedded within NSW senior secondary music curricula. Although new to AMC and my teaching practice, aspects of the program drew from my prior teaching experiences across each of the Stage 6 courses. As the experiment sought to explore teaching and learning across a range of informal and formal activities for the entire cohort of students, the program addressed both Music 1 and Music 2 course curricula concurrently as these courses (introduced in Chapter 1 and again in the next chapter) seek to cater for students representing both formal and informal backgrounds in music (Board of Studies, 2009c, 2009d). The program was not one I had employed before, although aspects had been variously trialled over many years with smaller class groups prior to their introduction in the research project. The practice of integrating the Stage 6 courses is not unique to this research, occurring whenever limits in school resources and time allocations preclude students being offered study in the separate streams, as outlined personally in Chapter 1. An overview of the teaching program employed in the research is provided later in the chapter, with more detailed summaries of pedagogy included throughout Chapters 5 through 9 of this thesis. A full copy is also provided in Appendix A. The teaching program was approved in 2011 by AMC school administration before implementation, and was reviewed and approved during a routine school inspection undertaken by the Board of Studies, Teaching and Educational Standards (BOSTES) in 2014.

The primary mode of enquiry once classroom research began was ethnography, which seeks to “identify and understand patterns of conduct that guide participants’ day-to-

day practice, as well as explore the institutional structures which shape that practice” (Krueger, 1987, p. 71). Acting in the role of teacher - researcher with two additional teaching staff, the experiences of 30 student musicians and the three teaching staff (myself included) explored the 10-week program of learning. The research sought to examine classroom activity both holistically and multi-dimensionally. My discoveries also punctuate the discussion in relation to my dual role as teacher and researcher and hence, co-participant and co-contributor to the outcomes of the study (Cochran-Smith & Lytle, 2009; Cochran-Smith & Lytle, 1993). These include auto-ethnographic commentary, as the research process provided me with new teaching insights which in turn affected the orientation of my teaching, and the analysis and interpretation of data (Ellis & Bochner, 2000). My voice is however only one of those featured, positioned alongside those of my colleagues and students who provide counterpoint to my own.

Participants, Data Collection and Analysis Processes

Seeking a multi-dimensional view of the classroom, different data types were collected in order to capture activity from several vantage points. To begin, a group of new students for the year 2012 and my two music teaching colleagues at the school were invited to participate in research activities, which ran parallel to the implementation of the same teaching program offered to all students. All 30 students and both staff signed participant consent forms. A copy of the consent form and letter of school approval to undertake research is provided in Appendices B and C. This number of students was an average sized enrolment intake for the school.

To begin, a survey (see Appendix D) was administered, in order to establish the nature of the students’ prior music learning both in and outside the classroom, as well as outline their current interests and aspirations for study. The results of the survey are discussed in Chapter 5. Then, the classroom learning activities undertaken were videotaped and later transcribed. Transcription was two-fold, involving both spoken and musical transcription using word processing and staff notation software (Heath, Hindmarsh, & Luff, 2010). Student work samples of assessed work included videotaped performances, written reports, drafts and submitted transcriptions of arrangements and original compositions. After the 10 week research period was

completed, follow up semi-structured interviews with select students and all teachers further explored and expanded upon the initial findings made during the 10 week program of study (Hammersley & Atkinson, 1995). These interviews were audio recorded and later transcribed, creating additional depth to research, and triangulation of the initial findings from the classroom data. A copy of the semi-structured interview questions is provided in Appendix E. At times the student surveys, written data, and video recordings were used to stimulate discussion and verify findings during these later interviews.

All of the transcribed audio and visual footage were then analysed inductively. This involved a coding process using open (thematic), axial (thematic-relationship) and eventually selective coding processes, falling within the analytical methodology of grounded theory (Corbin & Strauss, 2008). A copy of the twenty codes generated by this process is provided in Appendix F. While every effort was made to distance myself as researcher from the research and analysis process, the challenge of maintaining this stance due to the immediacy of the material and the familiarity of the context was difficult. To address this problem, I (as teacher-researcher) shared the role of videotaping the classroom material with the two additional music teachers. At times, the video camera was also placed in classrooms and rehearsal spaces where groups of students worked on the project without direct teacher supervision. Where decisions I made as teacher were affected by insights gained during transcription and analysis, these are included within the ethnography and presented as self-reflexive accounts.

The majority of classroom learning was undertaken in student groups in separate rehearsal spaces. Each of these groups was regarded as a distinct entity. As four groups participated in the research, these generated four smaller scale narrative cases. When the group cases were cross-analysed however, a broader series of overarching themes began to emerge. These findings highlighted the need for an additional level of theoretical appraisal, and this was undertaken using LCT, which by this time provided theoretical tools capable of addressing both the later analysis of curriculum documents 1955-2015, with the findings from the classroom research project conducted earlier in 2012. For an in depth discussion of the use of LCT in qualitative research including grounded theory thematic analysis, see Maton & Chen (2016).

The School Context: Arrow Music College (AMC)

Ethnographies exploring the internal dynamics of music schools have previously been undertaken by Nettl (1995), Kingsbury (1988) and Wilf (2014), but none document the Australian context, nor feature popular musicianship practices. The case study undertaken at Arrow Music College (AMC) is intended to therefore enlarge this area of scholarship. AMC is an independent senior secondary school specialising in music and facilitating the development of student musicians. It is a small, relatively unique educational community averaging only 30 enrolments per year, and is attached to a larger tertiary music school offering Bachelor and Diploma level courses in contemporary music performance, sound production and composition, arts management, music theatre and classical performance. Across the tertiary departments of the institution, the majority of teaching staff maintain working careers as performers, producers, sound engineers, arrangers and songwriters in the music industry. The senior secondary college at Arrow is structured to allow the students to study with many of these industry professionals whilst completing secondary school. The students are required to attend a number of additional classes providing intensive instruction in music technology, concert practice, performance ensembles and theory and aural skills alongside typical classroom music instruction.

The general ethos of the school is one of inclusivity and informality; no lesson bells are sounded nor are school uniforms worn. All teachers and students are addressed by their first name. Part of the appeal of the school is in its non-traditional approach and real world atmosphere for students interested in a career in music. A small number of the school students maintain semi-professional work in the music industry concurrent to their school studies. Other students display less well-established musical skills and choose the school due to its non-formal appeal. The core school disciplines offered are Mathematics, English, Information Processes and Technology, Modern History, a number of Social Sciences, Visual Arts, Drama, Dance and of course, Music. These BOSTES courses contribute towards university entry and matriculation in the Higher School Certificate (or HSC), the state wide centralised final examination system undertaken in NSW schools.

Overview of the teaching program

Prior to the research in 2012, both of the NSW senior music streams (outlined in Chapter 1) had been offered in separate classes with a small Music 2 class and two larger Music 1 classes timetabled for each year group, and a smaller Music Extension class formed from the Music 2 cohort for the final HSC year. However for the first seven of the ten weeks of research, the streams were integrated to allow for a spectrum of learning opportunities and pedagogy that might be taken to represent the terms ‘informal’ and ‘formal’ (Green, 2008a). The period of course integration also solved a practical problem the school faced each year, with staff often unsure as to which of the courses would best suit individual students. The period of course integration allowed for a period of sorting out, in which some of this confusion could be resolved. The topic focus for study was Baroque Music, chosen as it is listed in both courses, but is mandatory for Music 2 where the study of WAM requires students study repertoire representing the era 1600-1900. The approach taken facilitated mostly student-centred activity in three distinct phases as follows:

Phase 1 (weeks 1-5). Using a latter phase of Green’s (2008a) informal learning model as a point of departure (p. 149-180, and Chapter 2 p. 39 of this thesis), Phase 1 pedagogy sought to foster the students’ informal responses to a chosen Baroque music text from a compilation CD recording I had provided (recordings listed in Chapter 5, and in Appendix A). The students were asked to learn one piece of music from the CD by collaborating in friendship groups using aural learning, peer teaching, improvisation, and arranging or versioning practices in order to generate a live performance of their chosen piece. Online support materials including scores and YouTube performances showing stylistic adaptations of the same works provided precedents for this process. This phase of learning resulted in assessed performances in the same student groups in Week 5 of the research project.

Phase 2 (weeks 6 – 7). In Phase 2 the initial performance based exercise transitioned into two written tasks where the knowledge gained in Phase 1 became the focus of more formal activities: a transcription or scoring exercise, and a written analysis report using the music Concepts framework of the both syllabus documents

(Board of Studies, 2009c, 2009d). These written tasks were submitted together in Week 7.

Phase 3 (weeks 8 – 10). In Phase 3 the students were offered a choice of two tasks intended to transition them into separate classes according to the two BOSTES syllabus streams. The first was modelled after the Music 1 course and was a performance-based task encouraging improvisation upon the harmonic material from J.S Bach's *Prelude No. 1 in C*. The second was a more didactic composition task intended for those interested in studying Music 2. Here the students were provided with technical instruction in order to each compose and notate the opening portion of a fugue, in the style of J.S. Bach.

Ethics

Due care and process was undertaken in order that the principles of ethical research be observed and maintained throughout this study. After ethical consent was granted from the University of Sydney, the institution in which I was enrolled as a post-graduate research student, an initial letter of consent was sent to both the Tertiary Dean and the School Principal of AMC after initial verbal approval was obtained. Both of the additional teacher participants were thoroughly briefed on the nature of the study and both expressed an enthusiastic interest before official ethical consent was sought. All of the students and parents were thoroughly briefed on the nature of the study before being asked to participate and sign participant consent forms. All students were given the option of withdrawing their data at any time. The interviews were undertaken with additional consent and were conducted with the researcher at a time of the participant's choosing on school grounds. In the interests of maintaining confidentiality, the original name of the school and those of the research participants (except myself) have been replaced by pseudonyms. As stated, copies of the participant information statements, consent forms, and interview questions and protocols may be found in the Appendices section of this thesis. Due to issues of ethical consent, student assessment results gained throughout the research process have been provided as descriptions or as generalised percentages rather than as individual grades.

Conclusion and Timing of Research

The timing of data collection and analysis requires a final word of explanation. The classroom research project was undertaken in 2012 near the beginning of my research candidature, and was transcribed and coded in 2013 utilising grounded theory analytical processes (Corbin & Strauss, 2008). The historic analysis of curriculum, additional literature searches and statewide candidature statistics for HSC Music were undertaken after this in 2014 and 2015. It was at this time that LCT was employed as an overarching theoretical tool, capable of tying together findings on both levels of research. Timed in this way, it was impossible for me as teacher and researcher to affect the course of the classroom study to replicate findings made later on a broader scale.

In order to present findings from both components of the research design with a logical and chronological flow, the focus of the next chapter will present the historic aspects of the case study, as prelude to the presentation of the classroom ethnography. Accordingly, the focus of the thesis now turns to an overview of the history of senior secondary classroom music education in NSW, and the origins of separate music streams designed to cater for the pedagogic and stylistic diversity now typically present in classrooms such as my own.

CHAPTER 4: HISTORICAL OVERVIEW: CURRICULUM AND PRACTICE IN NSW SENIOR SECONDARY MUSIC EDUCATION 1955-2015

Introduction

Even within the parameters of case study research, the events of the past need to be examined in order to see their effect upon the present, for every field “consists of a set of objective historical relations between positions anchored in certain forms of power” (Bourdieu & Wacquant, 1992, p. 16). Accordingly, the purpose of this chapter is to provide a broad survey of curriculum and practice in NSW senior secondary music over a 60 year period, in order to determine the extent to which ‘historical relations’ between positions of power, determine the nature of play in classrooms such as my own today. The chapter addresses the first research question, which examines the NSW context with regard to curriculum and practice including popular music and musicians, in relation to established provision for WAM.

Through a review of available curriculum documents past and present, as well as associated literature, it can be shown that a set of bifurcated curriculum documents has evolved in response to dual forms of power, status and resources. The first seeks to preserve the knowledge and associated learning traditions stemming from the notion of music as high ‘art’ (Green, 2003; Wolff, 1987). The second acknowledges an increasingly broad conception of utilitarian or ‘everyday’ music including the popular, deemed relevant to the diverse array of students now choosing to complete high school (DeNora, 2000; Hesmondhalgh, 2013; Turino, 2008). Using both Specialisation and Semantics dimensions of LCT as theoretical lenses (Maton, 2014), the available syllabus documents will be critiqued,¹² with additional literature and matriculation statistics used to provide depth and context to the analysis.

For clarity, the chapter is structured in three parts. Part 1 begins with the post-World War II era of the 1950s and the development of the original senior secondary

¹² Only a selection of the earlier syllabus documents was available for examination, these obtained from the archives department of the NSW Board of Studies, the State Library of NSW, the rare books section of Fisher Library at the University of Sydney, and the Sydney Conservatorium library.

curriculum which paid homage to both university and conservatory tertiary study in WAM. Part 2 deals with the period of curriculum reform of the 1960s and 1970s. These reforms first impacted the junior secondary level, however shifts to both rationale and content instigated a chain of events that lead to the inclusion of popular music and eventually, provision at the senior secondary level for the ‘non-literate’ student musician. Part 3 deals with the present era (from the 1980s onwards) and the maintenance of two separate senior music streams. The first is an adaptation of the original WAM focused senior music course now known as Music 2, and the second is the Music 1 course, which caters for general music study, and the continued inclusion of the ‘informal’ learner typically possessing a background in popular music. Beginning with an analysis of the 1950s post-war period, the Specialisation dimension of LCT is used to show how each of the eras has resulted in the emergence of a distinct legitimation code evident in both curriculum and practice.

PART 1: The Post-World War II Era in NSW and the Development of Senior Secondary Music Education

The 1950s represents the beginning of a period of intense historic and cultural change, but one difficult initially to detect in school music classrooms (Pitts, 2000; Rainbow, 2006). Outside institutional education it was the era of rock ‘n’ roll, the rise of youth culture as a market force, and, growing political and social liberalisation in Australia (Arrow, 2009). Inside classrooms however, none of these forces were evident in curriculum, nor in practice.

An examination of available school syllabus document dating from the 1950s reveal a music curriculum centred upon the established canon of WAM knowledge and skills (Secondary Schools Board, 1956). Both ‘non-examination’ (general music) and additional ‘examination’ courses were offered to “any secondary school students with musical interest and aptitude” including those intending to pursue tertiary study (ibid, p.1). This syllabus was developed to reflect the established British university curriculum upon which Australian music scholarship was modelled (Comte, 1988, p. 104). This required instruction in harmony and counterpoint, fugue and canon writing, formal score analysis, music history and related skills in composition (Rainbow,

2006). As a direct precursor to this path, school music in NSW followed a clear and detailed sequence of graded learning, in order that students develop the requisite skills for success at the tertiary level. Foundational to study was the development of audiation skills,¹³ graded instruction in harmony and part-writing (or basic counterpoint), melodic and rhythmic transcription, and the terminology and techniques needed to analyse and discuss the musical scores listed at each level of study. At the centre of this curriculum was a relatively consensual canon of WAM works, organised into graded lists for intended study. From these works students were expected to recognise, discuss and reproduce memorised score quotations in written examinations throughout secondary school (Secondary Schools Board, 1956, 1957), an excerpt of honours (final) year course and examination requirements is provided in Figure 4.1:

¹³ Audiation is the ability to realise or imagine sound internally from staff notation without the assistance of recordings or live instruments (Gordon, 1992).

HONOURS COURSE

Candidates for Honours will be required to make a detailed study of a specific period in the history of music. A different period will be set each year. For the guidance of teachers and pupils a syllabus will be published two years in advance, year by year showing the composers whose work is to be studied, and giving a list of recommended books, music and recordings.

There will be two musical compositions which must be studied with the help of miniature scores and gramophone records. One movement of each composition will be specified for detailed study.

A three-hour paper will be set at the Leaving Certificate examination as at present.

Specimen Syllabus (Honours Course)

Classical Russian School from 1830 to 1910

1. *Composers and Works*

Glinka:

“Komarinskaya” (fantasia for orchestra on two Russian themes).

“Ivan Susannin” or “A Life for the Czar” (opera).

“The Five”.

Balakirev: “Thamar” (symphonic poem).

Borodin: “In the Steppes of Central Asia” (orchestral fantasia).

Rimsky-Korsakov: “Scheherezade” (symphonic suite).

Moussorgsky: “Boris Godounov” (opera).

Tschaikowsky: “Nutcracker Suite” (ballet); “The Seasons” (piano suite).

Russian Piano Music (6 books, graded in order of difficulty)—edited by Annie T. Weston (publ. Chester, London).

2. *Specially Prescribed Scores*

Tschaikowsky: Symphony No. 5 (with detailed attention to the slow movement).

Borodin: String Quartet in D (with detailed attention to the Nocturne).

3. *Recommended Books*

Montagu Nathan: “History of Russian Music”.

Gerald Abraham & M. D. Calvocoressi: “Masters of Russian Music”.

Rosa Newmarch: “Tschaikowsky”.

Figure 4.1. Honours course and examination requirements for school music in 1956 (Secondary Schools Board, 1956, p. 15).

This syllabus represented a hierarchy of knowledge and associated skills, structured and sequenced to imitate the rigour of a science. Although providing a degree of self-expression in composition, the curriculum at this time best reflected what Maton (2014) describes as a *knowledge code* (strong epistemic relations or ER+), emphasising “more or less consensual, relatively formal and explicit principles and procedures” (p. 32). The course downplayed the more practical aspects of music learning, opting for prescribed and graded exercises in class singing and imitative composition, with vocal performance the assumed choice for sight reading tests

(Secondary Schools Board, 1956, p. 4). Instrumental performance and private tuition were not stipulated as necessary additional requirements for study at this time.

The design of this early curriculum sought to strengthen the relatively weak position of school music as a peripheral discipline, by drawing upon the discrete canon of knowledge and skills highly valued at the tertiary level. The syllabus stated: “music has been regarded as a language of sounds, the vocabulary of which may be learned through a step by step study of its use in musical literature, hand in hand with creative and re-creative self-expression” (Secondary Schools Board, 1956, p. 2).¹⁴ Music education as synonymous with music ‘literacy’ reflected norms in British secondary school education established in the inter-war era and possibly earlier (Goodman & Jacobs, 2008). Over the five progressive years before students sat final Leaving Certificate examinations, this syllabus in NSW articulated a clear vertical sequence that would eventually allow students to combine and integrate simple tasks, with concepts and skills of increasing complexity, in order to gain the competencies required at the tertiary level. However, the syllabus implemented in schools was not the only acknowledged pathway to matriculation and entry into tertiary music study in NSW at this time.

Early syllabus documents and the research literature reveal that there were at least two additional pathways into tertiary music study, the first through accreditations provided by the Australian Music Examinations Board (AMEB), a nationally recognised examining body still in existence, and the second, through the NSW Conservatorium of Music, which conducted its own tertiary entrance exams (Comte, 1988, pp. 110-111; Secondary Schools Board, 1957, p. 4). In contrast to the curriculum designed for schools, the AMEB provided courses for private study, which the Secondary Schools Board allowed students to use as alternative units counting toward matriculation. The matriculation statistics archives maintained by the present Board Of Studies Teaching & Educational Standards NSW (BOSTES) (<http://www.boardofstudies.nsw.edu.au/>) reveal that an average of 60% of music candidates matriculated with an AMEB rather than a school based qualification up to as late as 1975. At this time, the candidature reveal a sharp swing away from the AMEB course option to the course designed for

schools. The practice of external tertiary entry pathways was eventually discontinued in 1998.¹⁵

Unlike the syllabus typically employed in school classrooms, the AMEB system focused on the progressive development of solo performance skills in the WAM tradition accompanied secondarily by the study of music theory. The graded examinations also imitated vertical progression, with sequenced technical work and progressive repertoire lists of increasing rigour provided for each instrument or voice type. However, the focus of study was different, with assessment directed toward the demonstration of stylistic awareness, technical mastery and personal expression in performance examinations—musicianship traits best acquired with the assistance of private tuition (Australian Music Examinations Board, 1956).

In contrast to the more explicit academic knowledge and skills emphasised by the school board (an ER+), the AMEB system aimed to assist in the development of an ideal musician displaying the correct musical disposition, a quality in sociological terms described as a kind of *gaze*, or, a way of realising authenticity within a field (Bernstein, 2000, pp. 164-171; Maton, 2014, p. 95). The refinement of these skills in the individual served not only to provide entry into tertiary study, but more importantly, developed the skills and qualities necessary for success in the real world of solo and orchestral music performance, not just in Australia, but potentially abroad (Finnegan, 1989). Cottrell describes the refined qualities required of professional performers under the terms ‘musicality’ and ‘musicianship’, which resonate strongly with the underlying code orientation of the AMEB syllabus previously outlined:

Musicality I see as essentially an individual duality, the 'art' of being a musician; yet despite it being essentially individual I shall argue that it is not in fact entirely generated by the individual but, paradoxically, is a quality ascribed by others through complex patterns of social interaction and negotiation, which establish a sociomusical hierarchy whereby the musical production of different individuals is endowed with varying amounts of significance....Musicianship, on the other hand, is the 'craft' of music-making; it may well involve learned behaviour; it is how particular individual qualities are put to use, and comprises not only the way in which specific cognitive and motor skills—pitch and rhythm perception, digital faculty and so on—are utilised, but also,...the social skills which are both a necessary prerequisite for and an inevitable consequence

¹⁵ Matriculation statistics for music 1955-2015 were accessed via the BOSTES website. Retrieved August 16, 2016 at http://www.boardofstudies.nsw.edu.au/bos_stats/

of acts of collaborative musical production (2004, p. 33).

Cottrell's description outlines a subtle combination of both individual artistry and craftsmanship, in LCT terms, a cultivated *knower code* (or strengthened social relations or SR+). Training in these skills and qualities in preparation for the world of professional music-making had since the 19th century commonly been undertaken in music conservatories, to which the AMEB system of accreditation was immutably tied. The role of the Conservatory—in contrast to the University—maintained a more practical and rigorous course in instrumental and vocal performance, in addition to theoretical and historical study and instruction in composition (McPhail, 2012a; Rainbow, 2006). These two relatively separate and specialised systems of tertiary music instruction were also responsible for teacher training in music education (Jeanneret, 1993). However, local government policy during the 1980s forced a gradual merger of these separate sites of tertiary music instruction.¹⁶ At around the same time the series of revisions to the senior secondary music curriculum outlined next, were undertaken. These are still reflected in the Music 2 and Music Extension courses today.

Revisions to the Senior Secondary Music Curriculum

Whether attempting to gain some of the control which the AMEB maintained over matriculating music candidates, or, in recognition that many students participated in both school and AMEB systems of accreditation, revisions were made during the 1960s and 1970s to the junior music curriculum to include more options for the study and examination of instrumental music (Secondary School Board, 1962; Secondary Schools Board, 1986). The senior syllabus was also revised over this time to encourage students to specialise in performance, composition or musicology. By 1983, students undertaking 3 Units of Music in performance (the most rigorous level

¹⁶ By the time of my own enrolment at the University of Sydney as a performance major in the 1990s, the Bachelor degree there was comparable with the performance Bachelor degree offered at the Sydney Conservatorium of Music. However, the majority of academic functions undertaken by the considerably smaller music department at the University of Sydney were eventually assumed by the Sydney Conservatorium of Music, which, after its amalgamation with the University shortly after my time there as an undergraduate served as the only pathway to the award of Bachelor of Music degree at this now combined institution. Mergers such as this were instigated by John Dawkins, Federal Education Minister (1987-92), and affected tertiary institutions nationwide in a national process of administrative and financial amalgamation.

with typically the highest number of candidates) were required to display many of the skills and qualities previously outlined by the AMEB system. This included a final solo recital of up to eight contrasting works for the NSW Higher School Certificate (HSC)—the revised examination system for high school matriculation (Board of Senior School Studies, 1983b). Supporting these observations Comte (1988) notes that “the final year of secondary schooling is, in many areas of Australia, tied somewhat immutably to an external examination system” (p. 109). Senior music had attempted a dual purpose to acknowledge two different but interrelated forms of power and status. The first maintained the core knowledge content outlined by the earlier 1950s school curriculum (ER+), and for performance, the musical attributes acquired through concurrent progression through the AMEB or equivalent system of private instrumental learning (SR+).

The combination of these outcomes, and the many years of private tuition (and associated financial cost) required achieving them, maintained a narrow and somewhat exclusive selection process for senior secondary music study, and, the world of classical music performance beyond school. The result reflected an *élite code*, in that the revised senior course by the 1980s, paid homage to the *knowledge* and cultivated *knower* attributes of both the school and AMEB systems concurrently (ER+ and SR+). This required schools produce students eligible for tertiary study who could be regarded as musicians already skilled in both the practice and knowledge of WAM. As Carruthers (2005) states:

Entrance to university music programs is especially selective. Incoming geography students are not expected to be geographers, nor are first-year botany students expected to be botanists, but entering music students are expected to be musicians. They must have received extensive musical training, especially (for whatever reason) in performance, and have achieved high standards. At universities with open admission policies in other areas, admission to music is by audition only. Students are accepted or rejected on the basis of prior learning, which puts tremendous responsibility on pre-university private and public music programs (p. 50).

To summarise these developments thus far, three interrelated specialisation codes had emerged. The first was a *knowledge code*, maintained by the focus of the original school curriculum, and the second was a cultivated *knower code*, maintained by the AMEB and equivalent external pathways. Notwithstanding variations in coding for students electing to specialise in performance, composition and musicology, revisions

to the senior music course offered in schools by the early 1980s reflected a third *élite code*, which required students display a subtle combination of both *knowledge* and *knower* attributes (SR+ and ER+) to qualify for entry into tertiary music study. This third code is heuristically represented in Figure 4.2 as an ascending triangle, representing a progressive hierarchy and gradual refinement of knowledge, skills and knower attributes acquired through long-term involvement and immersion in WAM.

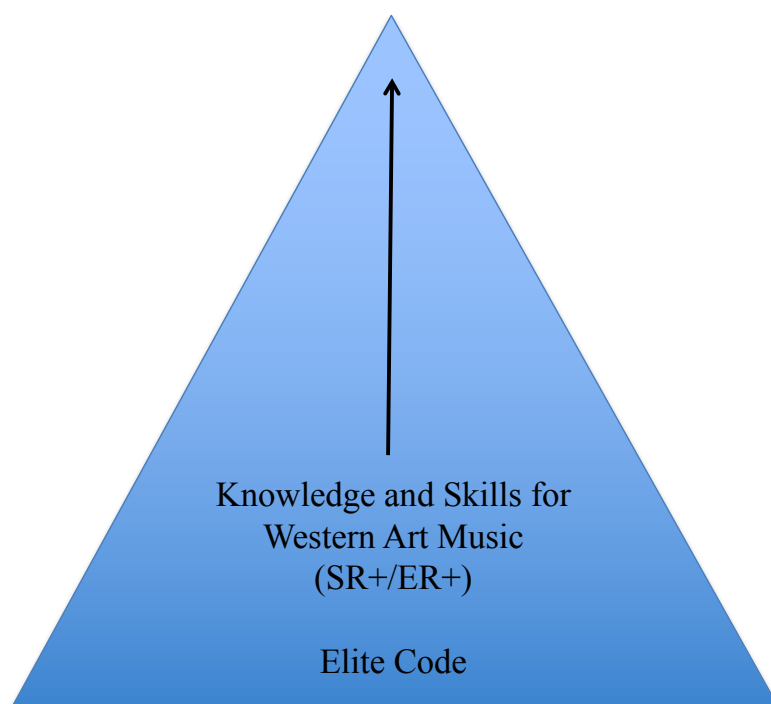


Figure 4.2. Heuristic representation of knowledge and knower structure in NSW senior secondary music

Although these requirements and skills were difficult to cultivate solely in the school classroom, two factors put additional pressure on the preparation of senior secondary (HSC) students and hence, the maintenance of the *élite code* after the 1980s. The first, included curriculum reforms initiated earlier during the 1960s and 1970s at the junior secondary level. These reforms introduced new content and competencies and major shifts in the rationale for classroom learning. The second was societal. Over the same time period a dramatic rise occurred in the number of students choosing to complete high school study. This rise was exponential. In 1955, 7903 students matriculated from high school in NSW. The number in 1985 was 37529, with 76461 matriculating in 2015 (http://www.boardofstudies.nsw.edu.au/bos_stats/). Eventually, the

combination of both junior school reform and the rise in candidature would require change at the senior level. But first, the reforms made to junior secondary music require address, as these were pivotal in making way for popular music and eventually musicians in school classrooms.

PART 2: Educational Reform in Junior Secondary Music Classes 1965-1985

Despite the pressure placed upon schools to maintain a rigorous course of study at the senior level, the rationale for school music at the lower or junior secondary level began to change during the 1960s and 1970s.¹⁷ For both non-elective or compulsory music and elective music classes, ‘student-centred’, ‘project based’, ‘creative learning’ approaches began to be implemented at a grass roots level in classrooms, facilitating practical music-making, student composition and the inclusion of Australian content (Beston, 2005).¹⁸ This resulted in a shift towards concentration on the more relative dispositions of the student *knower*, rather than upon the acquisition of a prescribed body of musical *knowledge*. The aim was for students to become performers, composers, conductors, listeners and critics in their own right, rather than the passive receptors of WAM knowledge and skills (Jeanneret et al., 2003).

Central to these changes was the implementation of comprehensive musicianship pedagogies which encouraged an integration of performance, listening and composition skills, and, the inclusion of Australian and Australian indigenous content (Jeanneret et al., 2003). The new integrated pedagogies required a shift away from the ‘music appreciation’ models, which had dominated junior secondary classrooms since the pre-war years (Comte, 1988). These initiatives were further influenced and supported by resources from the Australian Society for Music Education (ASME) and its associated journal *The Australian Journal of Music Education*. The inclusion of Australian content was fostered by the need for schools to promote the arts in

¹⁷ Junior secondary students then completed 1st to 4th form of high school, now equivalent to school years 7 – 10 (NSW Stages 4 and 5), with students ranging on average from 12 to 16 years of age.

¹⁸ The precise date in which these reforms began to take place is unknown. The earliest documents reflecting the changes date from 1981 as listed in the reference list. However, the literature reviewed here outlines changes which began much earlier, most likely at a grass roots level, with syllabus documents revised later to reflect existing practice in classrooms.

contributing towards the construction of an Australian identity: a felt need in a country becoming more ethnically diverse, and seeking cultural autonomy from Great Britain (Arrow, 2009). Some of these changes had a flow on effect to the senior secondary level, which by the 1980s, resulted in the decision to mandate the study of contemporary Australian works, again supported by resources from ASME, the Australian Music Centre, and the education program of the Sydney Symphony Orchestra (Jeanneret et al., 2003). These fixtures remain a feature of the Music 2 course and examination content today.

Jeanneret et al. (2003), propose that the reforms in NSW followed similar developments abroad. The comprehensive musicianship movement in Australia was paralleled in the USA by developments set out in the Manhattanville Music Curriculum Program (MMCP) (Mark, 1986), with teachers encouraged to integrate learning in music theory, history, and performance (Choksky, Abramson, Gillespie, & Woods, 2001; Heavner, 2005). The creativity movement in Australia with its focus on student composition followed similar movements in Britain, and the Contemporary Music Project (CMP) in the USA (Burke, 2014).

The British creative music movement became synonymous with the work of Paynter and Aston (1970) and later Keith Swanwick (Pitts, 2000; Swanwick & Tillman, 1986). Paynter and Aston's 'project based' approach (1970), was particularly influential in Australian classrooms, with group work enabling the child as "artist" to compose and improvise original music. Formal instruction in notation and theoretical content were believed subsidiary to creative enterprise, as classroom music-making sought to replicate aspects of 20th century avant-gardism, using graphic scores and non-traditional performing media. Paynter and Aston's stance is encapsulated as follows:

The art that is *most* relevant to us is that of our own time. We need the professional artist but at the same time we must cultivate the artist within ourselves, for each one of us has something of that child-like innocence which is the characteristic of the artistic mind, which draws fresh inspiration from familiar things and expresses feelings in words, action, visual symbols or music. We must not stifle this innocent eye or ear; our understanding of the professional artists' work may depend considerably on our ability to participate, even a little, in their activities (italics in original, 1970, p. 4).

The belief that classroom music learning had been out of touch with authentic, situated real world musical practices was fundamental to these developments. From a pedagogical view, these movements were *constructivist* in orientation—the dominant educational ideology of the era—and although adapted over time remain foundational to curriculum design and teacher training programs today (Cleaver & Ballantyne, 2013; Fox, 2001). Constructivist music classrooms sought to facilitate musical engagement, opportunities for social interaction, connections between new and prior learning, authentic assessment, and the valuing of student ideas and opinions (Blair & Wiggins, 2010, pp. 23-24). An educational code shift had occurred, framing the student *knower* as central to classroom discourse.

However ideal, many teachers faced problems enacting these models (Burke, 2014). In practice, the rigidities of timetabling and assessment often imposed a degree of separation, and prioritisation upon one learning activity over another (Jeanneret, 1993). The construction of musical knowledge also posed a problem, as knowledge outcomes were not articulated clearly nor mapped out in sequence by curriculum writers at the time (Secondary Schools Board, 1981, 1986). By the early 1980s the mandatory music syllabus for Years 7-10 reflected a climate of epistemic relativism (or epistemic relations ER–) stating; “rather than being told what sound is, pupils should be encouraged to discover for themselves the range of sounds available to them, together with the unique qualities of these sounds” (Secondary Schools Board, 1981, p. 12). In keeping, notation requirements were imprecise and stipulated only in relation to creative activity: “creative activities are ideally suited to develop an awareness of the function of notation, as a means of recording what is done” (Ibid. p. 17). Instead of the linear or hierarchic sequence articulated during the 1950s, knowledge acquisition was intended to occur in a broader “spiral” as proposed by Bruner (1963). Curriculum based on Bruner’s spiral model allowed learners to pass through several phases or ‘zones’ in musical and physical maturity, with knowledge acquired simultaneously in both a linear and cyclic fashion—and hence reflecting an upward moving vertical spiral (Jeanneret & McPherson, 2005; Mark, 1986).

However well intentioned, doubts began to be felt concerning the extent to which these initiatives truly resonated with students and hence met their intended aim. Swanwick (1999), an earlier proponent of the British creative music movement later

claimed the pedagogies had in reality served to widen the gap between students' school and everyday musical experiences. Retrospectively, he writes:

Metrical rhythms and tonal pitch relationships were discarded, and attention was switched to levels of loudness, texture and tone color. But in the evening after these distinctive school experiences, the students went home and played The Beatles and The Rolling Stones, or perhaps they taught themselves to play the music that really mattered to them, where metric rhythms and tonal tensions were the norm (p. 129).

In Australia, the era was marked by drastic political and social change, the introduction of television, a financial boom, and the rise of youth culture and with it, popular music as the dominant voice of a new generation (Arrow, 2009; Fiske, 2010). Classrooms attempted to keep up. By the 1980s a range of new topics appeared for elective music students in the junior secondary course alongside those for WAM. These included 'Popular music', 'Music for Theatre', 'Jazz', and 'Music of a Culture' providing the opportunity for students to encounter a variety of musics, and with them, the potential for new musical knowledge (Secondary Schools Board, 1986). This curriculum (typically the pre-requisite for senior study), outlined no mandatory topics or set works, but rather, allowed teachers to choose the topics and organise the specific content for these according to the perceived needs of their students.

Popular Music enters the Junior School Classroom

By the 1970s and 1980s, the reforms made to facilitate practical music-making at the junior secondary level coincided with a range of approaches for which popular music proved a valuable and compatible teaching tool (Swanwick, 1968; Vulliamy & Lee, 1976). However, the pedagogies employed to teach it worked within established norms of classroom practice. Dunbar-Hall and Wemyss note that in Australia, "the repetitive nature of much popular music was an added bonus,...as ostinato based work (such as performance of drum kit rhythms, bass guitar patterns, lead guitar riffs, and chord progressions) could form the basis of much simple classroom work" (2000, p. 24). Further, simple lead sheets could facilitate the acquisition of notation skills and provide a way to enhance comprehensive musicianship, through listening to recordings, performing simple arrangements and improvising or composing over these. The influential Orff-Schulwerk approach, originally developed in the pre-war

years, was useful in reinforcing many of these trends. Although intended for WAM and folk music traditions, Orff pedagogies fostered creative play upon repetitive musical figures, the use of modal or pentatonic tonality and flexible performing media—techniques all compatible with popular music (Dunbar-Hall & Wemyss, 2000; Vulliamy & Lee, 1976, p. 75). Practically, popular music proved easier to adapt, whereas classical music, due to its length, scope and complexity, proved more challenging for classroom instrumentation (Dunbar-Hall & Wemyss, 2000, p. 24).

So, the introduction of popular music content worked to reinforce progressive trends within music education at the time. These reforms challenged the formal social dynamics of the classroom and the centrality of WAM through the introduction of alternative skills required to realise more personal goals—in other words, a shift to emphasise the social over the more epistemic aspects of the discipline. Knowledge was not abandoned, but had become a secondary concern. But in providing more options for study including popular music, curriculum writers neglected to problematise and redefine how multiple ‘real world’ notions of the music ‘work’ or music ‘text’ might align with different music learning strategies associated with different kinds of music (Board of Senior School Studies, 1983a, p. 6; Secondary Schools Board, 1986, p. iii). This was a significant oversight, and revealed the extent to which popular music served an existing agenda, rather than a new one potentially in line with students’ experience of popular music learning outside the classroom. Although addressed in Chapter 2, a summary of this conflict is provided next, as it is pivotal to later developments impacting the senior secondary level outlined in Part 3 of this chapter.

Recording versus score: Opposing views of the musical ‘work’ or ‘text’

As popular music entered the school classroom due to these reforms, opposing definitions of the music at the centre of learning signalled potential for conflict. For popular music and other aural learning traditions, the musical ‘text’ is defined primarily by the “sounds themselves” (Moore, 2007, p. 1), in either live or recorded

form (Green, 2001; Turino, 2008; Vulliamy & Shepherd, 1983).¹⁹ To this end, lyrics, sound manipulation, amplification techniques, studio production effects and today music video, together constitute the music work or ‘text’ (Frith, 1987; Tobias, 2013; Turino, 2008; Webb, 2007).

This is not to say that musicians participating in aural or vernacular learning traditions do not use various kinds of notation such as lyric sheets, chord charts and tablature, however these remain pedagogic rather than performance aids. Despite a spectrum of notation types and uses such as those which bridge the popular–classical learning divide, the use of notation in popular music rarely scripts a musical performance (Moore, 2007, pp. 32-33). This is distinct from educational norms established for WAM, where the notated score remains the central pedagogic authority.

When popular music entered the school curriculum in the 1970s, the unmediated tension created by these apparently paradigmatic views of the music text proved problematic, as ultimately the construction or transmission of knowledge was, for teachers and student musicians, tied to two very different views of what defined learning: either the recording, or the score. The LCT Semantics dimension helps to map this change and contributes towards an understanding of why this tension was difficult to address and resolve (Maton, 2014).

As introduced in Chapters 1 and 3, the LCT Semantics tool uses two key concepts: *semantic density* and *semantic gravity*. *Semantic density* captures the strength in which multiple meanings may be condensed and represented as singular concepts, symbols or actions. The use of staff notation provides an example of this kind of condensed meaning, as it provides a relatively consistent and unproblematic way to represent sound—albeit one that prioritises pitch and rhythmic information above other sound qualities. Staff notation remains foundational to WAM musicology, music theory and formal systems of analysis, so by emphasising its importance, teachers maintained pathways of access to these higher-level forms of musical knowledge. Yet in doing so, other forms of knowledge more compatible with students immersed in popular music were potentially overlooked.

¹⁹ For a thorough exploration of the multiple fields of music-making, music production and their relationship to social context see Turino (2008), and Hesmondhalgh (2013).

For popular music and popular musicians, the notion of the work or text is more complex. Here the recording rather than the score remains the central authority. But ‘sound’ (in all of its various forms) represents a much richer yet more problematic basis upon which to construct knowledge due to strengths in *semantic gravity*. In contrast to semantic density, where meanings are condensed from multiple into singular forms of expression, such as a musical ‘note’ in a score, *semantic gravity* encapsulates the degree to which knowledge remains context dependent. For the sound recording, live performance or music video, meaning (or rather ‘meanings’), are tied to multiple contextual factors. These forms of sound ‘text’ imply specific performers, of specific repertoire, at specific times in specific places, producing specific tonal and visual qualities and so on, with each one of these ‘specifics’ presenting an intricate web of potential readings and interpretations (Middleton, 1993; Moore, 2007, pp. 154-187).

Therefore, the construction of knowledge in classrooms in relation to live or recorded music lacked consistency, clarity and authority. As Maton states: "when arguing for knowledge it is easy to valorise the kinds of knowledge most easily seen: explicit, abstract, condensed, hierarchical forms that visibly announce themselves" (2014, p. 14). Despite the usefulness of popular music in the classroom, it mainly served existing pedagogic agendas initiating easy summary or straightforward formalisation. Accordingly, pedagogy based in staff notation remained central to classroom learning especially at higher levels of study even after popular music entered the curriculum. Staff notation provided the means for teachers to maintain a fairly narrow yet teacher-centred (ie ‘undemocratic’) mode of knowledge construction and transmission that was relatively clear, quick and seemingly unproblematic to maintain (Waller, 2010, p. 27). Yet at the same time, the expanded range of topics now on offer in the curriculum at the junior secondary level in NSW required more. It required a complete re-examination of knowledge frameworks for school music, which then sparked the next major reform initiative, the development of the ‘concepts’ or music ‘elements’ frameworks upon which school music knowledge has been framed ever since. This framework remains the sole mode for representing knowledge in curriculum documents and, all that would be offered to student popular musicians soon to be acknowledged in curriculum rationales at the senior secondary level.

The Concepts or Elements approach to Music Knowledge

Without a critical understanding of the prevailing music literacy narrative, knowledge frameworks capable of addressing a broader range of musics were included in NSW school curricula from the 1970s onwards. The discursive, language-based frameworks commonly known as music Concepts or Elements (discussed in detail in Chapter 8), reflected an international trend to systematically organise music terminology into separate yet interconnected categories such as pitch, duration, texture, timbre, structure and so on (Rose & Countryman, 2013). These categories were believed capable of transcending the need to revert to the teaching of specific formal structures and theoretical concepts developed for the study of WAM. ASME and its associated journal were pivotal in initiating discussion supporting the framework in Australia (Jeanneret et al., 2003). Again this reflected concurrent developments abroad, including those in the UK founded upon the work of John Paynter and Keith Swanwick, and in the USA consolidated in the Manhattanville Music Curriculum Program (Mark, 1986). The system continues to guide NSW curricula today and has been implemented in syllabus documents across the majority of Australian states and territories, including those recently proposed at the national level (Australian Curriculum, 2016).

The new frameworks provided an opportunity for knowledge to be constructed in the classroom to address music features common to the different music styles and topics listed in the curriculum. It was this potential that gave the Concepts or Elements pride of place, as the narrower (yet clearer) hierarchic sequence of knowledge in the pre-reform curriculum was tied immutably to the WAM tradition. It was intended that teachers should use music notation to accompany classroom pedagogy using the new schema, and as discussed, this meant that in most cases the centrality of the score as authority was maintained. But the introduction of skills in reading and writing notation remained conditional upon teachers' choices of topics, the demands of chosen repertoire, and the personal needs of students in recording compositions (Secondary Schools Board, 1986).

As with the earlier pre-reform syllabus, learning was still expected to occur in sequence and then “aural experience be symbolised through some form of notation”

(Secondary Schools Board, 1986, p. iii). However, without clear expectations or skill outcomes for each stage of learning, and, the removal of official examinations at the junior secondary level, the design of teaching programs from school to school proved a challenge for many teachers whose learning was the solely defined by the previous *élite code* passage (Jeanneret, 1993). Little training was provided for teachers already out in the field as to how to design pedagogy around the Concepts (ibid). As an overarching framework capable of acknowledging and building upon multiple music discourses, teachers tended to choose the language and terminology with which they were already familiar, which almost always constituted a much narrower and uniform set of WAM-centric knowledge and skills derived through the use of staff notation and scores (Dunbar-Hall & Wemyss, 2000; Rose & Countryman, 2013). Moreover, as the framework was intended for use in conjunction with systems of music notation, a disparity prevailed between a range of available terms and symbols and their meaning (or rather meanings) in terms of semantic weight.

In this way, school music reflected what had occurred in the field of production or music scholarship, which by now had begun to tentatively consider other musics, including the popular, in much the same way as an earlier generation of music educators had championed the entry of jazz into the academy some decades earlier. Yet these scholarly discourses remained discrete, reflecting what Bernstein terms a ‘horizontal knowledge structure’; where an array of relatively separate ‘languages’, with “specialised modes of interrogation and criteria [are used] for the construction and circulation of texts” (Bernstein, 2000, p. 161). Each of these areas of scholarship or ‘languages’—WAM, Jazz and now Popular Music—had been developed separately, with popular music scholars more closely allied to sociology, cultural and gender studies than those working within the WAM tradition (Dunbar-Hall, 1991, 1999; Frith & Goodwin, 1990; McClary & Walser, 1988; Middleton, 1993). Importantly, relatively few music teachers gained exposure to these alternate forms of scholarship and learning in their training, and so remained unable to use them effectively in the classroom unless specifically equipped to do so via some alternate means.

Summary

Educational reforms instigated at the junior secondary level for school music during the 1960s and 1970s created a chain of events that would eventually affect the need for change at the senior secondary level. Fortuitously, the reforms improved the social dimension of music learning, as teachers could frame content around material deemed more culturally relevant to their students (SR+). This included the introduction of practical ‘real world’ learning models where popular music served as a compatible teaching tool to student centred learning—the mainstay of pedagogical reform. However, despite the inclusion of popular music as a valuable pedagogic tool, the development of pedagogies specific to popular music, and alternative knowledge addressing the recording as ‘text’ pertinent to popular musicians did not factor critically in discussion.

In addition, the topic-based or modular approach to curriculum using the Concepts or Elements frameworks, created a marked shift in practice that worked against the systematic construction of knowledge—the very thing the reforms were intended to facilitate. Maton describes this as generating ‘segmented’ knowledge (ER–)(Maton, 2009). In opposition to ‘cumulative knowledge’ where “new knowledge builds and integrates past knowledge” (p. 43), learning in topics or modules tends towards fragmentation and segmentation, with new knowledge acquired alongside old knowledge over time without drawing connections between them. In opposition to the established canon of hierarchic knowledge for WAM (ER+), knowledge and skills for Jazz, Popular and Non-Western music topics each involved discrete and interchangeable repertoire, and a more diverse range of skills.

This created a problem. As dependent upon a teacher’s choice of topics undertaken at the junior secondary level, and, also the choice of knowledge and skills imparted in association with chosen repertoire, schools could no longer guarantee that students were adequately prepared for the challenges and rigour of the senior music curriculum. The result of the reformed curricula for junior secondary music had created a new path of learning in parallel with the first established for WAM. This was a more inclusive *knower code*, that addressed students’ immediate needs and

tastes (SR+) but downplayed relations to hierarchic knowledge (ER-). The other was the much narrower and specialised *élite code* (SR+, ER+), providing access to the senior curriculum and to tertiary study beyond. This code split is represented diagrammatically in Figure 4.3:

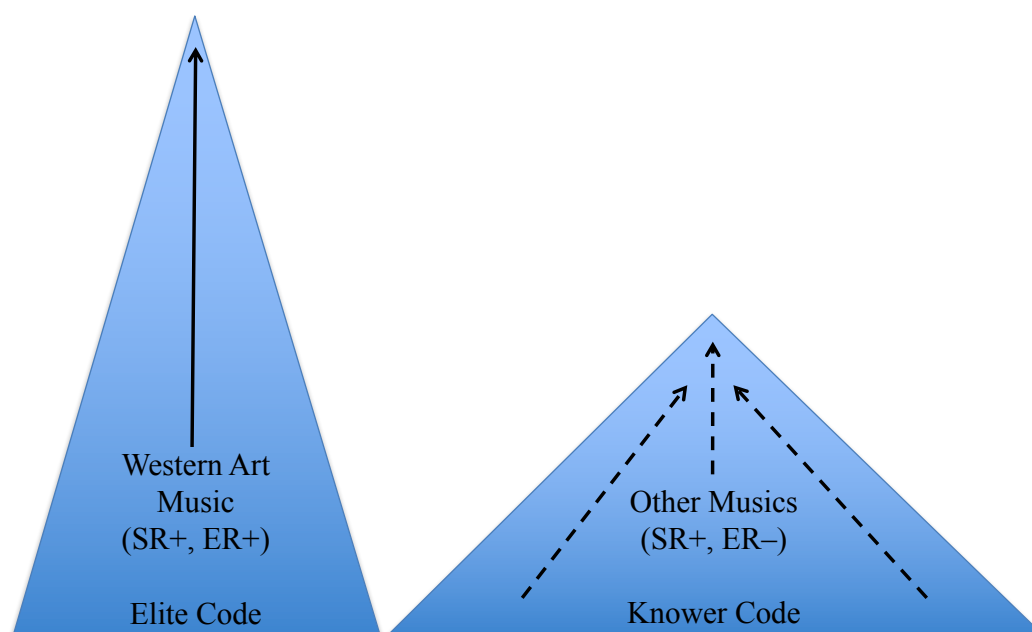


Figure 4.3. Knowledge and knower structures for NSW school music post-reform

The reformed curricula had served to establish a gap between the knowledge practices displayed in music classrooms. It created a situation similar to that prior to reform where students would continue to rely on the kind of music knowledge and ‘know-how’ they could acquire *outside* the classroom, rather than rely on school music to impart the necessary knowledge and skills valued through to tertiary level study. However, in keeping with the broader scope afforded by the new modular yet segmented approach, and more specifically, the inclusion of popular music content within the curriculum, the ‘popularity’ of school music gradually began to grow (Dunbar-Hall & Wemyss, 2000; Wemyss, 2004). Eventually this would result in the addition of a second curriculum to cater to demand at the senior secondary level, a course of study that remains in place to this day.

PART 3: Bifurcation and Streaming in NSW Senior Secondary Music 1980-2015

Mirroring the general growth in numbers in the senior school, the candidature for senior music began to slowly rise during the 1970s, such that by 1975 enrolments began to challenge the monopoly held by the AMEB. Strategically though, matriculation for both school and AMEB systems had remained small at only 2-3% of the state cohort until the then Board of Senior School Studies (BoSSS) introduced a second senior music syllabus called Music 2 Unit A in 1978 (Board of Senior School Studies, 1977; Wemyss, 2004).

The new syllabus (since revised Music Course 1 and then Music 1) stated in rationale that “the present structure of Music courses in the senior school pre-supposes a firm foundation of musical literacy and does not allow for a later development of interest in or aptitude for music” (Board of Senior School Studies, 1977, p. 1). Clearly on the grounds of inclusiveness, the emergence of a new kind of senior school student with skills developed other than in the narrower *élite code* set had prompted the addition. However, the kind of *knowledge* required of the ‘non-literate’ musician appears ambiguous. Moreover, a premise is revealed in the rationale. Despite the accommodation of multiple music styles at the junior secondary level including popular music, and, the multiple ways of *knowing* that should therefore be catered for there—the terms for success at the senior level still required formal knowledge and training.

Analysis of revised syllabus documents for the year 1983 show a clear maintenance of these code alignments. In rationale, the newer 2 Unit Music Course 1 syllabus stated:

2 Unit Music Course 1 is designed to provide senior school students with the opportunity to acquire the skills and experience necessary to fulfill their musical needs, by offering participation without pre-requisite, in a broadly-based multi-stranded course of study in music, in which the *individual needs, abilities and interests of each student are paramount* [emphasis added] (Board of Senior School Studies, 1983a, p. 1).

Mirroring many of the reform trends noted previously at the junior level, this syllabus reflected a *knower code*. The facilitation of ‘individual needs’ ‘abilities’ and musical ‘interests’ are emphasised (SR+), but no pre-requisite knowledge is required as content is ‘broadly based’ (ER–). In structure the course minimised core knowledge

and skill requirements allowing a greater portion of class time to be spent engaging in practical content, and individualised programs of study.

For the 2 and 3 Unit (Related) course (since revised 2 and 3 Unit (Common), and then Music 2 and Music Extension) however, a very different rationale reads:

The 3 unit Music course and the 2 Unit Related music course are designed to provide senior school students with the opportunity to continue to develop their music knowledge and skills gained during their earlier years at school....In the course flexibility is provided to meet such varying requirements yet at the same time the student will need to *continue to develop foundational skills of musical literacy based on traditional Western music* [emphasis added]...[as well as being] encouraged to recognise their *potential as creative beings* [emphasis added]...[taking] place through the performance and study of widely varied examples of the music and experiments of others (Board of Senior School Studies, 1983b, p. 1).

Here a very different set of criteria are required maintaining the previous *élite code*. ‘Flexibility’ is provided through specialisation in performance, composition or musicology, with *knower code* attributes such as ‘creativity’ encouraged (SR+). Yet this student requires the ‘development’ not the ‘acquisition’ of music knowledge—again defined as ‘music literacy’—gained through prior and ongoing study and music-making aligned with the WAM tradition (ER+).

By the late 1980s, a formal assessment scheme was introduced for both Preliminary and HSC courses to support the system of final HSC examinations. Although the scheme was managed by individual teachers in schools, the formal assessments were intended to support the examination system in both content and focus.²⁰ Notwithstanding minor revisions to the titles, topic areas and assessment procedures for the courses over the 1990s, the central differences and underlying codes of legitimation for each have been maintained (Board of Studies, 1993a, 1993b). Today, the structure outlined for each of the course streams contain similar wording—masking the gap between specialisation codes. For example, both streams stipulate that students will study “the concepts of music [or acquire knowledge], through the learning experiences of performing, composing, musicology and aural [through knowers’ experiences], within the context of a range of styles, periods and genres [in

²⁰ Completing the HSC in 1988, my matriculation cohort was one of the first to complete both assessment and examination requirements in all subject areas.

segments]” (Board of Studies, 2009c; 2009d, p. 8). These ‘segments’ or topic areas are not equivalent however, framed variously under ‘style’, ‘period’ ‘genre’ and other categories that vary considerably between the courses, continuing the code disjunction—or rather, code chasm—between the two. For example, mandatory WAM and contemporary Australian content requiring fluency in music literacy skills maintains the *élite code* for Music 2. In contrast, Music 1 continues to accommodate multiple ways of knowing through a broad range of general topic areas such as ‘An instrument and its repertoire’, ‘Music for Small Ensembles’ and ‘Music of the 20th and 21st Centuries’, alongside topics for WAM, popular, jazz and non-Western musics. Again, only minimal music literacy is required dependent upon chosen topics and the repertoire selected for study. (A comparison chart showing a breakdown of each NSW Stage 6 course is provided in Appendix G).

The syllabi for each senior secondary stream continue to address the critical issue of prior knowledge, music interests as well as preparation for subsequent tertiary study as the primary justification for the separate streams. For the Music 1 course the term ‘informal’ rather than ‘illiterate’ is used to describe the learning backgrounds of those deemed suitable for enrolment, however the term is used to imply a deficit rather than a divergent form of musical experience, and one for which research has recently made a significant case as outlined in Chapter 2. Further, there is no mention of tertiary preparation needs for these students, despite courses in popular and contemporary music to Bachelor level being offered in several NSW universities and music institutions from the early 1980s onwards. Further, the Music 1 rationale acknowledges that students with ‘formal’ training are also eligible, but no guidance is provided for the teacher as to how to accommodate for such different sets of skills within the one student body. The present Music 1 rationale states:

Students in Music 1 range from those with beginner instrumental and/or vocal skills to those with highly developed performance skills in a variety of musical styles including contemporary/popular music. Many of the students have *highly developed aural skills* [emphasis added] that have been nurtured through *performance by imitation* [emphasis added], and skills in *improvisation* [emphasis added] have often been developed through the same process (Board of Studies, 2009c, p. 8).

Note here that the ‘informal learner’ is acknowledged to have ‘highly developed aural skills’ developed in conjunction with skills in performance and improvisation, yet at the same time these abilities are placed alongside those of ‘beginner level’

musicianship. There is also no opportunity for extension for the ‘informal learner’, nor the opportunity to hone ‘aural learning skills’ based in ‘imitation’ or ‘improvisation’ through specific curricular structures or assessment procedures. More importantly, there is no indication of alternate pedagogies for this learner, despite the open recognition of their divergent musical skills.

In contrast the current rationale for Music 2 implies that only those with formal learning backgrounds (and hence music literacy skills) are eligible, stating:

Music 2 builds on the Years 7-10 Mandatory and Elective courses and focuses on the study of Western art music. It assumes students have a formal background in music, have *developed music literacy skills* [emphasis added] and have some knowledge and understanding of musical styles (Board of Studies, 2009d, p. 7).

To further emphasise the *knower - elite code* distinction, the Music Extension course (the revised name for 3 Unit study), is only offered to students from within the Music 2 stream, and reveals a further narrowing of the *elite code*. Here the terms ‘formal’ and ‘music literacy’ are coupled with later mention of musical ‘talent’ along with ‘academic’, and ‘musical sophistication’, as follows:

The purpose of the Extension course is to expand studies undertaken in Music 2 and is designed to focus the continuing development and refinement of student’s *advanced music knowledge and skills* [emphasis added] towards independent musicianship...It provides an opportunity for *musically and academically talented students* [emphasis added] to undertake a rigorous music study commensurate with their *academic and musical sophistication* [emphasis added] (Board of Studies, 2009d, p. 5).

To bridge the gap between the streams in the senior school, the Stage 5 music syllabus (for the earlier years 9 and/or 10) now mandates the inclusion of WAM and Australian content along with clearer expectations in music literacy as learning outcomes for students (Board of Studies, 2003). Yet problematically, the precise nature of knowledge and skills taught and potentially acquired through these and other topic areas continues to remain subject to the choice of teachers (and the perceived needs and interests of students) working within the segmented topic-based curriculum—constituting therefore no guarantee of preparation.

More importantly, a loophole exists. Students who have undertaken study during Stage 5 are permitted to enter *either* the Music 1 or the Music 2 course for Stage 6. This presents a dilemma for teachers as many components assessed in the Music 2

course still pay homage to the old *knowledge code* established pre-reform, requiring many years to acquire. These include sight singing, melodic dictation from recordings (or transcription using staff notation), score reading, and the discussion of seen and unseen WAM scores in written examinations requiring memorised score quotations from studied works.²¹ This prompts the question as to how and why teachers might maintain clarity in the teaching of knowledge outcomes and notation requirements outlined for Stage 5, when both the conceptual content, terminology and literacy expectations specified for Music 1 Stage 6 level are less rigorous and less specific than those listed for Stages 4 and 5. To demonstrate this disparity, Appendix H provides a table aligning the knowledge outcomes and literacy expectations for the syllabus concept *Duration*, from Stage 4, through to Stage 6 Music 1 levels.

Therefore, whether on grounds of inadequate preparation or music interests, the Music 1 course currently contains the vast majority of HSC candidates, with an average of 85% of students choosing, or being offered, this course of study.²² Despite the hegemony of WAM maintained by the structure of the streamed courses, a different kind of force can be seen to shape the future of senior secondary music in NSW, as is reflected by the sharp rise in Music 1 candidates depicted in Figure 4.4 since the course was first examined in 1979:

²¹ Music 2 and Music Extension BOSTES examination specifications are outlined in the Assessment and Reporting documents for these courses (Board of Studies, 2009a, 2009b). Past examination papers were retrieved December 13, 2016 from http://www.boardofstudies.nsw.edu.au/hsc_exams/2016/.

²² BOSTES 2015 course statistics state the total candidature for Music at 5404, of which Music 1 students numbered 4710, an 87% monopoly. Retrieved November 24, 2016, from http://www.boardofstudies.nsw.edu.au/ebos/static/EN_SX_2015_12.html

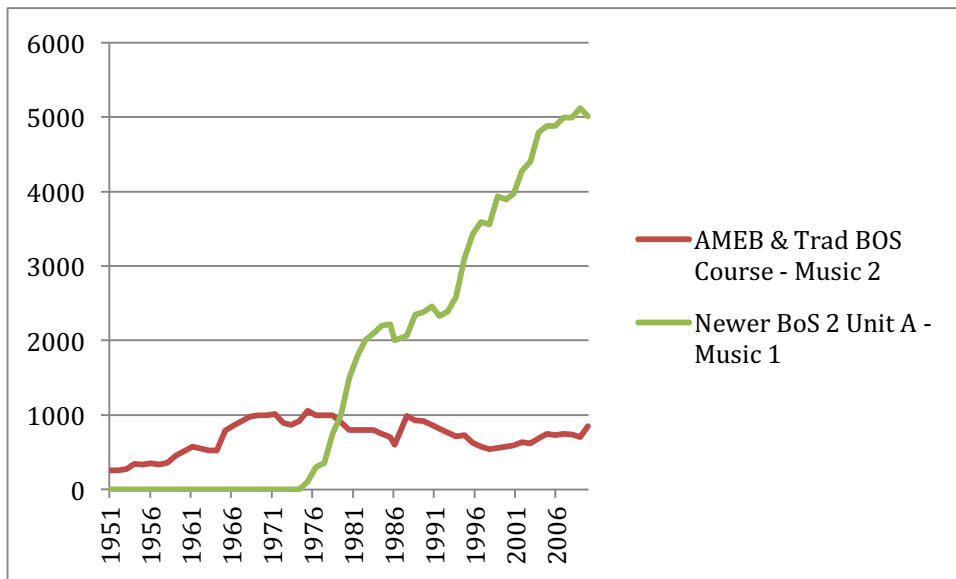


Figure 4.4. Matriculation Statistics for Music 1955-2015²³

This polarised situation presents a problem for both teachers and students, but particularly for those with skills established in aural-based learning traditions aligned with popular musics. On a surface level, the skills and academic capabilities of students with informal learning backgrounds are not specified, nor have pedagogies been developed specifically for these students. Further, a spectrum of music style interests, and notation types and uses may manifest in classrooms, that are difficult to categorise according to the syllabus documents. The syllabi also mask the knowledge expectations between the courses through the unilateral use of the music Concepts framework, albeit fleshed out in different ways both with and without the use of notation and in HSC written examinations (Board of Studies, 2009c, 2009d).²⁴

This situation creates a problem in classrooms. Can teachers assume that students with established informal learning orientations in popular and contemporary music, are able to acquire the kind of assessable knowledge deemed legitimate in written and practical assessment? If not, then how might such learning need to adapt? How might the teacher fully utilise or assess the innate, collaborative skills derived through

²³ Graph generated from candidature statistics for Music tabled by gender. Statistics retrieved November 24, 2016, from http://www.boardofstudies.nsw.edu.au/bos_stats/

²⁴ Example written examination papers for both Music 1 and Music 2 retrieved December 15, 2016, from http://www.boardofstudies.nsw.edu.au/hsc_exams/

‘imitative performance’ and ‘improvisation’ mentioned in the Music 1 rationale? Indeed, what knowledge would popular musicians wish to acquire in the school classroom that would not already be available to them due to their continued resourcefulness in everyday learning situations?

Mirroring the sharp rise in the number of Music 1 candidates, the number of tertiary institutions specialising in popular music performance and production has risen sharply since 1980, with pre-service teacher training courses and now schools employing teachers with backgrounds solely specialising in popular music. Poignantly, as the popularity of Music 1 has grown to accommodate popular music and musicians in classrooms—not just in NSW, but further afield—there remains a pressing need for research to reconcile their informal music learning and knowledge practices with the formal domain of the music classroom. This need is ever present. With the growth and world-wide success of informal learning pedagogies at the junior secondary level, it is time to foreground the experiences of senior students in order to re-evaluate our expectations of their experience of classroom study.

Conclusion

This chapter has addressed Question 1 set out in the research methodology, canvassing curriculum and practice in NSW senior secondary music from the 1950s through to the present. Analysis of the post-WWII era revealed a *knowledge code* mirroring the established university curriculum, incorporating the specialised and cultivated *knower code* attributes of the external AMEB examination system. The specific combination of knowledge and knower attributes implied an *élite code* student was prepared for entry into tertiary study in music, and that this musician was both knowledgeable and skilled in WAM. Despite this relatively narrow selection process, educational reforms designed to address the historically low uptake for music study at the junior secondary level eventually worked against the maintenance of this *élite code* in the senior school.

Due to increased retention rates toward matriculation, the ground swell of change at the junior level, and growing social and cultural diversity of junior students, a newer senior stream now known as Music 1 currently accommodates a broad range of music

candidates, and the study of multiple music styles at the senior level. This stream also seeks to accommodate students with informal learning skills grounded in transnational popular music forms, now the dominant art form representing youth culture in Western countries such as Australia. These students may or may not have participated in classroom music education up to this point in their schooling, and as such, may draw heavily upon the self-directed musical skills acquired in everyday music contexts, rather than upon the formal knowledge traditionally acquired in the classroom or through private tuition. Due to the relative autonomy of teachers within the current system and the maintenance of two separate codes underpinning these separate streams: an *élite code* for Music 2 and Music Extension, and a *knower code* for Music 1, a numeric gap exists between the cohorts of students that has widened over time.

Many of the underlying ideologies of reform now clearly require re-examination. Without a clear rationalisation of the multiple ways student musicians engage with learning experiences—as dependent upon their prior skills across aural or ‘literate’ music learning traditions—it is unclear how current practice can address this divide. Learning experience prompts knowledge construction, however what kind of knowledge? Does the knowledge generated by experience simply mirror existing real world knowledge, or can it generate the kind of knowledge that is legitimised in curriculum, teaching interactions and assessment procedures? These questions will be addressed in the remaining chapters of this thesis, where the focus of research shifts to address the complex interaction between knowledge and knowers within the arena of the senior secondary music classroom, in order to investigate the practical working out of the issues of curriculum and pedagogy identified above.

CHAPTER 5: INFORMAL LEARNING AND TEACHING INTERACTIONS

Introduction

The focus of the thesis now turns to the classroom research undertaken in 2012 at Arrow Music College (AMC), the school in which I was also employed as a classroom teacher. It traces the musical and verbal interactions among student and teacher participants (myself included), flowing from the students' initial informal learning experiences with a range of Baroque texts provided in both recorded and notated formats. As stated in Chapter 3, this WAM topic context was chosen for the research because it aligned with both streams of HSC music curricula I needed to address, that my teaching program (Appendix A) facilitate learning for students from both Music 1 and Music 2 course streams concurrently. This was done to address the second and third research questions, which required the implementation of a teaching and learning program exploring a spectrum of informal and formal learning and pedagogy (as defined in Chapter 2). The teaching and learning program was structured in three phases (see Chapter 3 and Appendix A). The first of these phases constitutes the focus of the present chapter, with the student performances resulting from this phase discussed in the next Chapter (6).

The chapter is presented in two parts. In Part 1, attention focuses on the students, beginning with the results from an initial survey completed before the classroom research began (a copy is included in Appendix D). This provides a snapshot of their prior music learning experiences before enrolment at AMC, and also, their goals and motivations for learning at the school and beyond. The survey also outlines the students' typical learning orientations in terms of their tendency to use staff notation, to work by ear, or combinations of the two. Their expressed identities as musicians with specific music style interests and music-making practices are also situated within this spectrum. At the beginning of this phase, the students formed peer groups. These are discussed separately in order to preserve the chronology of learning for each group as a distinct entity. In this way, possible connections between data contained in the individual student surveys and the later activity in groups can be explored. These

connections will then constitute the basis of a preliminary summary and analysis employing the Specialisation dimension of LCT (Maton, 2014). This will position the data emerging from the students' informal learning processes within a broader theoretical framework, capable of speaking to findings highlighted later in the chapter, and, throughout the thesis.

In Part 2, the teachers are introduced in terms of their specific musical and pedagogic backgrounds. This provides context to their teaching interactions with the student groups over the initial weeks of the classroom research project. The discussion in Part 2 highlights points of tension resulting from differing interpretations of the role of 'facilitator' when employing informal learning pedagogies. Follow up interviews and personal reflections are then used to clarify these differences. An important undercurrent here is the theme of teacher learning, in particular, the learning I undertook as a consequence of my dual role as teacher and researcher. This resulted in challenges to my 'habitus' or habitual thinking and behaving (Bourdieu, 1984) and a widening of the 'gaze' (Bernstein, 2000; Maton, 2014) through which I had viewed the classroom as a classically trained musician. An analysis using the LCT specialisation codes theoretically underpins the distinguishing features of the three teaching approaches, and provides a way of aligning these with student learning. But first, the students will be discussed in relation to individual learning orientations, skill competencies and music style interests.

PART 1: THE STUDENTS

Survey Results

Before the classroom learning began, the students each consented to complete a survey designed to investigate their prior music learning, their current music interests and future aspirations for study. A copy of the survey is provided in Appendix D. As outlined in Chapter 3, a total of 30 students elected to participate in the research, which constituted the entire year group of newly enrolled Year 11 students at AMC. The cohort constituted 18 male and 12 female students with an age range of 15 – 17 years. In the survey, 17 students initially indicated a desire to study the Music 1 course, eight the Music 2 course, and five students were unsure as to which course to

undertake. As the teachers were unaware of the students' individual musical competencies at this time, the period of course integration over Phases 1 and 2 of the research project allowed all participants additional time to consider and assess course suitability for the long term.

In the survey, the students were initially asked to give reasons for their preferred course. For the students interested in undertaking Music 1, the primary reasons stated were 'lack of music theory' and/or 'limited music literacy' skills (arguably ER-). However, a small number (5 students) also mentioned that the topics allowing the study and performance of popular music were 'more their style'. For the eight students interested in undertaking Music 2, the appeal lay in the perceived 'academic' nature of study (or ER+), although the WAM topics and preparation or prerequisite for university music study were also stated, revealing their understanding for the course rationale for each was based, at least in part, on intended knowledge outcomes (ER+ or -), rather than in specific pedagogies designed to foster different kinds of musicianship.

The students were also asked to comment as to what had prompted their decision to enrol at AMC. Owing to the specialised nature of study offered at the school (outlined in Chapter 3) some stated that for them the desire to work with music industry specialists was the appeal, and for others the non-formal educational environment was what had attracted their interest. Others mentioned that their choice was motivated by dissatisfaction with the music instruction they had received at their previous school. For the majority however, the desire to develop 'music knowledge and skills' was the chief reason stated for enrolment.

The survey revealed that the cohort came from a wide variety of prior school settings including Government Comprehensive (11 students), Catholic (7 students), Independent (8 students), and also Steiner schools (4 students). These schools employed a wide range of classroom and extracurricular music programs with 27 of the 30 students undertaking elective music at the junior secondary or Stage 5 level prior to commencing study at AMC for Stage 6. The majority of the cohort (23 students) also mentioned a range of either short or long term school and community music ensemble participation, such as choir, concert band, jazz band or orchestra.

Roughly half of the cohort also listed participation in small self-directed rock or garage bands of some kind as their primary or sole learning experience in an ensemble. The survey revealed that students with this kind of ensemble background had developed musicianship skills playing by ear.

The survey also revealed a diverse array of classroom music learning encounters, categorised under Popular Music, WAM, Jazz, Australian and also Non-Western music topics. Despite exposure to many music styles in the classroom, the majority claimed there had been minimal focus on music notation and/or music theory, with the music Concepts framework of the syllabus remaining central to their prior classroom learning. In addition to performance and listening activities, composition had also featured. Despite this, improvisation—a skill integral to music creation and one with regard to which the survey outlined existing competencies—had not been a common feature of their prior classroom learning. Although the survey draws from only a small sample of students, these findings concur with Maton’s critique of ‘segmented learning’ (2009, 2014) and the findings outlined in the preceding chapter, with the topic based or modular approach offered at Stages 4 and 5 failing to prepare these students for the rigours of the Music 2 Stage 6 stream, should they so choose.

Via the survey, the students also mentioned having received a range of prior one-on-one instrumental or vocal instruction. Two students indicated that they had up to 12 years formal training on a single instrument, some, the study of multiple instruments, and three, no private tuition at all. Although the exact nature of this tuition was not examined in the survey, correlations between students’ interests in a particular music style and their exposure to the use of music notation could be observed. For example, for the students who had undertaken classical instrumental study, competence with staff notation was ranked higher than for the students who had studied popular musics with an instrumental or vocal teacher. The only exceptions to this were the two classically trained singers, who also reported lower levels of competency with music notation.

To cater for the students’ desire to refine their performance skills, enrolment at AMC also included one-on-one instruction with a specialist instrumental or vocal coach. This required they select an instrumental or vocal ‘major’ area of study in which to

receive tuition. The most common choices were in popular or contemporary guitar, drums, voice, and piano, with only four of the thirty students intending to specialise in any kind of classical instruction. Aside from performance, a third of the cohort stated they wished to specialise in song writing, composition, or music production and also refine their skills using music technology. These skills were not taught to individuals using one-on-one instruction at the school, but were taught in some of the additional music programs on offer, and where included where possible in classroom instruction.

Through a synthesis of this survey data a ‘learning mode’ category was generated according to three types: those whose strengths lay in playing by ear through prior experience within popular musics (labelled ‘Ear’: 20 students); those whose strengths lay in learning by using staff notation as a consequence of classical instrumental study and experience in performance ensembles (labelled ‘Notation’: 4 students); and a ‘Mixed’ group, whose learning strengths spanned both aural- and notation-based learning (6 students). These categories however, serve as a rather broad and imprecise preliminary grouping, and do not describe the extent to which prior knowledge, intelligence or the speed or competence of learning had been developed as a consequence of these different modes of music transmission.

The survey concluded by asking the students to comment on their self-perceptions and expertise as student musicians. Here, correlations could be observed between their current music style interests (typically spanning popular/contemporary or classical music styles), instrumental and/or vocal skills, prior ensemble experiences and competence in either playing by ear, using music notation, or both. A total of 26 of the 30 student participants aligned with preferences and backgrounds in popular music performance, composition and music production, and only four with specific or ongoing interests in WAM. There were no students in this particular cohort with specific interests in jazz, traditional folk or world musics. Appendix I includes a list of the 30 student participants using pseudonyms, along with a summary of their corresponding survey results and learning profiles. An additional summary of the survey results is provided. Where relevant, further details from individual survey responses are included within the ethnographic description, which unfolds throughout the chapter.

Implementation of Phase 1 of the ‘Barock’ Project

The classroom learning project became known amongst the participants as the ‘Barock’ music project, owing to the particular approach taken with the music as described below. This encouraged the students to collaborate in friendship groups to produce an ensemble arrangement of a chosen work from a CD I had provided, allowing for a breadth of stylistic interpretation of the musical material should the students so choose.

An introductory week took place before group work began, allowing the students time to get to know each other, and, the opportunity to introduce them to the pedagogic framework for the lessons to come. This introduction included an initial listening and discussion lesson where the students were introduced to two works: the first, the opening movement of J. S. Bach’s *Brandenburg Concerto No. 5* (BWV 1050), and the second, a contemporary recorded version of the same Baroque text by French jazz artist Jacques Loussier.²⁵ My intention was to provide a precedent for the arranging and versioning process, and to gauge the students’ initial reactions to the scores and video recordings of these works accessed via YouTube. This was undertaken through guided listening, and by initiating student comparison of both versions using the music Concepts framework of the syllabus. The exercise served to generate general rather than detailed student commentary. In the next lesson, the teachers modelled the task the students would complete during Phase 1. The task stated:

In groups of either 5 or 6 students, create an *original* arrangement of *ONE* of the following Baroque pieces found on the ‘*Barock*’ Music Project Student CD. You will begin by copying the original recording using your chosen instrument/voice. The arrangement may adhere to traditional Baroque stylistic conventions *OR* may adapt the given musical material to a new style of the performers’ choice altering the original instrumentation and or musical material to suit your group. Arrangements however must show a thorough understanding of the original Baroque text. Perform the arrangement to the class (see Appendix A teaching program for Task 1 details and marking rubrics).

Forming an impromptu ensemble of flute, bass and piano (the teachers’ chosen instruments for the exercise) the three teachers demonstrated the intended process,

²⁵ A video recording of the work using period instruments was used (Croatian Baroque Ensemble, 2012), with a free score accessed online (Bach, ca. 1720). The Loussier recording was also accessed via YouTube (Lalezari, 2011). Full reference details including url links is provided in the reference list.

recreating the original opening ritornello material from the Brandenburg recording without the direct assistance of the score. In addition, we improvised several adaptations of the theme, appropriating the material in three popular music styles including blues, reggae and rock.

From here the students were encouraged to form groups of their choice and repeat the process themselves using one of the recordings on the CD I had provided. The compilation included recordings of J.S. Bach's *Organ Toccata in D minor* (BWV 565), J.S. Bach's 'Air' from *Orchestral Suite No. 3 in D major* (BWV 1068), J.S. Bach's 'Little' *Organ Fugue in G minor* (BWV 578), J. Pachelbel's 'Canon' in *D major* (P 37) H. Purcell's 'Dido's Lament' from the Opera *Dido and Aeneas* (Z 626), and G.F. Handel's 'Hallelujah Chorus' from the Oratorio *Messiah* (HWV 56). These works were selected due to their use of contrasting performing media, their accessibility in terms of repetition or structural organisation, and also, their relative familiarity due to their use in contemporary film, radio and television. The students were also provided with access to scores of the same works, and directed to additional web resources including links to existing performance adaptations for a range of performing media.²⁶ The students were also permitted to access TAB notation online for the same works should they so choose. Once the groups were formed, each was allocated a separate rehearsal space for the remainder of Phase 1 (4 weeks). These spaces were equipped with a sound system, a piano, amplifiers, a drum kit and a P.A. system, although many of the students also choose to use their own instruments which they brought with them to school.

The Student Groups

For the purposes of identification, the student groups formed will be labelled in terms of their choice of one of the music texts listed on the CD recording provided. Five groups were formed, but as one student from the *Air* group did not consent to the use of video as a data collection source, this group has been omitted from the research discussion, though fully participated in all other aspects of classroom activity with

²⁶ Recordings and scores for the works selected for Phase 1 were accessed at <http://imslp.org/>. Appendix A includes online links to YouTube performance adaptations of the same works via the school intranet.

staff off-camera. The four remaining groups: *Fugue*, *Canon*, *Toccata*, and the *Russian (Toccata)* group (a name which will be explained in the course of the chapter), comprise the focus of my research analysis and discussion over the next four chapters. The individual participants from each group and their learning profiles as generated through the survey data are provided in a shorter table prefacing each group discussion, with the complete table containing all participants provided as stated in Appendix I.

Considering the relatively open-ended nature of the task instructions, the students interpreted the arrangement process with considerable licence in order to formulate ‘their version’ of the chosen text, initially with minimal teacher involvement. As each group worked in relative isolation, each constitutes an individual entity within the broader classroom case study. The account preserves the chronology of events and also the broader emergent themes with a focus maintained on presenting not only the music produced as a consequence of the students’ informal learning strategies, but also, the knowledge and skills acquired by them through these in addition to their prior learning. As musical outcomes feature here, transcribed notated excerpts support the findings. Appendix J includes the audio recordings of the completed and assessed student performances discussed in the next chapter. The students in the Fugue group will be discussed first.

The Fugue group

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Conrad	M	Music 1	Guitar/Composition	Government	Ear
Klein	M	Music 1	Guitar/Composition	Government	Ear
Blaire	M	Music 1	Guitar/Drum Kit	Government	Ear
Xavier	M	Unsure	Guitar	Catholic	Ear
Oliver	M	Music 1	Composition/Drum Kit	Independent	Ear
Ned	M	Music 1	Contemporary Guitar/Composition	Independent	Ear

Table 5.1. Fugue group survey summary

During the initial lesson, the Fugue group selected J.S. Bach's *'Little' Fugue in G minor* (BWV 578), with Xavier able to mirror by trial and error the solo melodic line heard on the organ recording with his electric guitar. Xavier was a confident performer and improviser. Accustomed to experimentation, his playing of the melody line was never limited to the notes contained on the recording, but also included distorted guitar effects, power chords²⁷ and rapid arpeggio patterns drawing from his prior knowledge of heavy metal music (subsequently labelled 'metal', the term the students preferred). Xavier had extensive experience performing in a metal band outside school prior to enrolment at AMC with Fugue group co-member Ned. Oliver, also shared a love of this style evident in the drum patterns he created against the recording, which featured fast, complex bass drum rhythms to generate the thick and 'heavy' sound typical of the genre.

Several in the group displayed multiple instrumental skills, which they had acquired without formal instruction. For example bassist Ned, typically played guitar and drums in his band with Xavier outside of school, but chose to play bass for the group task. Keyboardist Blaire usually played the guitar, but could also play drums, bass and sing confidently. Blaire's prior learning is worthy of special mention as he had received no private instrumental training prior to enrolment at AMC. During his follow up interview, Blaire reported to having learned his musical skills by himself, or from friends and neighbours. Over many years, he had eventually formed a band for which he now wrote songs and occasionally played gigs (Blaire, interview, June 6, 2012). Multi-instrumental skills were seen as an asset by these students, as versatility helped them to meet the changing needs of the bands they participated in outside of school.²⁸ However, not all group members worked with such confidence and adaptability. From the survey, Klein's learning had also reportedly been self-acquired, but he and Conrad (co-guitarist) took on a more passive role, allowing Xavier, the more confident performer to demonstrate the opening phrase material as a model for their own learning. Importantly, all of the group members reported little or no experience using music notation nor with WAM in a performance context.

²⁷ Power chords are guitar chords which omit the 3rd, creating a hollow sonority and tonal ambiguity.

²⁸ This observation concurs with Davis (2005) who notes multi-instrumental skills in the student rock musicians rehearsing outside her music classroom.

During the second week of the research project, the Fugue group worked autonomously, beginning by tuning their instruments to the recording, and finding the key: G minor, by trial and error. Yet despite the ease of Xavier's earlier attempt, his confidence soon began to fade when faced with the additional complexities of the fugue recording, such as modulation, the introduction of new textural voices and ornamentation. Unable to differentiate the top textural voice from the inner lines by ear, an abbreviated more symmetrical fugue subject emerged as the basis for the boys' arrangement. This melody would become a central feature for the performance arrangement, so is transcribed below in Figure 5.1. When presented in alignment with the original fugue subject underneath, it shows a simplified fourth bar which repeats bar 3, instead of the longer and more varied five bar original theme:



Figure 5.1. Xavier and J.S. Bach (ca. 1705) fugue subjects aligned

Now working away from the recording, Xavier's melody inspired Oliver to generate drum patterns. These served to address some of the initial timing issues faced by the guitarists, as the note durations on the organ recording had proved difficult to copy by ear. Blaire then isolated and repeated bar 3 of the pattern to create a synthesiser riff, which added an additional layer to the group arrangement. Over the top of these lines Conrad then experimented with rapid G minor arpeggios, which provided additional colour and density to the performance. The boys then began to experiment with the timbre and structure of their arrangement using known structural, textural and rhythmic devices. This process is captured in the following section of transcribed classroom footage:

Blaire (to Xavier): Ok, play the first part.

[Xavier plays his opening 4 bar melodic subject in G minor.]

Blaire (to Xavier): Hey dude, why don't we have like a string synth backing?

Kind of like...what note are you in that first part? Is it G minor?...[Blaire plays G minor chords in a variety of positions on the piano]...So if we have a string pad or whatever...how long would you carry that on for?

Xavier: I don't know. Maybe we could make that like the intro?

Blaire: Yeah but like how long would you carry it on for?

Xavier: We could like have that ... a proper sort of melody ... just you and I sort of thing, and then we could add in a whole new... [Xavier motions to Conrad] ... Conrad could play like the harmony of it, and...[Xavier plays a power chord to demonstrate]

Blaire: Yeah!

Xavier: And then in the background we could have...[Xavier plays a more rhythmic power chord riff]

Blaire: *It kicks in!*

(Lesson footage, February 8, 2012)

Blaire's excitement could be witnessed in the following lesson, when the boys were asked to demonstrate some of their preliminary ideas for the teachers and the rest of the class in an impromptu workshop. When I questioned the boys as to why they had chosen to change the key, Blaire simply responded, "It wasn't brutal enough!" (Lesson footage, February 10, 2012). I only came to understand this remark much later as a result of the follow up interviews and further analysis of the video footage.

Their playing featured an opening un-metred 'intro' section featuring Xavier's fugue melody, underpinned by a static open 5th synthesiser string pad and a held bass pedal note using drop D tuning and distortion.²⁹ Then the melody was augmented using

²⁹ Drop D tuning is common in many styles of metal. The technique involves the guitarist or bassist re-tuning or 'dropping' the lowest E string down a tone to a D, creating a power chord when the lowest three strings D, A and D are strummed. The power chord effect creates a stark, hollow sound as the warmer 3rd degree of the chord is omitted. The addition of the lower D to the chord or bass line also

half-time durations over rhythmic power-chord riffs. This new section they labelled a “break-down”, and used a strong minim pulse on crash cymbal and prominent interlocking guitar, bass and bass drum riffs. Their break-down rhythm is transcribed in Figure 5.2 for clarity:

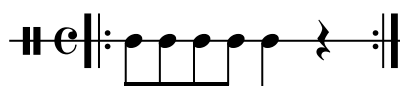


Figure 5.2. Initial D5 power chord break-down riff

Over this, Blaire added a complementary riff also using the same half-time feel:



Figure 5.3. Blaire's synthesiser riff

The term “break-down” requires explanation. Used in association with some of the metal bands the boys reported listening to and had seen in live concerts, it describes a section of music which is rhythmically charged through the use of a heavily accented half-time feel, emphasised through rhythmic unison by the band. In metal, break-downs are typically used to separate outlying sections using very fast or double-time tempos with rapid double-kick drum patterns. Most importantly (as explained to me in follow up interviews with the students), the break-down signals ‘moshing’ or ‘slamming’—physically aggressive, unbridled dance moves in the mosh pit (front of stage) by the audience.³⁰ The choice to use this kind of rhythmic structure in the boys’ performance echoed for them the same kind of association, with Ned choosing to ‘head-bang’ in time to their playing during the workshop. In this way, their classroom music-making reflected strong social connections to music-making and music participation outside the classroom, reflecting individual and shared memory.

intensifies the ‘dark’ sonic quality of the performance, as the very low frequency of the pitch is played in rhythmic unison with the bass guitar and bass or ‘kick’ drum.

³⁰ Ethnomusicologist Thomas Turino (1999) discusses at length the role that music can play in social identity construction particularly where dance and rhythmic motion mutually interlock to create shared experience. He states: “When music makers and dancers are in sync, such signs move beyond felt resemblances to experienced fact of social connections and unity” (p. 241).

The Canon group

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Lucy	F	Music 2	Voice/Guitar/Song writing	Government	Mixed
Emily	F	Music 1	Voice	Independent	Ear
Tiffany	F	Music 1	Voice	Catholic	Ear
Anne	F	Music 1	Voice	Government	Ear
Monique	F	Music 1	Voice	Steiner	Ear

Table 5.2. Canon group survey summary

In contrast to the Fugue groups' clear preference for metal music, the Canon group contained female singers with shared interests in the performance and composition of pop and contemporary folk music genres. After listening together to the unit CD, they decided to arrange Pachelbel's *Canon in D major* (P 37), a work with which they were somewhat familiar due to its popularity at weddings. With the exception of Lucy who had undertaken formal classical instrumental training, this group of students had limited music reading or theoretical knowledge. They were however confident vocalists, learning both informally and through prior private tuition, and in school vocal ensembles before attending AMC.

In addition to voice, Lucy, and Emily had also acquired instrumental skills. After an extended period of formal violin and piano training, Lucy had taught herself the guitar earlier in her teens to accompany her solo singing and song writing. Emily had developed keen aural learning skills as a child through Suzuki violin training. She described this as "just learning from recordings and stuff without any music reading", and believed that this early training had provided foundation for later informal learning by ear: "that's how I could you know, teach myself the piano later on" (Emily, interview, September 21, 2012).

Listening together to the recording of Pachelbel's Canon, Emily began to use the piano to imitate the opening material by ear, playing a sequence of parallel chords along with the recording. An original portion of the score and Emily's adaptation are provided for comparison in Figures 5.4 and 5.5:



Figure 5.4. J. Pachelbel's Canon in D major score (P 37), bars 1-6 (ca. 1680)



Figure 5.5. Emily's initial chords

As a singer, Emily was accustomed to focusing her ear upon the treble melodic line. Her initial attempt thus represented a 'treble-downwards' approach to the task with the bass line in her left hand mirroring the shape of the upper string lines to form a sequence of descending parallel thirds, rather than the more angular contours of the original ground bass pattern. She then repeated the chords to form a repetitive pattern. Although her chords closely resembled the original progression, the canonic relationship between the strings went unrecognised by her and the other girls at this initial stage.

Like the boys' 'metal' fugue, the girls' initial informal attempt was challenged by the complexities of the Baroque recording. Like the previous group, they also choose to home in on only one melody, in this case the iconic passage that serves to climax the work. The section in question first occurs in bar 19 of the score and is provided in Figure 5.6 for clarity:



Figure 5.6. J. Pachelbel Canon in D major (P 37), bars 19-20 (ca. 1680)

As the melodic line was too complex to sing along with the recording, the girls worked without it, simplifying the passage, shortening its length and elongating the rhythms by ear in order to make it easier to sing. From here they used the simplified version in order to generate a series of layered vocal parts or ‘harmonies’—a typical performance practice when organising multiple vocal parts in many popular musics. Adopting the same kind of strategy, Monique added a line above Anne’s in parallel 3rds. But, as the singers now worked away from the piano and the recording, the parts generated followed each other in parallel thirds in two different keys: F and D major, as follows:

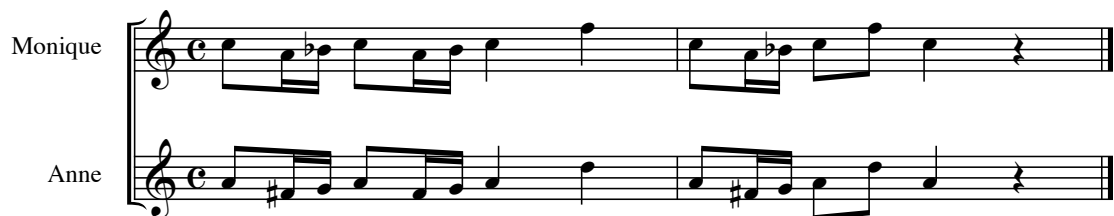


Figure 5.7. Canon group initial vocal parts in two keys

The girls were well aware that their attempt had not created the intended effect, with Monique exclaiming it “sounds horrible!” (Lesson footage, February 10, 2012). Yet, as the singers were unaware of the key they were working in, they continued to repeat the phrase in the same way, becoming increasingly frustrated.

As a consequence, the girls stopped the experiment and chatter gave rise to a spontaneous sequence of four chords played by Lucy on the piano. The pattern: I-V-vi-IV, was in an unrelated key to Pachelbel’s Canon, however the progression

sounded similar and was familiar to the group. Over the top Monique added the opening vocal lines of ‘Price Tag’, by pop artist Jesse J.³¹ As researcher, follow up investigation of this footage revealed possible connections between the girls’ shared listening experience and the Baroque text. The chord sequences used are both based upon single cyclic progressions, with the I–V–vi–VI of ‘Price Tag’ beginning in the same way as the Canon’s I–V–vi–iii–IV–I–IV–V eight-chord sequence.³² The students appeared unaware of the connection and soon discarded the brief experiment. Later however, they would return to consider ways of incorporating pop music into their arrangement, in order, perhaps, to maintain collective ownership over their classroom music-making.

The ‘Russian’ group

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Jack	M	Music 2	Guitar	Catholic	Mixed
Alan	M	Music 1	Voice	Independent	Ear
Jason	M	Music 1	Drum Kit	Independent	Ear
Lex	M	Music 1	Guitar/Composition	Steiner	Ear
Matt	M	Unsure	Classical Piano/Composition	Government	Notation
Tim	M	Music 1	Guitar/Voice	Steiner	Ear

Table 5.3. Russian group survey summary

From the very beginning, the boys in this group decided that Bach’s organ *Toccatà in D minor* (BW 656), sounded like ‘Russian music’, however the reason for this was difficult for them to explain. Like the Fugue group musicians, these students were similarly attracted to the ‘heavy’ sonic quality of the organ recording, commenting that it sounded like “shredding”—a term they also used to describe technical or complex guitar solos (Lesson footage, February 8, 2012). However, unlike the Canon

³¹ The song and official film clip for ‘Price Tag’ by Jessie J were retrieved February 13, 2012, from <https://www.youtube.com/watch?v=qMxX-QOV9tI>

³² The four-chord progression used in ‘Price Tag’ is an extremely common harmonic formula. The ubiquity of the progression has become the basis of comic parody. See The Axis of Awesome ‘Four Chord Song’, retrieved March 2, 2012 from <https://www.youtube.com/watch?v=5pidokakU4I>

and Fugue groups who attempted a closer listening to the original recording, these students moved almost straight away to improvisation.

Flowing from the ‘Russian music’ association, guitarist Lex generated a one bar chordal vamp pattern, using the progression Dm – Dm/A, which when repeated formed an ostinato or riff with a swung or ‘shuffle’ feel. Similar to the preceding groups, the use of repetition proved a useful structural aid. The vamp pattern became the foundation for blues guitar solos by Jack, and also vocal lines by Alan. Alan decided to combine sung material with spoken dialogue over the vamp, in a comic or theatrical ‘cabaret’ style. The boys encouraged Alan’s gift for showmanship, but were curious as to how he planned to organise his part. The group dialogue unfolded as follows:

Matt (to Alan): Are you wondering what you are going to sing?

Alan: No, I know what I’m going to do.

Matt: What are you going to do?

Alan: I shall tell a story over the song and sing parts of it.

Jason: Tell a Russian folk tale or something!..[Laughing in the background]

Jack: Say it with a Russian accent or something!

Lex: You have to have one of those hats you know!

Tim: I have one!!

Alan: Bring it in!!

Jason: Make it about Stalin!..[more laughter]

(Lesson footage, February 10, 2012)

To accompany the vamp pattern, the boys encouraged Matt (the sole classical musician in the group), to find a piano accordion sound on the synthesiser to add to the Russian folk flavour of their performance. Finding this sound, Matt contributed some of the opening motifs from the Toccata score, over which Jack continued to improvise and Alan experiment with his vocal line.

Observing the boys play in the initial week of research, my colleague Andrew and I sought to discover the genesis of their rather unusual experiment. Andrew also

expressed his concern that the boys had perhaps misunderstood the point of the task, which had intended they begin by listening and copying the recording as the basis of their performance material. After further observation, he couched his concerns as follows:

- Andrew (using a Russian accent to gain their attention): But this has nothing to do with Bach's Toccata and Fugue in D min.
- Tim: It has lot's to do with it.
- Matt: It is a Russian Folk version of it.
- Andrew: Yes, but you're now playing a different piece in a Russian folk style.
- Tim: What if we keep playing the melody through it?
- Andrew: What do you think that my point might be?
- Lex: We need to stick to the Russian idea? [Laughter]
- Andrew: I don't have any problems with you going Russian, but you need to go back to the recording and find out what Bach wrote and then apply the Russian-ness to it.
- Tim: I don't even know where we got Russian from any way.
- Jason (joking): He wasn't Russian was he?...no?...damn!
- (Lesson footage, February 10, 2012)

Seeing that Andrew was making limited progress in realigning them with the initial objective, I decided to adopt a softer approach:

- Christine: Can I ask you guys to tell me, where did the Russian idea come from? Who went, 'let's make this Russian music!'
- Lex: I think Tim said *folk*, and then someone said *Russian* and we all thought that that was the best idea ever.
- Christine: But what made you think of that in relation to *this piece*??
- Lex: Well no one was going to do Russian!
- Christine: Yes but after you listened to the Organ Toccata why did you think that it sounded like Russian music?
- Lex: The Doors inspired us.
- Christine: The Doors don't play Russian music!

Tim: They do play kinda folky kinda sounding stuff sometimes.
 Christine: Because they use an organ?
 Tim: Yes.
 Jason: How did that translate to Russian though? I don't know! It's pretty original though, that's true...
 (Lesson footage, February 10, 2012)

Aside from Matt's direct quotation of the opening pitch motives and the same key, I could fathom no direct connection between the boys' experiment and the original work, aside from the associations they had made to organ music. Turning to the fourth and final group, discussion reveals the extent to which the informal group experiments created a wide range of musical responses, in this case, even to the same choice in recording.

The Toccata group

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Peter	M	Music 2	Classical Piano/Composition	Catholic	Notation
Juliet	F	Music 1	Piano/Voice	Government	Ear
Mairead	F	Unsure	Voice/Composition	Steiner	Mixed
Madeline	F	Music 2	Voice	Independent	Mixed
Zali	F	Music 2	Classical Voice	Independent	Ear
Josie	F	Music 2	Classical Violin	Catholic	Notation

Table 5.4. Toccata group survey summary

Unlike the preceding group who appeared intent on subverting the task instructions, the Toccata group moved much more tentatively. These students represented those with more formal classical training, along with mixed learning experiences encompassing both popular and classical music styles. Their music literacy skills were reasonably developed; however, this did not appear to assist their decision making or their arrangement choices in the initial weeks of the project. Unlike the other groups who moved quickly to aural copying and improvisation, Peter, a classical pianist of 12 years chose to learn the first portion of the organ score on the

piano. Eventually after two weeks of deliberation, the group gradually began to formulate a plan, but only after they began to adopt a more playful approach. Classical soprano Zali joined Peter, by singing over the top an operatic rendition of the Toccata opening, which then initiated a game of musical one-upmanship between them, with the two performing and imitating several unrelated classical works in comic fashion. Interestingly, these musical references included short riffs and harmonic progressions from jazz and popular music, revealing a wider frame of learning and listening to that reported in their surveys.

An example was a repetitive chordal figure improvised in the key of A minor, featuring static broken chords and a descending bass line from tonic to dominant. Mairead, (a fellow group member) described the progression as “sounding flowy, like an Adele song” (Lesson footage, February 10, 2012). Peter’s playing is transcribed here:

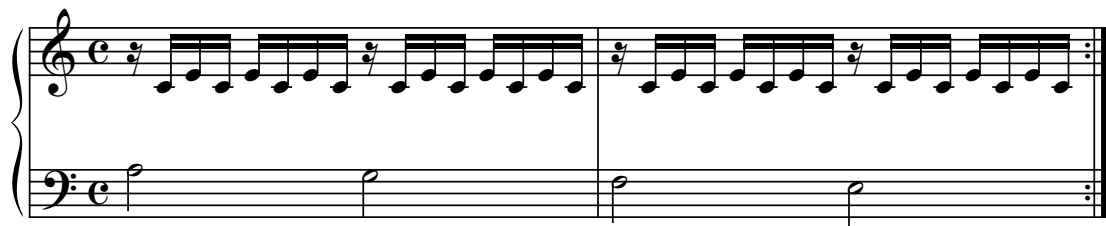


Figure 5.8. Peter’s ‘flowy’ chords

Although seemingly unrelated to his earlier performance of the Toccata score, research investigation of the footage revealed a strikingly similar progression found in the Toccata score, also featuring a descending sequence of broken chords from tonic to dominant. The progression is a central fixture of the work, used in succession no less than seven times with minimal variation from bar 16 to 20 of the score. It begins in this way:



Figure 5.9. Excerpt from J.S. Bach *Toccata in D minor* (BW 565), bar 16 (No Date)

The emergence of Peter’s version of the chords, although in a different key revealed a potential merger of the Bach material with his experience of popular music. Yet, this remained tacit, as he was unaware of a direct relationship. The experiment became a point of tension between himself and Mairead who also sought to adopt a leadership position in the group. Peter wanted to discard the pattern complaining that “it would come out of nowhere” and “wasn’t even in the same key” but Mairead liked the sound as it was “pretty and flowy”, and would work well with some of the ideas she had begun to envision for the arrangement (Lesson footage, February 10, 2012).

Summary: Groups’ Initial Informal Learning Responses to Baroque Music

The students’ initial progress revealed a variety of stances to the exercise exhibited by those who worked solely by ear (the majority), and those who also used notation (the minority) and those who stood somewhere in between. For those who worked by ear, several themes are worth mentioning. Firstly, although these students were able to begin the process confidently, a variety of musical responses emerged as a by-product of the copying exercise that generated new material more closely aligned with their prior learning, than with the material on the CD recordings. At times this appeared to subvert the task instructions, but also served to strengthen social bonds between group members. Where references to the Baroque texts were retained, these were incorporated into a more familiar musical framework reflecting homophonic textures, even phrase structures, parallel harmony and high levels of repetition, in keeping with many of the style characteristics of popular music. Notwithstanding the degree to which the deliberate arranging or versioning practices affected this outcome, these findings—although preliminary—provide a richer context in which to situate discussion of informal learning (discussed in Chapter 2), especially when the process is enacted upon classical and ‘other’ musics syntactically divergent from popular music (Green, 2008b, p. 164). Similar observations have been made by Evansa et al. (2015, p. 6), and Väkevä (2009, pp. 19-20).

These preliminary findings highlight that the orientation of students’ prior learning coupled with their current music style interests proved key in affecting the music produced. Further, as this learning happened gradually and spontaneously, the students were unable to articulate clearly which features or portions of the original

texts had emerged in their playing, nor differentiate how these were distinct from the non-baroque features. Working with sound over score, the learning produced a primarily tacit awareness of both the learning process, and the origins of the music created.

The Specialisation dimension of LCT provides an extra level of clarity, allowing an initial positioning of the pattern of student responses to the classroom task. First, the informal classroom experiments created personal and collective identification with music-making (in other words strong social relations or SR+). This was substantiated through follow up research investigation of the lesson footage, which revealed connections between the students' music processing inside the classroom and their collective and individual experience of music-making outside it. This meant that references to metal, pop, blues, and other genres were included in keeping with their likes and personal music tastes. However, as the students' performance skills were developed within these style frameworks, their capacity to extend these skills to grapple with WAM is brought into question. Working without direction from the teaching staff at this point, their skills did not extend to embrace the unfamiliar content, in effect, mirroring the knowledge and skills they had already acquired (effectively weaker epistemic relations, or ER-). Two instances serve as examples. Firstly, Monique and Anne's learning and arranging of the Canon melodies used a layering strategy in parallel 3rd's (to organise their vocal parts) while remaining unaware of the key of the music and oblivious of the underlying harmonic progression. Secondly, Xavier's imitation of the fugue subject did not replicate all of the melodic and rhythmic details presented on the recording, but rather, generated a more even four bar phrase, akin to the hyper-metred structures he was accustomed to performing in rock and metal.³³

Although these findings are preliminary in nature, the high levels of engagement and ownership (SR+) and the tacit knowledge created (ER-) can be described as generating a *knower code* (SR+, ER-) in the students' informal learning experiments. This code alignment is congruent with the variety of responses and adaptations to the

³³ Rothstein (1989), defines hyper-metre as the grouping of measures or bars according to a metrical scheme, generating both the recurrence of the same size groups of measures as phrase structures and an underlying pattern of alternation between strong and weak measures or bars within these (p. 12).

task instructions, with less concern paid to replicating content from the original works, nor closely investigating their compositional features or construction. The figure below depicts these initial results using the specialisation plane:

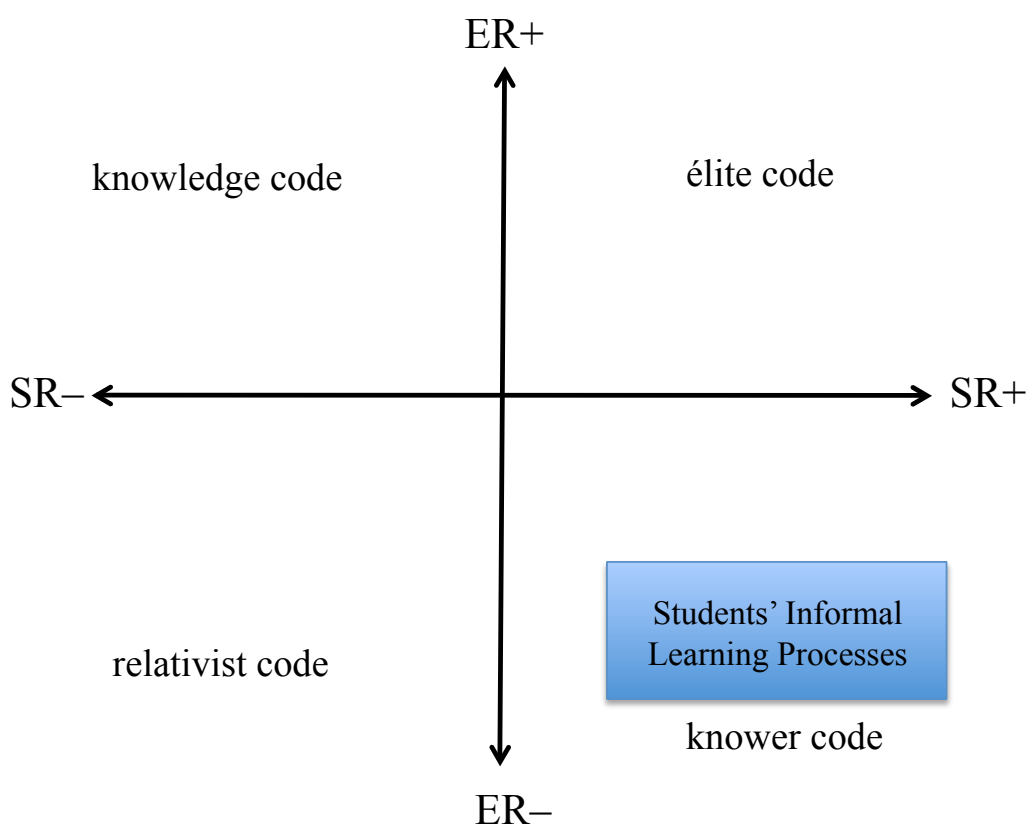


Figure 5.10. Knower code generated through initial informal classroom learning

Within this alignment there were of course considerable variations, with knowledge never absent. At times this variation between group members resulted in tension, with Peter afraid his playful experimentation had questioned the legitimacy of the task, but Mairead unconcerned by his informality. In kind, the Canon group abandoned their rather insightful four-chord experiment without investigating the underlying harmonic connection between it and Pachelbel's original progression. These 'learnings' however remained tacit, and under explored. The teachers (including myself) were also initially unaware of these connections, with insights gained only later through closer examination of the lesson footage. As the teachers found these initial student responses rather baffling, they responded by each initiating a variety of teaching

strategies in an attempt to carry out their role as ‘facilitators’. These strategies will be explored next, after a brief sketch of each distinct teaching personality.

PART B: THE TEACHERS

At the beginning of the study, the teaching staff were instructed to limit their interactions during Phase 1 to observation and facilitation, only stepping in when directly required in order to maintain the integrity of the students’ learning choices. In reality this proved almost impossible as the complexity of the chosen texts and the wide variety of student responses afforded by the open-ended task instructions provoked the teachers to focus (often unconsciously) on the outcomes implicit to them as a consequence of their own training and musical skills. In order to both preserve the classroom narrative and convey the emergent themes, a selection of video footage capturing the various teaching approaches is provided. My colleagues Justin and Andrew (pseudonyms) will be discussed first, with each interacting with a different two of the four groups participating in the research. Then, a critique of my teaching will be offered (name unaltered) as my attention was divided equally between the groups in order to oversee the entire project. Interpretive insights punctuate the discussion and provide depth to the analysis of my own practice. Justin will be discussed first, using his interactions with the Russian and Toccata groups as the basis for discussion and analysis.

Justin’s Background and Pedagogy

Justin is a professional jazz saxophonist and arranger who came to teaching later in his working life. His professional career in the music industry was one that gave his interactions with the students weight and authenticity. As he described himself in later interview, his industry experience of “doing music...[had] shaped just about everything he did in the classroom” (Justin, interview, June 6, 2012). Yet through observation of Justin’s teaching, the informal learning approach did not appear to resonate with his typical classroom practice. Aside from the open-ended planning (which he said he preferred), he found it almost impossible to be a “hands off” facilitator, allowing the students to initiate and drive the learning process.

Justin interacts with the ‘Russian’ group

Working with the Russian Toccata group, Justin drew on his practical knowledge of ensemble performance to co-construct the student arrangement. Using the whiteboard he “took up their scarce ideas” (Lex: Lesson footage, February 17, 2012) to formulate a chord chart in order to solidify a structure for the arrangement. By now, pianist Matt had improvised a virtuosic piano solo based on the introduction material from the Toccata score. This solo included a flamboyant ascending C# diminished seventh sequence based on the dissonant chordal material introduced in bar 3 of the Toccata score. Labelling the solo a ‘cadenza’ on the whiteboard, Justin then directed Matt to next adopt the role of accompanist for vocalist Alan and the rest of the band, who now entered with the following triplet melody over the chords: Gm, Dm, A7 as follows:

The image shows two staves of musical notation in 4/4 time, featuring a key signature of one flat (Bb). The melody consists of eighth notes grouped in triplets. The first staff contains measures 1 through 4, and the second staff contains measures 5 through 8. Chords are indicated above the notes: Gm, Dm, A7, and Dm. Triplet markings (the number 3) are placed above each group of three notes. The melody ends with a double bar line in the eighth measure.

Figure 5.11. Alan’s melody (sung to the syllable ‘ya’)

Alan explained his melody had “come from Matt’s chords” (Lesson footage, February 17, 2012), however the process had probably worked the other way around—that is, Matt’s chords had more likely been formed from a synthesis of a very similar triplet passage in the original score. This connection only became apparent through later analysis of the classroom footage. The original passage is provided in Figure 5.12:



Figure 5.12. J.S. Bach Toccata in D min (BW656), bars 8-9 (No Date)

Like Alan and Matt, Justin was equally unaware of these connections, but his presence did initiate a shift in group dynamics, with Alan now choosing to remove his comic Russian cabaret routine.

In its place, the boys extended their original Dm vamp to include crescendos to G and A chords (chords IV and V) as the pattern was “getting too repetitive” according to Tim (Lesson footage, February 17, 2012). This served to return the group to the tonic at the end of every 12th bar. In this way, Justin facilitated the creation of a 12 bar blues progression from the previous static guitar vamp, over which Jack was then comfortable to improvise blues solos.

Justin also worked to improve their ensemble skills, suggesting ways to direct and improve dialogue during improvisations. Due to his classical training, Matt found this particularly challenging as he had limited ensemble experience and was not accustomed to playing in an accompaniment role, nor by ear. Despite this, the video footage of his playing did not reveal development in these skills over time, despite the highly developed technical display offered by him during his solo ‘cadenza’ sections.

Regardless of overall improvements in the groups’ ensemble skills, several themes are worthy of mention regarding Justin’s pedagogic approach. Working away from the score and the recording, Justin, like the students, had seemingly sidestepped the initial point of the exercise. This had required a careful listening to the Toccata recording, and as able, to use this copying attempt as the basis for their arrangement choices. At present, it appeared that Matt was the only student to refer to the original text intentionally, and he had worked with the assistance of the score. Then later in Justin’s absence, confusion arose as the students had come to rely on his directions

and became confused as to who was in charge of the arrangement process. Some of the students' also saw Justin's input as a threat to their autonomy and ownership of the performance, as expressed in later lesson footage. These themes would re-emerge also in Justin's interactions with the Toccata group, discussed next.

Justin interacts with the Toccata group

When 'facilitating' the Toccata group, Justin again assumed a temporary role in directing student learning. As stated, during their initial period of deliberation, this group had struggled to make decisions as to how they would together organise their arrangement. Despite their resourcefulness in listening to the recording and Peter's mastery of the score, the group lacked consensus and had trouble making decisions. Frustrated by their inability to begin, Justin introduced some ideas that he felt might realise their intended vision for the arrangement. These involved reinterpreting Peter's learning of portions of the score through a jazz framework. Beginning with the melodic theme introduced in bar 12 of the score (Figure 5.13), Justin demonstrated how to swing the melody (Figure 5.14), but Peter was unable to reproduce the feel opting instead for crisp 'classically styled' dotted articulation, rather than Justin's intended lilting swing. Both the original and the student version of the passage appear in Figures 5.13 and 5.14:

Figure 5.13. J.S. Bach *Toccata in D minor* (BW 565), bars 12-15 (No Date)



Figure 5.14. Toccata group’s abbreviation of the same bar 12 passage (sung with swung semiquavers to the syllable ‘da’)

Aware of Peter’s growing frustration at being unable to grasp the swing feel, Justin turned to address the harmonic possibilities for the arrangement. Peter already had a firm grasp of classical harmony having studied music theory in addition to classical piano. Turning now to the score, Peter was able at Justin’s request to identify the tonic and dominant chords used, which then inspired a series of jazz alternatives and substitutions to these from Justin on the piano. Unable to process his performed instructions the classroom discussion proceeded as follows:

- Peter: I know that it sounds good. I just don’t understand the logic.
- Justin: Don’t worry, I will teach these to you as we go, but right now we just want to get a product. Right?..[Justin then syncopates Dm¹¹ and Amin¹¹ chords at the piano to accompany Madeline and Mairead’s swung performance of the bar 12 vocal melody line. Justin finishes with further chordal extensions over the D minor tonic triad].
- (Lesson footage, February 15, 2012)

Justin’s push to ‘get a product’ here reflects his difficulty in negotiating learning outcomes within the broader time scheme of the informal classroom exercise, compared with teaching marked by more measurable lesson outcomes. Fuelled by frustration at the students’ inability to progress more quickly, he resorted to known jazz formulae, rather than delve deeper into the students understanding of the text, despite the fact that he, and the majority in the group members could already read the score. Working firmly within the grammar of his own musical language, Justin’s directions (or instructions as he insisted Peter “write down” his demonstrated chords), worked to confirm his role in command of the teaching situation, instead of allowing

the students to direct the organisation of the learning more slowly and idiosyncratically. As a consequence, a clash in agendas can be witnessed here between Peter's need to 'understand the logic' (or ER+) and Justin's focus on the kind of sound and feel which he felt the exercise had implied.

Summary of Justin's teaching

Before transitioning to discuss my colleague Andrew, a brief summary is offered for later comparison. Justin's approach with both groups had drawn upon much of the tacit, implied and embodied skills in line with his jazz and blues performance background. To this end, both clashes and resonances can be noted within the transcripts, which were replicated thematically in his interactions with the remaining student groups. This involved his personal demonstration of versioning choices (SR+), rather than deliberate replication or engagement with the Baroque text through aural copying, score reading, or theoretical discussion (weaker ER-). In this sense, his strategies like those of the students also generated a *knower code* (SR+, ER-). This orientation did not eliminate classroom tension however, with friction resulting between Justin and Peter, or when the students made contrasting interpretive choices to his own. Tensions also arose when my colleague Andrew attempted to operate in the role of 'facilitator'. His background and teaching interactions with the Canon and Fugue groups follow, which will again provide the basis for later analysis and comparison.

Andrew's Background and Pedagogy

Andrew, like Justin, had a background in professional jazz performance. He possessed two undergraduate degrees in music, originally training as a classical clarinettist and music educator before later studying jazz and embarking on a performance career as a bassist. Despite these diverse musical experiences, it was Andrew's earlier classical training that informed most of his classroom interactions during Phase 1 of the research project.

Andrew interacts with the Canon group

After observing the girls in the Canon group attempting to copy the recording by ear, Andrew offered them a theoretical appraisal of the work in order to assist their progress. Speaking over the recording, Andrew focussed the students' attention to the upper string parts from bar 5 of the Canon score as follows:

Andrew: Can you notice the intervallic relationship between these two parts? So, Pachelbel is being quite clever because he's got this ground bass, that's one layer, and he puts in a melody over the top, now that's repetitive in itself, another violin comes in and it's the same shape same contour, but I think it's a third higher, a major third higher maybe? So, these are the kind of ideas that I think will cut out a lot of work for you and make things easier.

(Lesson footage, February 15, 2012)

Andrew's explanation attempted to assist the students by offering short cuts to the copying exercise, but his use of unfamiliar terminology ('ground bass', 'contour', 'major third' etc.) did not serve his intended agenda. Further, he remained unaware of Emily's earlier 'aural' attempt of the Canon, which had illustrated in concrete form some of these same concepts. Furthermore, his approach failed to empathise with the practical difficulties the girls faced in negotiating their way through the task. These had required the students to move the musical material between different mediums; from strings to voices, and from the fixed structures represented in the score into a generative live version. In addition, the girls perceived his direction as something of a threat to their autonomy. Still speaking over the recording, the discussion unfolded as follows:

Andrew: It's all long note durations too, nothing fancy.

Girls interrupt: We're going to do it staccato...

Anne adds: You know? 'Bap' 'Bap'...[Anne moves her hands to gesture short durations in time with the recording and Lucy smiles in support].

- Andrew: Oh, Ok...[pause in conversation as recording continues. At bar 7 Andrew adds]...Another line, can you hear that?...Sort of going double the time of the top violin part?...[Anne nods in recognition. At bar 11 Andrew continues]...this line is going double the speed of that other one.
- Emily: Do you think we should work out what every line is sort of playing, before we kind of make it different?
- Andrew: I think so.
- (Lesson footage, February 15, 2012)

Eager to please Andrew even in his absence, Emily and Lucy did attempt to ‘work out’ several additional lines at the piano, as Lucy was able to read the score. However, without recognition of her earlier attempt, Emily discarded her insightful chord sequence in preference for Lucy’s performed demonstrations. Also, singers Anne, Monique and Tiffany became disengaged, as they were unable to participate in the note reading exercise. This divided the students along lines established according to their prior learning. Despite this, the students later reunited—seeking a common vision for their performance, but only after returning to their initial aural-based approach to the task. Choosing demonstration over discussion, Andrew’s approach with the next group produced a similar outcome.

Andrew interacts with the Fugue group

Without engaging with their earlier metal version of the Fugue in D minor, Andrew used his score reading and performance skills in order to scaffold the aural copying process for the boys. Breaking down the ideas, he first demonstrated a G harmonic minor scale upon (the original key of the fugue), and then taught them by rote portions of the treble line from the score. The students found this extremely challenging and soon became overwhelmed and fatigued by the unfamiliarity, length and complexity of the line. Despite the laborious nature of rote learning and memorisation, Andrew continued this strategy intermittently with them for an entire week of class time. The following passage (at which time I also had entered the room to observe) records his work with Xavier:

[Andrew plays the passage slowly as Xavier copies. The other students appear disengaged but are quiet. Xavier becomes fatigued and frustrated].

Xavier: Is it meant to go higher there?..[Referring to the trill in bar 6]

Christine: Yes that's the right note.

Andrew (to Christine): So a Baroque trill always starts on the note above doesn't it?

Christine: It doesn't really matter ... but yes.

Andrew (to Xavier): So you're trilling, and that's the note that you finish on...

[Andrew plays the finishing note of the trill sequence 'A' on his bass].

Christine (to Xavier): So you finish on an A.

[Andrew continues playing the passage asking Xavier to copy him. Andrew verbally corrects Xavier's wrong notes during this process].

(Lesson footage, February 15, 2012)

Admirably, Xavier and Blaire eventually mastered by memory the first seven bars of the treble line. The rest of the group gave up much earlier. Even so, they were then unsure as to how to incorporate the passage within the framework of their arrangement. In Andrew's absence during the following lessons, the students ignored his earlier instructions, and jammed on known metal riffs, perhaps as a way of reaffirming their identity and autonomy. Yet as per the Canon group, the boys would eventually return to their earlier version of their fugue arrangement, which became the basis for my own teaching approach discussed later in the chapter.

Summary of Andrew's teaching

A brief summary is offered for Andrew's involvement, which will again provide a backdrop to later comparison. Andrew displayed very high expectations of the students, but he introduced theoretical concepts and performed demonstrations unfamiliar to them. This combination of knowledge and musical experience drawing from his earlier classical learning resulted in *élite code* pedagogy (ER+, SR+). Unlike Justin, Andrew did not choose to first engage with the students' versioning attempts,

but instead, focussed their attention to the score and recordings provided. As this approach failed to empathise with the students' own understanding and experience of their chosen texts, divisions occurred within the groups when individual students were unable to meet his expectations.

I will now turn to critique my own 'facilitation', which was equally underpinned by assumptions made according to my prior learning. Unlike my colleagues, my response was more complex due to my dual role as teacher and researcher. So, discussion of my teaching is interspersed with insights gleaned as a consequence of personal access to the classroom video footage, which was viewed both during and after the classroom project was completed. My background is summarised first.

Christine's Background and Pedagogy

As outlined in Chapter 1, the focus of my formal musical training had been in classical performance, involving for a short time in the authentic realisation of Baroque repertoire using authentic performance treatises and period instruments. Pedagogically, the texts chosen for the research project were familiar to me, and had constituted the basis for my teaching program for the Music 2 course at AMC and in earlier teaching positions at other schools. I also shared with the students some informal learning skills in piano and voice gained outside the classroom. Neither of these experiences prepared me to understand the breadth of musical responses the students offered during this phase of the research. Turning to address the Fugue group, I decided to try to understand their position to the intended task in order to re-evaluate my expectations.

Christine interacts with the Fugue group

At the time the classroom project was implemented, I had limited understanding of the depth and integrity of aural-based learning, and had assumed that the students' existing skills would sufficiently address the complexity of the recordings I had provided. Questioning the Fugue group during the initial weeks Oliver responded, "just figuring it out by ear... like it's pretty complicated" and Blaire had stressed, "and well the parts change a lot". Recognising that many forms of metal are also

highly virtuosic and technically challenging, I initially appealed to the boys to try harder. Xavier became frustrated by my expectations and simply responded: “But in metal, *I know what to expect*” (Lesson footage, February 17, 2012).

In between classes, Xavier’s response prompted me to reflect on my own musical background and its relationship to the learning and arranging processes adopted by the students. Having played Baroque music over many years, how much did I similarly ‘know’ innately or tacitly because I also ‘*knew what to expect*’? To what extent had my fluency in the language developed through years of immersion? How much did I assume I knew merely because I could read notation, and to what extent was my understanding dependent upon my ability to see the structures unfold in the score? Clearly, I needed a different kind of plan.

Returning to the classroom, I reviewed with the boys the video recording of their earlier performance in D minor captured the week prior. The classroom discussion unfolded:

- Christine: Tell me, what are you currently thinking about in terms of the structure of this arrangement?
- Xavier: We could have the main melody as the chorus when it comes back in, and then we could use the parts in between like a verse.
- Christine: Yep, so you’ve got this idea of repetition which you’re calling ‘chorus’ and this idea of variation which you’re calling ‘verse’, which is exactly what Bach is doing in the original, except it’s not exactly happening in chunks. How’s it actually happening in the original?
- Xavier: It kind of just comes in and out.
- Christine: How does it come in and out?
- Conrad: It blends in.
- Christine: How does it blend in? Because it’s not exactly in your face when it comes in is it? So where does it come in?
- [No response].
- (Lesson footage, February 22, 2012)

Aware that the boys were unable to discern where the melody was placed in the texture through listening to the recording alone, I decided to introduce the score not as a performance aid, but as a way to focus discussion. The conversation continued:

Christine: So when you say ‘chorus’, you mean this bit here?...[I point to the solo melodic subject at the beginning of the page]...(to Xavier)...the ‘melody’, the ‘main-melody’ that you’re playing?

Xavier: It’s the more recognisable melody.
[I ask the boys to put the fugue recording on again and as it plays I trace the top melodic line of the score with my finger. At bar 6 the second fugue subject enters underneath the top voice in the dominant key].

Christine: Now, here’s the melody again but it is underneath.

Xavier: But it’s on the fourth isn’t it?

Christine: You’re on to something there...now this is all just variation...[I continue pointing to the stretto material above the second subject until the third subject enters in the tonic key in the bass clef line. Pointing to the new entry...]

Christine: What’s that? This tune, can you hear it underneath?

Klein: It’s the bass.

Xavier: The melody.

Christine: It’s the melody *in* the bass...fantastic!

(Lesson footage, February 22, 2012)

A graphic score was then constructed with the students to depict these observations and provide a loose framework to guide the arrangement process. This captured in abstract form that which they had observed and described. Importantly, a link was forged between the students’ concept of melodic repetition or ‘chorus’, and the role of the melodic subject in the fugue, which changed both in key and where it was placed in the texture. The conversation then deepened as a graph (replicated in Figure 5.15) was co-constructed as a consequence of the next piece of lesson footage:

Christine: All right, now in terms of this...[again pointing to the score], fugues kind of have a system in terms of how they work. So if the original melody here is in G minor and then it comes in here in D....

Xavier (interrupts): So ours would go to A shouldn't it?

Christine: Fantastic! How did you know the answer to that because that is correct?

Xavier: Because the fourth is just a string lower.

Christine: Yep, so that's exactly what you want to do. So when this second melodic subject comes in for you it needs to be in the key of A minor. [Venturing further]...Now there is a special word for that relationship, and it's called 'Dominant'. So when you start learning more about keys [in the music theory class], you'll learn that some keys have a relationship to each other. This particular relationship which is essentially four notes down, or five notes up, is called 'Dominant-Tonic' relationship. So this one here, (pointing to the top voice on the graph below) is called 'Tonic' which is like the home key, and this one here (pointing to the middle voice), we call 'Dominant' because it is five away.

(Lesson footage, February 22, 2012)

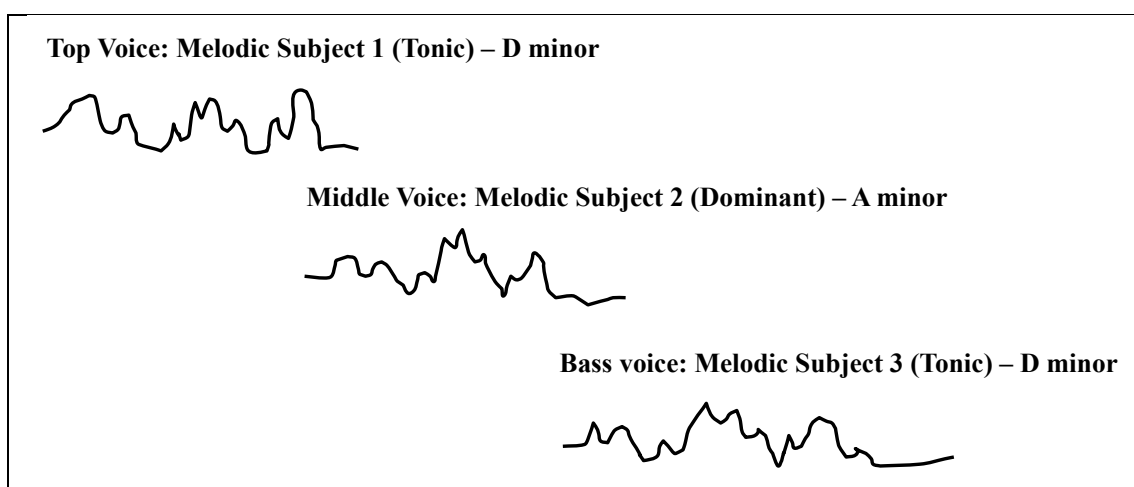


Figure 5.15. Replication of teacher/student graphic score

As a consequence of this discussion, several conclusions began to generate in my mind. Firstly, through seeing the layers unfold in the score (and reinforcing these graphically) the students could begin to grasp the unfamiliar concept of polyphony as a texture type. The students' inability to conceptualise this through listening alone had been apparent to me much earlier during initial experimentation when Xavier had suggested that Conrad "play the harmony of it" (Lesson footage, February 8, 2012 quoted p. 113 this chapter). Yet, no chords were used in this section of the Fugue, consisting instead of one, two and then three separate intertwining melodic lines.

However, when exploring the students' knowledge of tonal relationships, the boys had already established foundational knowledge of keys in relation to the music they knew and played. Xavier's understanding of pitch in relation to guitar tunings helped him to grapple with the unfamiliar concepts I now ventured concerning modulation. Having already deduced that the interval separating the starting notes of the first and second subject entries was to him a 'fourth' down—the same distance that separated the tuning of his guitar strings—he was then able to anticipate the new key of the student arrangement as A minor using the same concrete formula. Building upon this foundation, the unfamiliar concepts of 'tonic' and 'dominant' had some basis. In this way, the conversation allowed Xavier to fuse some of his existing knowledge (or ER+), with some of the new concepts I introduced (also an ER+): a code match. Problematically however, the learning was not uniform across all of the group members, involving Xavier fully but less so the other students. Despite this, the lesson had exposed some of the relationships between the boys' prior music knowledge, and some of the unfamiliar concepts in the Bach Fugue—an approach that appeared less of a threat to their ownership of the performance product. My approach had aligned with a *knowledge code* (ER+, SR-).

Following the exchange with the Fugue group, I employed similar tactics with the remaining groups. The girls in the Canon group described the repetitive ground bass line of Pachelbel's Canon as a "loop", which not only provided me insights into their shared listening experience of digitally generated pop music, but also prompted discussion on the use of layering effects in the canon. This led Lucy to deduce that the upper string lines functioned "like a round" (Lesson footage, February 15, 2012), a finding which then became the basis for further arrangement ideas. However, the

introduction of these concepts was also rather loaded. To what extent could the students incorporate these new concepts whilst maintaining coherence within the popular music styles to which the majority maintained ongoing interests? To what extent should I require them to do so? A similar discussion with the Russian group later in the research project proved almost entirely unfruitful, as they perceived the new knowledge a threat to their collective autonomy and creativity. Further, as the Toccata group worked already in closer proximity to the score I mistook this to mean they already understood the theoretical concepts and ideas behind its construction.

The three teaching approaches and the various consonances and dissonances afforded by them served to make classroom interactions more complex. To tease out this situation, each teacher was interviewed at the conclusion of the research project, with additional insights gained through this process of triangulation. This extra layer of investigation served to confirm their existing code orientations, providing further basis for code clashes and matches presented in the forthcoming chapter.

Summary and Analysis: Informal Learning and Teaching Interactions

Two emergent and at times conflicting factors drove the classroom learning thus far: one social (SR) and the other epistemic (ER). As these forces were often enmeshed, the specialisation codes provide a way of placing and differentiating each approach in relation to student learning. The analysis will begin first with Justin and Andrew and will end with an evaluation of my own attempt. Importantly, this summary and analysis serves to encapsulate the general trends observed in the exchanges thus far, as in practice a more fluid range unfolded in verbal and musical exchanges.

Justin

My interview with Justin at the completion of the project revealed the extent to which his musical background had influenced his pedagogic approach during the research project. He stated: “in almost every aspect of how I teach I am influenced by my musical career—more so than my teaching career, it should be said. My teaching career has been sporadic, and interspersed between longer periods doing just music” (Justin, interview, June 6, 2012).

Justin's hands on approach to teaching as 'doing', is evident in his every classroom interaction during Phase 1. His pedagogy is decisive and marked by musical behaviour that rings with an air of professional authenticity, as the genuine jazz musician teacher. Despite this, several drawbacks appear in relation to the exercise at hand, concerning his lack of engagement with the Baroque texts, of which his knowledge was "extremely superficial" (Justin, interview, June 6, 2012), and, his inability to engage students with backgrounds significantly divergent from his own. Here, instead of expanding his own knowledge of the unfamiliar, his tendency is to draw the interaction closer to his own particular musical strengths. In essence it is a pedagogy that results in the replication of his own musical experiences in the classroom, the end result being to impart the skills to equip others to replicate his own success.

Justin's pedagogy is also one that focuses on the construction of musical products implicit to him in each immediate teaching situation. Musical products are the aim, rather than the knowledge that could be constructed alongside or as a direct consequence of practical learning experiences. This observation remained distinct from his teaching of music theory or listening in other classes, where Justin's musical knowledge often surpassed my own. Yet here, involved in the hands on 'experience' of practical ensemble playing, his focus is on 'doing music'; the development of *knowers* over knowledge, and *knowers* who conform to the specific mode of music production and discourse to which he is accustomed, confirming his *knower code* alignment.

Andrew

Conversely, the follow-up interview with Andrew confirmed his alignment to the *élite code* during Phase 1. Despite his jazz training, I asked him to relay more of his background in classical music study. Andrew explained that each side of his dual musical background had developed separately, with his experience of classical study tending towards a more 'academic' approach to music, and his performance life on bass typically being more 'hands-on'. He relayed:

I found my classical training more isolated and academic and my jazz training more collaborative and spontaneous. But because of my classical roots I am more than happy, if I get the opportunity, which I don't really with Music 1, to teach a lesson on four-part chorale writing...I'm right at home with that. And looking at orchestral music, I'm happy doing that even though that's not my specialty now, I'm glad that I've got that background because not having that shuts you off to a whole world of beautiful music.
(Andrew, interview, May 10, 2012)

Andrew here outlines his perceptions of classical music as situated firmly in the aesthetic and academic realm of his musical experiences. His interactions with this music are therefore undergirded by respect for the authority of the art 'work' text, accompanied by formal study and a degree of academic rigour. Aware of the disjunction between this learning and that of the students, I reviewed with him a piece of video footage to initiate further reflection and discussion. The footage in question was taken from one of the lessons in which he had attempted to teach by rote some of the score material with the Fugue group. His response unfolded as follows:

Well, I would have liked them to have...well you know, when you learn a language...not only do you learn some grammar and syntax and vocabulary, you learn the accent, and I think that I would have liked them to get a bit of all of those things...And look, I guess this is how it just had to be because they have such limited experience with this type of music, but it was like listening to someone speak French with a very heavy Australian accent. There was a very heavy accent of their *own* musical vernacular imposed upon the music. And I think that I would have liked them to get more into some of the details.
(Andrew, interview, May 10, 2012)

Andrew here relays several assumptions governing his approach. For him an authentic interaction with Baroque music was in the 'details', involving by default the students' engagement and reproduction of the score even down to the correct execution of ornamentation. For Andrew, to learn *about* Baroque music is to *play* Baroque music. Like Justin, Andrew's learning is also summarised as 'doing', but it is a 'doing' of a specific kind—acknowledging tried and tested historic traditions. Like Justin, his knowledge appears inseparable from knowing.

His use of the 'language' metaphor also reveals interesting insights concerning his classical training. Music learning for him is akin to learning a language. But what if one does not speak, or in this case *read* that language? Andrew's use of the metaphor reveals something further. For him to speak with one's own 'accent' imposes

something unwelcome. Viewed in this way, Andrew's actions serve to allow the students an interactive experience of WAM, but only those with the requisite training can realise his intentions. These students equally align with an *élite code*, requiring prior knowledge of staff notation and the correct 'accent' or musical disposition in which to speak through extensive training and immersive experience over considerable time.

Christine

Analysis of my own pedagogy revealed a different set of assumptions. Recognising my miscalculations in respect of the initial aural copying exercise, like Andrew, I also turned to the music texts but with a different agenda. My agenda sought to marry the students' understanding of the texts as revealed through their talking and playing, with the knowledge insights I had acquired from this music over time. Pedagogy of this kind is only possible though through a kind of terminology exchange. A fugue's subject is like a 'chorus', a canon is like a 'round', a ground bass is like a 'loop' and modulation is a concept grasped best in relation to the tuned strings of a guitar. Mine is a more objective approach to the task—a *knowledge code*. This approach does not resonate with all students however, nor make the subsequent arrangement process easier, as will be made clearer in discussion in the next chapter.

Figure 5.16 serves to visually represent the three different teachers' stances and their respective specialisation codes. Although here simplified, Justin's approach represents a *knower code*, with practical hands-on learning stemming from his and the students' musical experiences (ER-, SR+). Andrew conversely represents the *élite code*, synthesising and demonstrating the knowledge, skills and performance practices of the WAM tradition (ER+, SR+). Mine lastly represents a *knowledge code*, with focus directed towards more objective discussion tying ideas inherent to the original works, with those demonstrated through the students' talking and playing (ER+, SR).

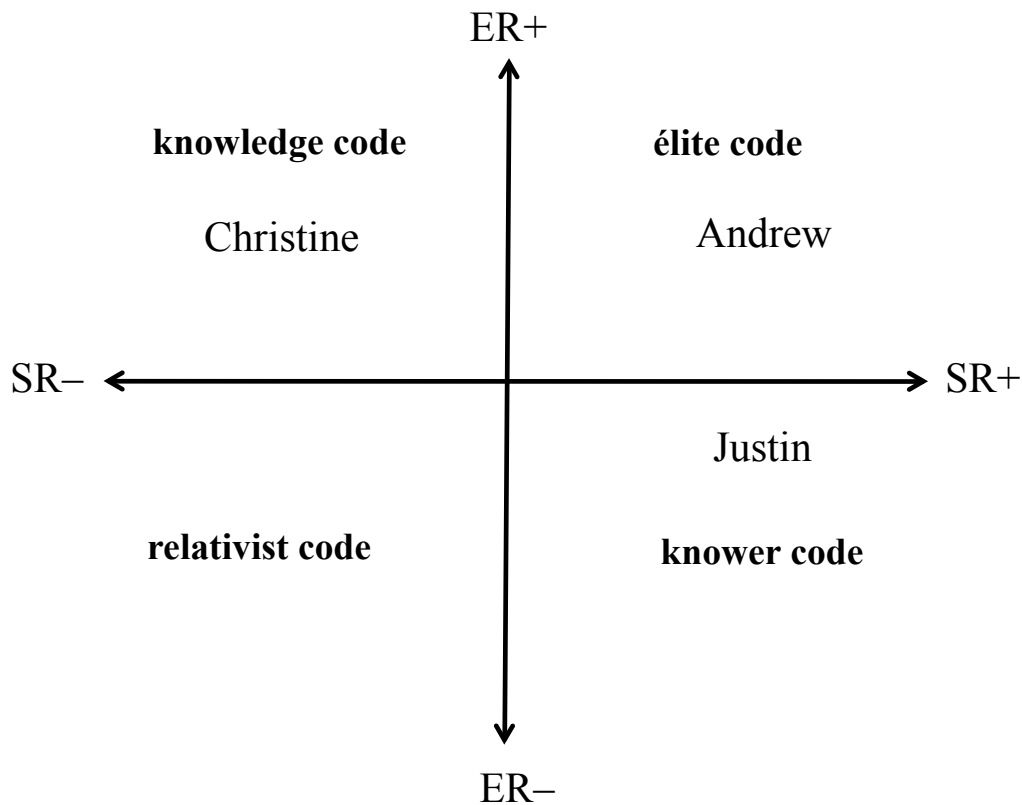


Figure 5.16. Three ‘facilitative’ teaching approaches demonstrated during Phase 1

In addition to the three teaching stances, two additional factors can now be included determining the outworking of teaching and learning thus far. The first is the student cohort. They for the most part through the demonstration of informal learning processes fall also within the *knower code*, as evidenced by their personal responses and interpretations of the recordings. These responses generated lower level epistemic relations to the texts, or ‘tacit’ knowledge, at this time (ER-), with their need to communicate collective social identity through their music constituting the overriding agenda (SR+). The second factor influencing these outcomes is the presence of the Baroque texts, which added an extra layer of complexity to classroom interactions. These examples of WAM are positioned mid-way on the epistemic axis, with both notated and recorded formats providing access to musical content knowledge (ER+ and -).

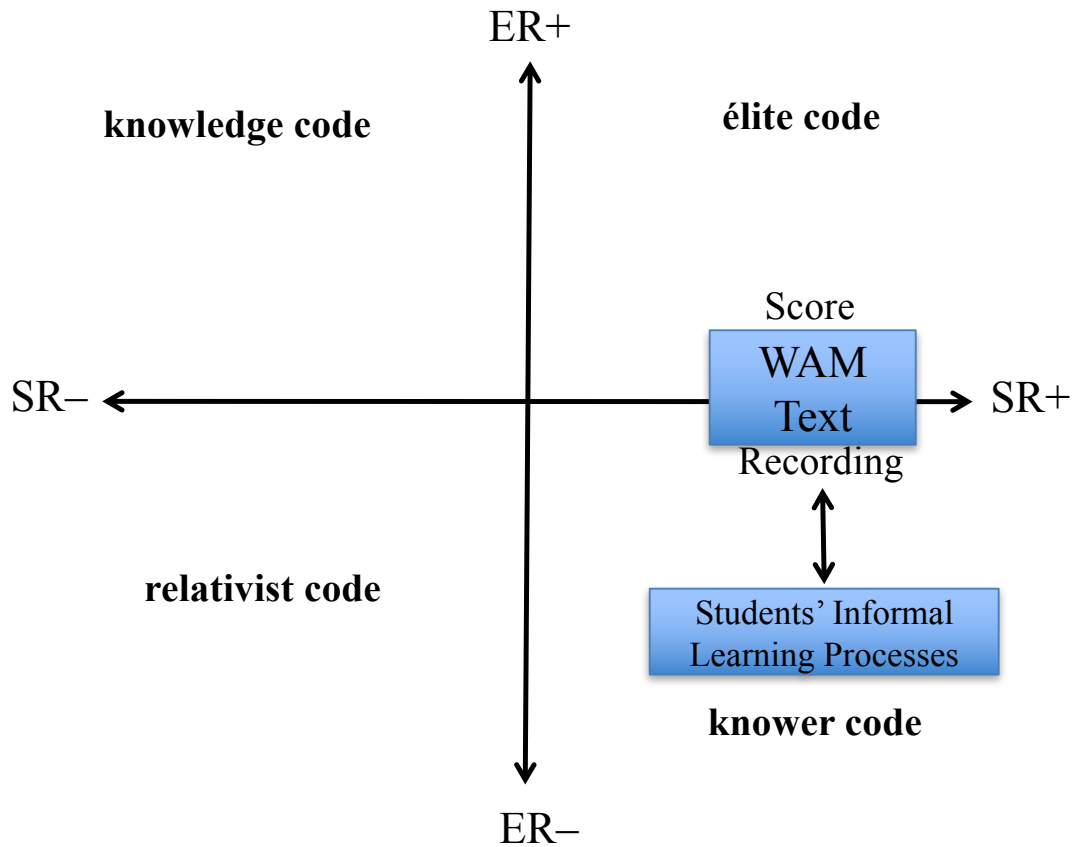


Figure 5.17. Specialisation codes student informal learning interactions with Baroque music

The three teaching approaches will now be added. Key here is recognition that each agent is depicted to represent patterns of both *relationship* and *influence*. The opposing ER and SR axes thus provide a way to theoretically underpin the descriptive tensions and synergies observed in research thus far, generating a set of relational positions and code alignments. Pedagogy and learning interactions are also depicted using arrows (both one and two-way), reflecting the preceding ethnographic description.

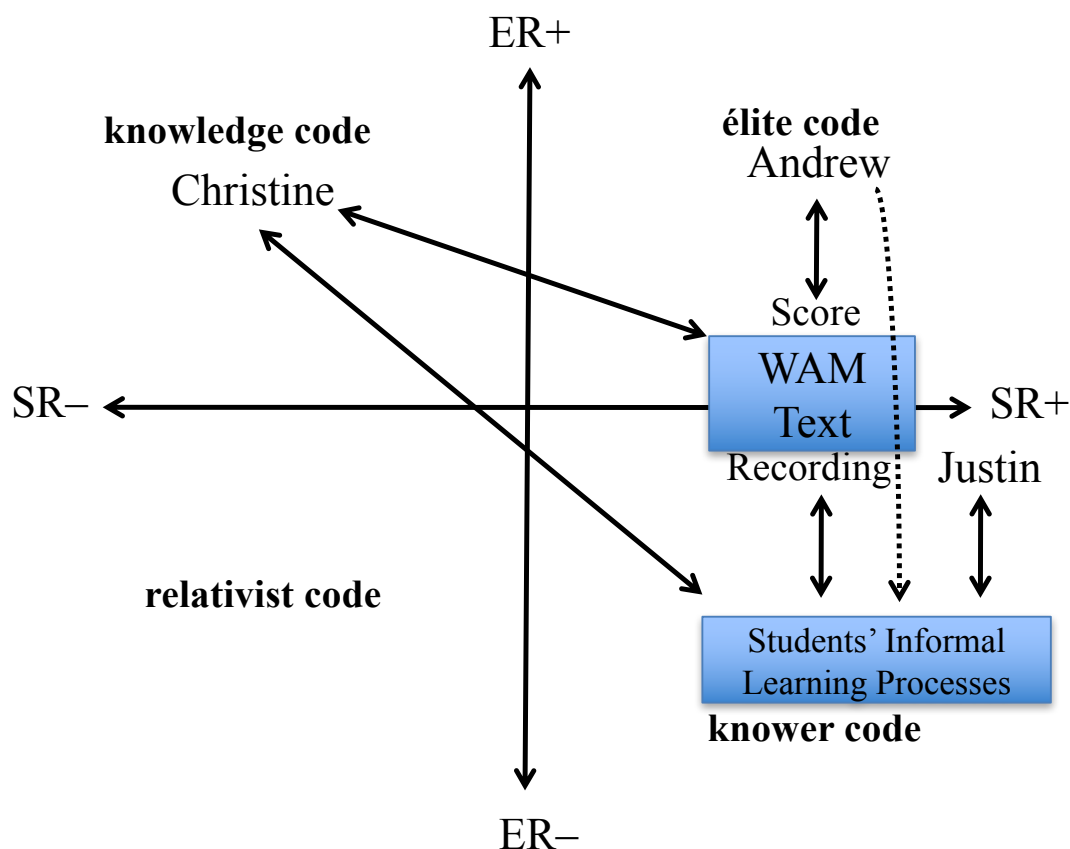


Figure 5.18. Specialisation codes exhibited in Phase 1 teaching and learning interactions

As previously described, each of the teaching approaches represents a separate code. The students' informal learning processes are positioned within the *knower code*, influenced by a two-way exchange with the text—the recording influencing their informal musical play, which is equally informed by their prior learning embedded in personal and collective musical identity (ER–, SR+).

Justin's interactions with the students work two-way, as his observations of their playing inspire the formulation of chord charts on the white board (an expression of their informal knowledge displayed in stronger ER form). Equally, his demonstrations (rather than knowledge of the Baroque texts) influence some of their own performance choices (or ER–, SR+).

Andrew's interactions are more one way. His *élite code* position is maintained by personal interaction with the score and recording, which then inspires both technical

discussion and performed demonstrations (ER+, SR+). Andrew however chooses not to interact nor validate the students' informal learning attempts at this time, represented by a downward broken arrow in the figure.

Lastly, my approach works in a kind of three-way cycle, between my own knowledge of the text (also constructed upon prior *élite code* training not dissimilar to Andrew's), but with an attempt to separate personal experience (SR-) through a reconciliation of my knowledge with that of the students (ER+).

Conclusion

This chapter has served to establish the nature of the student cohort at AMC in terms of their prior learning, and canvassed their informal and mostly aural-based learning responses to a range of Baroque texts. From an initial student survey, the majority reported established backgrounds in popular music-making, with this reflected in their performance choices generating a *knower code*. This code alignment matches that attributed to the current rationale for the Music 1 Syllabus, outlined in the preceding chapter—the course most frequently undertaken by student popular musicians. This would appear to be a code match, however, there were considerable variations within this code alignment. Further, the knowledge outcomes for Music 2 were not addressed fully at this time.

Then the three teachers were introduced, each representing a variety of musical and pedagogic backgrounds, from jazz, to popular and Western classical training, and various combinations of these. Through an observation of teaching and learning interactions, three distinct codes emerged in 'facilitative' pedagogy, with Justin aligning with a *knower code*, Andrew aligning with the *élite code*, and my own choices aligned to a *knowledge code*. The discussion has sought to highlight a number of tensions due to clashes and matches between epistemic and social relations within the classroom. However, it has not discussed the outworking of these tensions by the students as they moved toward the construction of music performances submitted for assessment, nor the long-term knowledge outcomes resulting from teaching and learning in Phase 1. This will constitute the basis for the following chapter.

CHAPTER 6: CLASSROOM MUSIC-MAKING

Introduction

Where the previous chapter served to introduce the research participants through an analysis of informal learning responses and facilitative pedagogy, the present chapter looks more deeply at patterns in student music-making in relation to live performance and arrangement strategies. The performances were constructed in the existing student groups, and emerged as the consequence of a series of tensions outlined in the previous chapter. Analysis of these tensions using LCT Specialisation concepts revealed a series of legitimation codes. Student informal learning responses to the Baroque texts generated mostly *knower code* responses. The various facilitative directions offered by the teachers generated a three-way *knower, elite* and *knowledge code* split. In spite of this three-way pull, this chapter records the students' attempts to reconcile each approach with their lived experience of popular music, in order to maintain ownership of their music-making.

As each student group navigated this process differently, a degree of detail—both musical and pedagogic is required. In doing so the second research question examining musicianship and musical knowledge is explored more fully. To support discussion musical transcriptions and audio recordings of the final assessed performances are provided (see Appendix J). Punctuating the discussion are insights and commentaries documenting the way my particular 'gaze' (or habitual way of thinking and seeing) cultivated over many years as an educator and classical musician widened as a consequence of this phase of the research. In this regard, a central theme is that of teacher learning—specifically my own. This occurred bit by bit as I processed the classroom video footage, and triangulated preliminary findings through follow up student interviews. Where these primary forms of data warranted further investigation to verify the origins of music, terminology and learning practices in popular music with which I was unfamiliar, I undertook additional research using online and published sources. These sources included music video, recognising the connections between “musical sounds, lyrical texts and visual narratives” as intrinsic

to the students' real world experience of popular music established outside the classroom (Whiteley, 1997, p. xiv).

The findings highlight the important role the students played in recontextualising many attributes of their popular musicianship skills into the classroom. Allowing them to do so provided the impetus for an expansion of teaching and learning, as different musical practices stemming from WAM and popular musics intentionally interacted (See Elliott, 1995 and Chapter 3 of this thesis). Analysis utilising LCT specialisation codes serves to clarify these findings, and build upon previous discussion. The four student groups, *Fugue*, *Toccata*, *Russian* and *Canon* participating in the research continue to constitute individual sub-cases. For readability, Tables 5.1 – 5.4 summarising their survey results are repeated to foreground the introduction of each group, with discussion beginning with the Fugue group musicians.

Little Fugue in the Key of Metal

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Conrad	M	Music 1	Guitar/Composition	Government	Ear
Klein	M	Music 1	Guitar/Composition	Government	Ear
Blaire	M	Music 1	Guitar/Drum Kit	Government	Ear
Xavier	M	Unsure	Guitar	Catholic	Ear
Oliver	M	Music 1	Composition/Drum Kit	Independent	Ear
Ned	M	Music 1	Contemporary Guitar/Composition	Independent	Ear

Table 5.1. Fugue group survey summary

In the previous chapter, the boys in the Fugue group had initially struggled to process the various forms of facilitation presented by Andrew and myself. Andrew had chosen to return the students to the score of Bach's *Little Fugue in G minor*. Using his electric bass to demonstrate, he had modelled portions of the score for the students to copy by ear, that they gain a more immediate experience of the original work. Instead, my approach had been based in discussion. After listening to their metal version of the Fugue, I found links between the boys existing knowledge and what I knew about

the work, through an acknowledgement of ‘like’ concepts. This discussion had led to the generation of a graphic representation (Chapter 5, Figure 5.15), outlining ideas the boys could try to reflect in their playing.

Perhaps as a consequence of the two contrasting teaching approaches, the boys struggled initially to generate a coherent plan. Working alone during Week 4, footage of them showed off-task behaviour, such as talking and jamming on metal riffs they already knew and enjoyed. However, before long and without teacher intervention, they returned to their original metal arrangement of the Fugue in D minor generated in Week 2 (discussed Chapter 5, pp.113-114). In passing, Blaire commented that it sounded like ‘A Little Piece of Heaven’ by metal band Avenged Sevenfold (Avenged Sevenfold, 2009).

His comment warranted follow up investigation on my part. Accessing the official video clip on YouTube (https://www.youtube.com/watch?v=VurhzANQ_B0), I was initially struck by the explicit and macabre content of the lyrics and visual footage. Setting this aside, I also noticed unexpected musical similarities to the Bach Fugue, and, to the boys’ adaptation of it. The recording included a quasi-classical introduction featuring woodwind, brass and vocal choir, and then counterpoint based on thematic material not unlike Bach’s. This then gave way to structures more typical of hardcore metal: rapidly strummed power chord riffs, drop D tuning, unusual tonal juxtapositions and extremely dense textures. Returning to analysis of the classroom footage, I kept these insights in mind.

Addressing the riff material first, Xavier suggested to the group how they could elaborate on the original power chord riff because in his words, it was now “so boring!” (Lesson footage, February 24, 2012). The riff they had labelled a “break-down” (Figure 6.1), was then extended and ornamented not with pitch material, but with rhythmic variation as I have transcribed in Figure 6.2. The creation of the riff was a collective exercise with the new syncopated version emerging gradually over an extended number of repetitions. The experiment was pivotal to their progress and became an important structural tool for the rest of their arrangement. The original riff and the new syncopated version are transcribed in Figures 6.1 and 6.2:

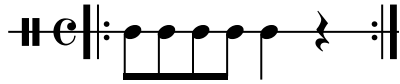


Figure 6.1. Original power chord (D5) break-down riff (previously Fig 5.2)



Figure 6.2. New syncopated (D5) power chord break-down riff

Ned’s response to the new riff was an interlocking bass pattern also featuring drop D tuning. The bass riff began on a static low D, but again evolved gradually through repetition and improvisation to incorporate a minor 9th leap in the fourth bar, implying a phrygian tonal inflection:³⁴



Figure 6.3. Ned’s bass riff

The transcribed classroom footage records the collaborative nature of their musical play and its relationship to previously known material:

[Xavier teaches Klein the Fugue subject in D minor (Chapter 5, Figure 5.1). Xavier and Klein play this together in unison with Klein attempting to copy Xavier’s melody, with verbal corrections by Xavier. There are pitch discrepancies between the two guitars].

Xavier [to Klein]: You’re out of tune!

[Peer teaching/learning continues. Ned and Oliver look bored waiting for Klein to finish learning the Fugue subject. While they wait they start to jam together on bass and drums. Ned plays a bass riff].

³⁴ Through research I was interested to learn that the Phrygian mode featuring a dissonant minor 2nd or 9th is common to many genres of metal (Everett, 2004; Walser, 1992, pp. 294-297).

Ned [to Xavier]: Xavier! Xavier!..[Gaining his attention. Xavier joins Ned playing the same riff by adding power chords over the top of Ned's bass line].

Oliver: It's Misery!..[Oliver smiles and joins Xavier and Ned with the drum pattern for the song].

(Lesson footage, February 24, 2012)

As I was unfamiliar with the song mentioned above (Gallows, 2009), I accessed the official video clip during the analysis process (https://www.youtube.com/watch?v=PNodyijdG_E). Again, similarities became apparent to me in relation to the classroom activity quoted above. The song was another example of the hardcore genre featuring a slow introduction section, followed again by repetitive material using drop D tuning, phrygian modality and thick textures constructed from interlocking riffs. Like Ned's riff transcribed above (Figure 6.3), the 'Misery' bass riff (Figure 6.4) also featured an ascended leap to an Eb in the fourth bar, creating harsh dissonance against the static D5 power chord accompaniment in the guitar chords above. For comparison purposes, I have transcribed the 'Misery' bass riff in Figure 6.4:



Figure 6.4. 'Misery' bass riff

With the addition of Ned's bass riff, the boys' classroom music-making moved with increased pace and enthusiasm from this point on, with Oliver adding a heavily accented bass drum riff to the group improvisation (transcribed in Figure 6.5):

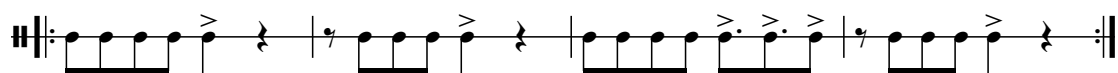


Figure 6.5. Oliver's break-down drum riff

Expanding his part to include snare and crash cymbal, Oliver's drum line was then combined with the existing bass and guitar riffs for the boys' arrangement. These accompanied Xavier's foreground melodic subject, which continued to feature half-time rhythmic augmentation in keeping with the established break-down feel. Xavier's fugue subject is transcribed here in Figure 6.6:



Figure 6.6. Xavier's melodic subject

Observations of the boys' creative process here resonate with those of Davis (2005) and S. Cohen (1991) (discussed in Chapter 2) concerning the use of 'fiddling' and cyclic grooves as structuring tools, with new material built upon known material through these same processes. Bennett's 'recording consciousness' (1980a, 1980b) was also reflected in the boys' use of distortion, and extreme volume.

In keeping with the original classroom experiment discussed in the previous chapter, this material was referred to collectively as a break-down. The break-down combined all of the boys' existing riff material as an interlocking polyrhythm (Figures 6.2, 6.3 and 6.5), which was then repeated to form longer sections of music. The more rhythmically charged break-down material followed their existing slower introduction section, which remained largely unchanged from the work they had undertaken in previous weeks. The introduction used sustained note durations to an unmeasured pulse over a held synthesiser and bass D5 pedal (or drone), all supporting the same heavily distorted electric guitar melody transcribed above, but played in an unmeasured fashion.

In the following week, the boys worked to incorporate some of the material and ideas introduced by Andrew and myself. As a consequence several new sections of music began to emerge. The first featured Blaire who performed Xavier's opening fugue subject on the synthesiser accompanied by the same break-down material. Then, after several repetitions against a fading bass pedal note, the extended score material

modelled by Andrew was added as an unaccompanied synthesiser solo—now transposed also to the key of D minor.

The boys then included two sections reflecting the key changes or modulations depicted on the graphic score constructed in earlier discussion with myself (Figure 5.15). The first new section used the break-down material in the dominant key, and the second new section a return to the tonic. This was undertaken all by ear, and required frequent trial and error attempts and extended periods of improvisation. As before, Xavier took a leading role in initiating these processes. He transposed by ear the second subject to the dominant key of A minor as a model for Conrad who would take the lead role for this new section. Then, Xavier modelled the tonic subject for Ned, who would feature this on the electric bass to close. In this way, some of the design elements of the Bach Fugue were appropriated in the foreground melodic material, whilst maintaining stylistic coherence to metal in the accompaniment riffs. Changing keys for each of these sections required aural learning and aural transposition of both the thematic and riff material with no teaching assistance required. As the process was fluid involving more fiddling and modelling than verbal dialogue, the melodic themes were at times played simultaneously in both keys, creating parallel 5th movement between the guitars. Oliver commented that the effect “sounded brutal” (Lesson transcript, March 1, 2012).

During the final week of Phase 1, renewed energy and engagement with the learning process had resulted in an expansion of their aural awareness to embrace further attributes of the organ recording. Xavier’s opening subject (Figure 6.6) now showed differentiation between the rhythmic patterns used in bars 3 and 4 as per the recording and score (see Figures 5.1 and 5.2 previous chapter). Also, semiquaver and triplet ornamentation occurred spontaneously in ensemble dialogue, creating quasi-baroque nuance and occasional moments of polyphony in rehearsal. Oliver’s contribution became pivotal in enabling collective improvisation, by communicating structure and key changes in the form of fills and cues from the drum kit—a much needed rhythmic foundation to the featured riff and melodic material above. These observations align with Green’s discussion of ‘flow states’ in informal learning (2008a, p. 56). Transitions between the creation and refinement of ideas were seamless, with play rarely interrupted to fix problems. Collective ownership of their work and a

realisation of the experimental nature of their music-making were also apparent, along with felt connections to external musical experience. Xavier stated on camera; “it feels like an experimental band” and Oliver and Ned also coyly remarked, “it is an experiment...we’re playing ‘Little Fugue in Metal’, and then we’re accidentally playing ‘Misery’” (Lesson footage, March 1, 2012). A recording of their final performance is included in Appendix J, Track 1.

Summary

A kind of balance was struck here between the students’ desire to maintain ownership of their music-making and the teachers’ challenge to incorporate some of the less familiar musical features of the Bach text. For example, instrumental roles in metal retain a fixed hierarchy in terms of their relative position to foreground and background textures. A Baroque fugue on the other hand is always linear, and polyphonic in design. Although the boys varied the melodic focus in their arrangement somewhat by switching performers for the entry of each subject line upon each key change, this melody was consistently featured in the foreground layer, usually accompanied by thick rhythmically charged interlocking riffs. The only exception to this was Ned’s final bass entry of the melodic subject. Yet here again, Xavier doubled the bass: maintaining the hierarchy of the treble melodic material and also, his clearly defined role as lead guitarist of the group.

Tonally, a Bach Fugue features material moving between different voices in different keys with a certain degree of subtlety. Contrary to this, the boys’ break-down sections utilised drop D tuning, sudden juxtapositions in key, phrygian references, and thick textures featuring hyper-metre, rhythmic complexity and distortion—akin to the music I had discovered they played and listened to outside the classroom. These findings resonate with the discussion of musical ‘formulae’ by Lilliestam (1996) and Johansson (2004) in Chapter 2, with reference to the use of licks, clichés, harmonic formulas and other style traits intrinsic to specific genres played by ear.

In keeping with these style traits, the melody featured in the arrangement continued to simplify and truncate the original Fugue subject using even and repetitive four bar phrases. Despite this, melodic detail was not absent from the boys’ performance, but

was derived by a very different means, occurring spontaneously through improvisation, where every now and then an impression of baroque melodic nuance were occasionally appropriated. These findings reveal unexpected correlations between some of the style elements between Baroque music and metal, but more importantly, some of the associated performance practices. These are noted by Walser (1992, 1993) who explores the relationship between metal and classical performance, equating the history of the ‘virtuoso’ guitarist in metal with the 19th century classical virtuoso. He states:

Virtuosity—ultimately derived from the Latin root *vir* (man)—has always been concerned with demonstrating and enacting a particular kind of power and freedom that might be called ‘potency’. Both words carry gendered meanings of course; heavy metal shares with most other Western music a patriarchal context wherein power itself is constructed as essentially male (1992, p. 278).

Walser also explores connections between metal and Baroque music including harmonic organisation, musical structures, technical mastery, improvisation, the role of basso continuo and the “gothic overtones” implied by the sonic power of the organ (1993, p. 281). He states: “the power and sustain of the organ are matched only by the electric guitar, and Bach’s virtuosic style and rhetorical flair is perfectly matched to heavy metal” (ibid). Although these connections were not established in follow up interviews, the boys’ choice of the organ recording to begin with along with the virtuosic nature of their playing bear testimony to these underlying correlations.

The boys’ final comments in interview did however confirm their ownership of both learning process and the end performance, with Blaire commenting they had generated a new musical ‘sub-genre’. Xavier agreed, but added he valued the challenges the task had presented, including the introduction to staff notation and previously unknown theoretical concepts (Blaire and Xavier, interview, June 6, 2012). This sense of reciprocity between teaching and learning occurred also in the Toccata group discussed next, however here it was enacted from within the group itself.

Toccatà and ‘Flow’

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Peter	M	Music 2	Classical Piano/Composition	Catholic	Notation
Juliet	F	Music 1	Piano/Voice	Government	Ear
Mairead	F	Unsure	Voice/Composition	Steiner	Mixed
Madeline	F	Music 2	Voice	Independent	Mixed
Zali	F	Music 2	Classical Voice	Independent	Ear
Josie	F	Music 2	Classical Violin	Catholic	Notation

Table 5.4. Toccatà group survey summary

Firstly, a brief summary is necessary to recap these students’ progress to this point in the research. Remembering that this group had comparatively higher music literacy skills and prior experience of WAM in performance, I had assumed they would already possess the requisite skills (and perhaps musical disposition) with which to approach their chosen text: J.S. Bach’s *Organ Toccatà in D minor*, with some level of confidence. In reality, the open-ended instructions and level of choice accommodated exposed an underlying conflict in agendas between two key group members—Mairead and Peter. This tension hinged upon Peter’s belief that the task required close engagement with the score, but Mairead wanted to work more spontaneously in keeping with her typical creative practice as a singer-songwriter. Data from follow up interviews as well as early classroom footage are included here to explain their dispositions to the task.

Peter

Peter’s music learning was one that represented the most formal learning of all 30 student participants. Having studied classical piano for 12 years he had completed the relatively standard sequence of now eight graded performance examinations in the Australian Music Examinations Board (AMEB) system. His learning was one characterised by a clear sequence of mastered classical repertoire accompanied by skills in music literacy and music theory. This learning path had instilled in him a

particular love of impressionist piano repertoire, and also, a fear of solo performance situations (Peter, interview, June 23, 2012).

Mairead

Mairead's interview unveiled a more mixed background in both formal and informal situations. She however believed that her current skills as a singer-songwriter were fostered more through 'hearing' the music rather than 'reading it'. She stated:

My Dad is a drummer so I've always just been around music but, although I got lessons it was always my ear, like I would always just hear it...like although I can read it I generally can hear it first...and that helped me a lot with what we did in class because I was able to hear the piece of music and then figure out how I could, you know, change it into a different style.

(Mairead, interview, June 23, 2012).

In the separate class streams facilitating the Music 1 and 2 courses typically offered at AMC, these students would not normally have had the opportunity to participate in classroom music together. Yet, as a consequence of the research, an interesting dialogue began to unfold, which began confrontationally as the early classroom footage records, but later resolved into a productive working dynamic:

Peter (to Mairead standing next to him at the piano): You have to be the main voice. You have to sing something!..[Peter gets up from the piano frustrated].

Mairead (to Peter): [Annoyed]...But you've got to play it so that I can hear what I'm doing!

Peter (to Mairead): I'll be accompanying you!

Mairead: But I need to know what I'm working with!

Peter: You're working with the D minor chord...[Peter strides back to the piano and plays a loud D minor chord on the piano and then walks away].

Mairead (to Peter): Keep playing it though!

Peter (to Mairead): But I'm accompanying you!

Madeline: But she doesn't know what she's doing at all.

Peter: I don't know what I'm doing either!..[Peter plays an aggressive D minor and E minor chords on the piano].

Mairead: Well we can do that...[pause]...or we can make it flowy...
(Lesson footage, February 17, 2012)

Mairead frequently used words such as ‘light’ or ‘flowy’ in order to describe her musical ideas to the other group members, which Peter had difficulty interpreting as the footage demonstrates. Yet as she was used to creating music alone, Mairead had not considered how her use of language and imagery might be difficult to interpret by others. The interview transcript highlights something of her personal discovery to this effect:

For me it’s not just the music it’s everything behind it, it’s the feeling, it’s the pictures it comes from. The words [I use] are like the feeling behind it. So, when I think ‘flowing chords’, I think of something airy and simple. It’s a good question...I’ve never thought about this! It’s good to be asked this because until now it’s just something that I’ve done (Mairead, interview, June 23, 2012).

As they needed to work together, Mairead and Peter’s oppositional stances gradually softened during Weeks 3 and 4 of the research project. Peter adopted the role of mediator between the fixed content of the score (which he could by now perform competently as recorded in Chapter 5), and Mairead, who exercised creative control of the arrangement processes in response to his playing. The outworking of this strategy resulted in a kind of re-composition of the Toccata, generated from both the score, student improvisations, and the earlier work with Justin (see Chapter 5)—expressed within a style framework which aligned with Mairead’s creative interpretation of the piece.

The classroom footage records this process. Beginning with the iconic opening score motives from the Toccata, Peter used his knowledge and love of impressionist piano writing to refashion the Toccata’s strident opening into a gentler more pianistic ‘flow’. This involved the creation of soft, delicate rippling octaves using the sustain pedal, which he described as ‘sounding impressionistic, like Debussy’ (Lesson footage, February 22, 2012). The original score passage (Figure 6.7) as well as a transcription of Peter’s adaptation are provided:

Figure 6.7. J.S. Bach *Toccata in D minor* (BW 565) bars 1-2 of organ score (No Date)

Figure 6.8. Opening phrase of Peter's 'impressionistic' introduction

Next, the students addressed the ascending C# diminished 7th chord (bar 2 Figure 6.7 above). Mairead suggested that each vocalist enter each with a separate note from the chord, using the staggered sustained entries to create a layered effect. The students then turned to the iconic theme occurring in bars 12-15 of the original score with which they had previously worked with Justin. For clarity, the original passage is provided in Figure 6.9:



Figure 6.9. J.S. Bach *Toccata in D minor* (BW 565) bars 12-15 (No Date)

Peter created a thinner chordal ostinato from Justin's earlier harmonic demonstration which he labelled 'Justin's chords'. These chords (transcribed Figure 6.10 below) were used to accompany a series of layered vocal entries intended by Mairead, based upon the original ascending melodic sequence in the score passage. The discussion below relays Mairead's use of demonstration and descriptive prose now entwined as this process began:

Mairead: What if um...(getting excited) you do um...(to Peter) I go...
 [Mairead sings pitches D E F]...and then (to Madeline) and then
 while I hold it you go up?...Because if I sit on that note that's like a
 harmony note.

Madeline: Sure...[Madeline sings the bar 12-13 passage slowly while Mairead
 experiments with held vocal pitches against the moving pattern to
 create dissonance and tension against the moving line. Against this
 Peter accompanies as transcribed below in Figure 6.10].

(Lesson footage, February 22, 2012)

As a result of the experiment, the passage transcribed below emerged, with the vocal material alternating spontaneously between Mairead and Madeline in the alto register:

Figure 6.10 shows a musical score with three staves. The top staff is labeled 'Alto 1' and contains a vocal line with 'Ah' lyrics. The middle staff is labeled 'Alto 2' and also contains a vocal line with 'Ah' lyrics. The bottom staff is labeled 'Justin's Chords' and shows a piano accompaniment with a steady eighth-note pattern. The key signature is one flat (B-flat) and the time signature is common time (C).

Figure 6.10. Student improvisation over ‘Justin’s Chords’ based upon original bar 12-13 melodic motifs

The rather static piano line still containing reference to the pedal note ‘A’ from the score (Figure 6.9), allowed moments of harmonic tension to emerge between the stationary accompaniment pitches (A and F) and the shifting vocal motifs (e.g. Figure 6.10, bars 2 and 4). Mairead then extended the experiment to include a bass line which eventually became the left-hand of Peter’s piano part (Figure 6.11). The bass line created further points of dissonance between the right-hand piano ostinato and the vocal melodies above. It also provided another reference to the original bar 12 Bach melody line, this time using held notes to outline the original more complex contour as transcribed in Figure 6.11:

Figure 6.11 shows a single staff of music in bass clef. The key signature is one flat (B-flat) and the time signature is common time (C). The melody consists of a series of eighth notes and quarter notes, with some notes held over from the previous measure. The notes are: G2 (quarter), A2 (quarter), Bb2 (quarter), C3 (quarter), D3 (quarter), E3 (quarter), F3 (quarter), G3 (quarter), A3 (quarter), Bb3 (quarter), C4 (quarter), D4 (quarter), E4 (quarter), F4 (quarter), G4 (quarter), A4 (quarter), Bb4 (quarter), C5 (quarter).

Figure 6.11. Improvised bass line to student melodic experiment

The addition of the bass line brought stability to the improvisation, which in turn instigated further musical dialogue. From there Mairead created a series of upper lines for the singers and violin, which also featured ostinati (transcribed in Figures 6.12, 6.13, and 6.14). These entered sequentially after a series of repetitions of the piano accompaniment, gradually building the texture and the intensity of the arrangement to climax with a final statement of the original melodic theme (Figure 6.15) as follows:

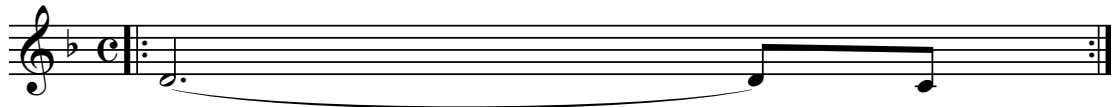


Figure 6.12. Violin ostinato



Figure 6.13. Madeline's vocal ostinato

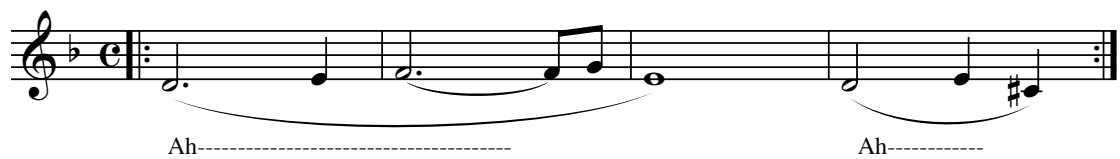


Figure 6.14. Mairead's vocal melody

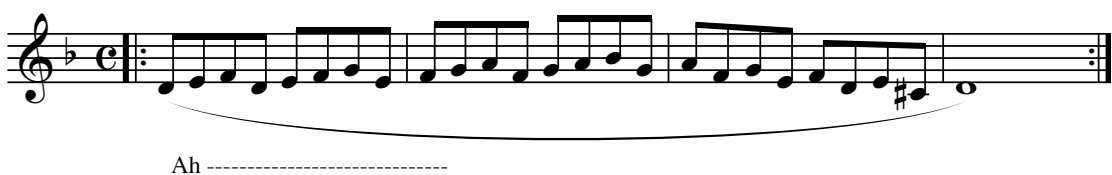


Figure 6.15. Zali's melodic theme

Despite the observed similarities between their work and the original score, Mairead described the derivation of this material as “coming from hearing the harmony and through hearing the chords” (Mairead, interview, June 23, 2012). Clearly, despite her closer proximity to the original material mediated through Peter's playing, her awareness of direct relationships between new and old material remained tacit and intuitive.

The arrangement then explored a contrasting section using Peter’s earlier ‘flowing chords’ experiment (discussed in Chapter 5, p.122), earlier noted to bear resemblance to a similar passage from the score. The original experiment is transcribed here for clarity:

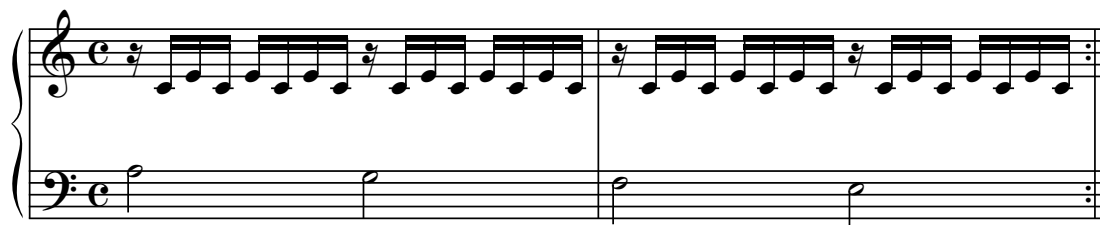


Figure 6.16. Peter’s original ‘flowy’ chords (originally fig 5.8)

Peter then transposed the chords by ear to D minor to match the existing student arrangement. Over this new section, a violin solo was planned for Josie. Mairead composed this by ear, although Josie would not attempt the passage until she had first written it down. Ironically the transposition of the chord sequence brought the passage closer to the corresponding one in the score, although the students remained unaware of this connection. The original score passage and Mairead’s adaptation for Josie are provided in Figures 6.17 and 6.18:



Figure 6.17. Excerpt from J.S. Bach *Toccata in D minor* (BW 565), bar 16 (No Date)

Figure 6.18. Josie’s violin solo upon the ‘flowing chords’

As can be seen, Josie’s violin melody also referenced the descending section of the original melodic line (see Figure 6.9, bars 13-15). The ‘flowing’ chords were then used in root position (Dm, Am, Gm, Am), with added syncopation as a way of providing a climax to their arrangement:

Figure 6.19. ‘Flowing’ chords

This climax generated additional harmonic tension, with a sustained G in Mairead’s vocal material (below) over the initial D minor chord in the piano line—dissonance that was left unresolved. The use of Zali’s upper register also worked to expand the range of the vocal parts:

Figure 6.20. Mairead’s ostinato



Figure 6.21. Zali's ostinato

The students' reworking of the Toccata thus created five distinct and balanced sections: an opening 'impressionist' piano solo by Peter, the section using Justin's chords, the two sections based on 'flowy' chords, and a final coda featuring a reprise of Peter's piano solo (see Appendix J, Track 2). Each section featured layered melodic ostinati, and subtle shifts in texture and tone colour with each maintaining pitch references as described to the original score material. The arrangement however worked within a much looser and more static tonal and harmonic framework than the original work, which featured darker sonorities and longer passages of uneven lengths constructed by extending periods of dissonance with harmonic resolution.

Summary

Several themes are worth highlighting at this point before preceding to the discussion of the next group. These concern the role of language and demonstration in group communication, the use of harmony and repetition as structural tools, the use of the score, and again, the experimental nature of the end performance. Concerning language, problems arose when Mairead's use of terms such as 'flowy' proved inadequate as communication tools, unless accompanied by performed demonstrations. This finding stands in contrast with discussion of the previous group, where concrete demonstrations or shared terms such as 'break-down' proved more effective communication tools. These findings build upon those of Davis (2005, 2010) and Gullberg and Brandstrom (2004) as outlined in Chapter 2 revealing variations in the use of language and terminology depending upon solo or ensemble contexts in popular music-making.

The second theme concerns the use of harmony as a structural tool, which again contrasts with the previous groups' reliance upon riff material. By default, this again meant that most of the arrangement was homophonic in design, although this

arrangement explored more variation in texture and tone colour than the one from the preceding group.

Turning to the use of the score, this provided not a script of the performance but instead an interesting compositional tool. The students' use of the score served both 'explorative' and 'reproductive' roles in their music-making (Hultberg, 2002). This resulted in an interesting adaptation, with the student arrangement or rather re-interpretation of the Toccata eventually lying somewhere in between portions of the fixed score material, and an entirely new creative enterprise.

The group performance exhibited aesthetic coherence as a consequence of these choices. Also, as they had remained closer to the original Baroque work in terms of score references (although for the most part unknowingly so), the teachers and I deemed their work the most successful adaptation, despite them utilising only a limited number of Bach's original ideas. Further, (and in keeping with the previous group commentary), their arrangement brought breath and fluidity to the original text via improvisation—a skill rarely exhibited in student classical musicians, but one likely to be responsible for the genesis of the original Toccata some four hundred years earlier. In later interview, Peter attested to the experimental nature of their music-making, describing it as “a weird form of folk, pop-impressionist fusion” (Peter, interview, June 23, 2012). Attention now turns to address the Russian group who chose an entirely different approach using the same Baroque text.

Russian Folk Toccata No. 1

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Jack	M	Music 2	Guitar	Catholic	Mixed
Alan	M	Music 1	Voice	Independent	Ear
Jason	M	Music 1	Drum Kit	Independent	Ear
Lex	M	Music 1	Guitar/Composition	Steiner	Ear
Matt	M	Unsure	Classical Piano/Composition	Government	Notation
Tim	M	Music 1	Guitar/Voice	Steiner	Ear

Table 5.3. Russian group survey summary

Where the previous group had worked almost solely at the direction of one student, the Russian group employed a more democratic approach. This involved their consideration of the various teaching directives, all of the original experiments, plus a few more that were generated in the final weeks before assessment in Week 5. The result was a comical pastiche arrangement the boys named ‘Russian Folk Toccata No. 1’. The piece combined Matt’s opening score material in the style of 19th century piano virtuosos (his favorite composer at the time was Rachmaninoff), sections resembling gypsy jazz, Alan’s spoken cabaret section (delivered in a Russian accent), blues solos from Jack, and finally, a thrash punk ending.

As recorded in Chapter 5, Andrew and I had been unable to unearth the inspiration behind their earlier ‘Russian’ experiment. This had been based on a repetitive guitar vamp pattern (Dm – Dm/A), which had been foundational to the arrangement and ensemble work then facilitated by Justin (see Chapter 5). I had later attempted to draw the boys back to the original purpose of the listening and copying exercise. This had been largely unsuccessful, as the density of the textures and the speed and complexity of the recording had proved almost impossible to learn by ear. As a consequence, the boys had returned to the vamp and combined it with some of the exposed melodies used in the Toccata, which Matt had been able to play from the score. Drummer Jason had added a shuffle swing pattern, which created a ‘gypsy jazz’ feel. Then additional melodies had been added including an abbreviated version of the bar 12 theme (also featured in the previous Toccata group), and an ascending melodic sequence which Tim labelled the “climbing up” section. As the passage was difficult to copy by ear, the boys asked if Matt knew the notes. Referring to the score, he found the passage (which occurs as early as bar 4) and sight-read it slowly. The original score reference is provided in Figure 6.22:



Figure 6.22. J.S. Bach *Toccata in D minor* (BW 565), bars 3-5 (No Date)

Confusion soon arose however as the boys were unsure as to what ‘chords to use’ with the piano line—despite the passage containing no chords at all as can be seen. Owing to the complexity of the line, Tim experimented with an ascending sequence of power chords, but the passage only began to gel when the boys realised that the line worked better without the chords by playing the ascending triplet sequences as series of guitar riffs. This involved the use of peer teaching strategies to find the correct notes on the guitar using Matt’s piano notes as a guide. Eventually the passage was performed in unison and repeated three times with the incorporation of a crescendo that climaxed on a strummed A⁷ chord, which then returned the students to the original D minor swing vamp. Drummer Jason provided rhythmic accompaniment, and suggested they play it faster, at the same tempo to his existing shuffle beat so that the drum groove tie the sections together. Eventually his drumming provided fill patterns to link the three sections, climaxing with a short solo over the final A⁷ chord at the peak of the final phrase. The beginning of the passage is transcribed in Figure 6.23:

Figure 6.23. Climbing up riff passage

After the addition of the climbing up section, the boys continued to experiment with the arrangement in the final week of rehearsals. In addition to Matt’s solo introduction, all of Justin’s earlier chordal material, Alan’s comic vocal delivery, blues solos by Jack including a key change to E minor, the boys added new sections, exploring musical references to rock, funk and thrash-punk styles. The last of these style experiments was created ad-hoc during a final workshop performance open to the rest of the class. Jason decided to initiate a spontaneous change to the end of the performance with a furious ‘1,2,3,4!’ count in. This prefaced rapid double-time drumming, which inspired strummed (or ‘thrashed’) E minor power chords, over which Jack overlaid distorted soloing or ‘shredding’ and Alan improvised Russian ‘Cossack’ style vocals and dancing (Appendix J, Track 3). The new thrash-punk section received such an enthusiastic response from the class that the boys included it unchanged in the assessed performance. Alan quipped that the ending was “*folking awesome!*” (Lesson footage, March 3, 2012).

Summary

The teachers interpreted these choices as a subversion of the task instructions, with only surface level detail from the original work retained. However, follow up interview with Jason provided further insights into some of the boys’ arrangement choices. As a rock drummer, Jason’s music interests prior to his enrolment at AMC

consisted of mainstream rock and grunge music, which he had played with friends outside of school. Yet, after enrolment his music interests had diversified to include hip-hop, blues and jazz, all of which he now enjoyed listening to and performing with other students outside of class time. Fluency in multiple music styles and the ability to transition between them had equally featured in the group performance. Unlike the previous group who had attempted a more deliberate engagement with the original Toccata, the boys had instead displayed versatility, referencing no less than five genres within the one performance, and finding rather resourceful ways of connecting each through ensemble communication. This versatility equally reflected their commitment to the social aspects inherent to the learning situation, and to performing music the rest of the class would enjoy. Further to this, there was evidence of ‘fun’ in their performance, with strong ownership of the process and end product. Showing a similar desire to retain ownership over the final performance, the Canon group is now addressed, completing this portion of the classroom ethnography.

Canon meets ‘Kimbra’

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Lucy	F	Music 2	Voice/Guitar/Song writing	Government	Mixed
Emily	F	Music 1	Voice	Independent	Ear
Tiffany	F	Music 1	Voice	Catholic	Ear
Anne	F	Music 1	Voice	Government	Ear
Monique	F	Music 1	Voice	Steiner	Ear

Table 5.2. Canon group survey summary

The girls in the Canon group had adopted a variety of informal learning strategies as previously outlined, including Emily’s experiments with the ground bass line, and the generation of vocal harmonies by the singers. By Week 4 of the research, the girls had gained a stronger sense of their pitch in relation to the rest of their ensemble. At Emily’s direction, the girls had decided to work in the key of G major rather than the key of D major as per the Canon recording, as the key suited their vocal ranges better. Emily, had successfully learned and transposed the original ground bass line, and then

developed a chordal (or ‘comping’) line transcribed in Figure 6.24, which mirrored exactly the chord sequence heard on the recording:

D A B m F#m G D G A

Figure 6.24. Emily’s ground bass ‘comping’ pattern

Over this the girls added short simplified vocal ideas, some new, and others adapted from the recording. These were introduced one at a time as a series of layered ostinati. This meant that the original polyphonic design of the work became homophonic, and the lengthy melodic ideas were shortened and simplified to make them easier to sing and remember. The vocal ostinati included a sustained soprano note by Monique, and a descending vocal line by Emily imitating Pachelbel’s opening violin passages. These are provided for comparison:

Figure 6.25. J. Pachelbel’s Canon in D major (P 37), bars 1-6 (ca. 1680)

Figure 6.26. Emily’s opening phrase in G major adapted from Vln. 1 bars 5-6 above (all sung to the syllable ‘dah’)

Tiffany then abbreviated her adapted bar 19 theme into a shorter vocal ostinato. Tiffany’s ostinato is transcribed for clarity, with the original bar 19 passage from the score provided as reference:



Figure 6.27. J. Pachelbel Canon in D major (P 37), bars 19-20 (ca. 1680)

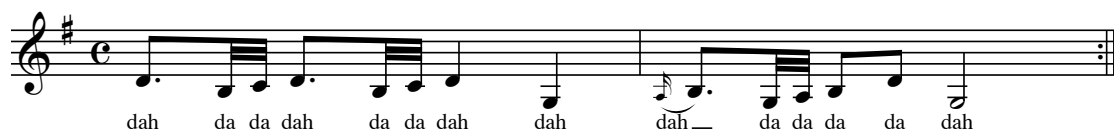


Figure 6.28. Tiffany's equivalent vocal melody in G major

However, as only minimal portions of score material were being used with very high levels of repetition, the girls thought their arrangement lacked variety and were keen to address this problem. Instead of returning to the score or recording for inspiration, Lucy decided at this point to add foot bells and harmonica to the existing lines. The bells provided a clearer sense of pulse, and the harmonica extended the sustained pitches sung by Monique. Noticing that the sound she produced on harmonica (with vibrato) sounded similar to the violins on the recording, I asked Lucy about her classical training and whether she would consider using her violin in the performance. Although the girls greeted the idea enthusiastically, Lucy did not. The exchange is worth including here as it revealed further insights concerning the value of classical training.

Lucy

Eager to understand more about Lucy's disdain for the violin, and her current music interests as a folk singer-songwriter, I decided to probe a little further. The classroom discussion records this exchange:

Christine: Um, so what's your main instrument Lucy, just so that I know?

Lucy: Well I started violin when I was four, so I'm classically trained on violin, I was playing 8th grade pieces but I completed grade 6, but I'm majoring in guitar and I sing too, and I did some piano lessons as well.

(Lesson footage, February 22, 2012)

Clearly Lucy believed it important that I and the other group members become aware of her classical accreditations, despite her reticence to use these skills in the classroom. Like many of the other popular musicians involved in the research project, multi-instrumental skills and versatility were clearly viewed as an asset by Lucy, yet it was apparent that the 'violin' represented a chapter in her musical development she now wanted to keep closed. The exchange resonated with me as an interesting counter to her use of foot bells and harmonica—two instruments closely associated with the anti-sophistication of contemporary folk music. Lucy's solo performances had aligned closely with this musical code, its "characteristic sense of self-expression", simple strummed accompaniment figures, and an emphasis on lyrics and the "nuancing of the vocal gesture itself" (Whiteley, 2000, p. 73). Clearly, the classroom task had exposed an internal tension between the development of her outside-class musical identity, and the perceived 'value' and 'status' of her prior classical training within it.

Returning focus to the arrangement, the girls acknowledged Lucy's songwriting skills and so asked her to create lyrics for them to sing in the Canon. Eager not to stray too far from the task brief, the girls wanted the lyrics to reflect an understanding of the Canon itself. The exchange which followed highlighted a different set of stances to the exercise; theirs' to personalise the performance, and mine; to interpret and convey a more objective understanding of the structural design of the Canon itself:

Anne: What is the song about? Does he [Pachelbel] write it about a specific thing?

Christine: I don't know that it's about anything specifically.

Anne: So we could sort of do whatever?

- Christine: Yes, I think you could do with it what you like...but I think that you should remember that the words should be secondary to what's happening musically.
- Lucy: So they, [the words] shouldn't be too complicated?
- Christine: It just needs to give you something to articulate...you don't need to necessarily tell us a story...although you can if you want to. The important thing is this idea of layering.
- (Lesson footage, February 22, 2012)

Upon later analysis of this footage I became aware of the misunderstandings exposed in this brief exchange. I was directing their attention to explore the harmonic and textural features beyond the surface detail. They, on the other hand, were revealing *their* understanding of music in relation to their perceived identity as singers. That is, if they were to sing Pachelbel's Canon, then surely it was a 'song'—and as a song, it surely *should* have lyrics. I had not considered before their need to engage with the performance through the need to construct narrative through which they, as singers, could communicate. For me as a classical instrumentalist, I had assumed the communication of the performance would stem from what was inherent to the design of the work, and that notes, textures and other compositional features would provide ample subject matter.

Seeking to personalise the performance further, the girls then decided to try and weave a pop song into their arrangement. This idea was inspired by Jon Schmidt, a contemporary performer-arranger whose adaptation of the Canon I had included as one of the additional learning resources for the project (see Appendix A for reference links to these). His instrumental version: 'Pachelbel meets U2', involves a syncopated re-working of the ground bass and insightful adaptations of the melodic and harmonic material from the Canon score. Schmidt's arrangement also transitions effectively into the chorus of U2's 'With or Without You' which uses the same cyclic four-chord I-V-vi-IV the girls had also referenced earlier in their initial informal experimentation (see Chapter 5). Schmidt's arrangement is an example of a fairly recent recording and performance practice known as a mashup. This is worthy of brief discussion.

Mashups

A mashup is a practice stemming originally from DJ and Hip Hop culture, where the distinction between recorded and live music production has become increasingly blurred (Väkevä, 2010). Using mixing software, music samples or ‘memes’ from existing recordings can be easily combined or ‘mashed up’ to generate new music (p. 60). In a live context such as the one the girls were working within, the practice typically involves the incorporation of vocal melodies or riff material from two different songs, layered over similar accompaniment material to merge the texts. The composition of a live ‘mashup’ may either incorporate melodic material from different songs as themes and/or counter-melodies, or in sequence—somewhat like a medley. Used effectively, the arranger or producer of the mashup is able to reveal the underlying similarities between different songs (even across distant styles or genres) by aligning the use of common harmonic, melodic and/or rhythmic accompaniment material. The mashup may also highlight lyrical themes between the texts as a consequence of their alignment, and play upon their deliberate thematic juxtaposition.

Pushing further, the girls used Schmidt’s example as a starting point for their own Canon mashup. As a contrasting text, they chose to weave in Kimbra’s ‘Settle Down’, a pop song that they all reported enjoying at the time of the research project (Kimbra, 2010). Their decision (and the set of challenges it presented) became the focus of their learning for the few remaining lessons to come. This in itself set up a very specific number of challenges for them (and myself as their teacher), as musically, the texts appeared completely unrelated. Unlike the Schmidt mashup example I had provided, which had used the same tempo, key, instrumentation and initial chord sequence as unifying elements between the texts, Kimbra’s pop song was riff or groove-based, in a faster tempo, a minor key and used studio generated vocal and instrumental ‘loops’. After accessing the clip online outside of class time (<https://www.youtube.com/watch?v=yHV04eSGzAA>), I considered the musical differences would be nearly impossible to reconcile in live performance.

Yet, remembering the point of the research I tried to remain objective. Considering the girls desire to construct lyrical narrative, and that for *them* the Canon was a song that needed to be ‘about something’, I began to consider what the song was about.

Remembering that the initial selection of the Canon held a ‘wedding’ association for them (as mentioned in Chapter 5), I began to see a possible connection. The music video, and the song were rather subversive in intent, with the female protagonist’s cry to ‘settle down’ and ‘raise a child’ portrayed through the eyes of a little girl—demeaning marriage as childish and outdated (to enforce her point, Kimbra’s dress and the sets for the video all date from the 1950s). A complete set of song lyrics were accessed and are provided below:

"Settle Down"³⁵

I wanna settle down
I wanna settle down
Won't you settle down with me?
Settle down

We can settle at a table
A table for two
Won't you wine and dine with me?
Settle down

I wanna raise a child
I wanna raise a child
Won't you raise a child with me?
Raise a child

We'll call her Nebraska
Nebraska Jones
She'll have your nose
Just so you know

I wanna settle down
I wanna settle down
Won't you settle down with me?
Settle down

Run from Angela Vickers
I saw her with you
Monday morning small talking on the avenue
She's got a fancy car
She wants to take you far
From the city lights and sounds deep into the dark

Star so light and star so bright

³⁵ Lyrics for Kimbra’s *Settle Down* retrieved May 14, 2012, from <http://www.azlyrics.com/lyrics/kimbra/settledown.html>

First star I see tonight!
 Star so light and star so bright
 Keep him by my side

I wanna settle down
 I wanna settle down
 Baby there's no need to run
 I'll love you well
 I wanna settle down
 It's time to bring you down
 On just one knee for now
 Let's make our vows

Star so light and star so bright
 First star I see tonight!
 Star so light and star so bright
 Keep him by my side!

The remaining discussion focuses on how the girls and I as teacher worked to include the song within the existing Canon arrangement. With the Canon material unchanged except for the addition of hand drums and bells by Lucy, the girls linked the two sections by joining in the new Kimbra section which they had learned directly by singing along with the pop recording. The vocal riff and the melody of the verse were sung a cappella for the new section, as transcribed in Figures 6.29 and 6.30:



Figure 6.29. Vocal riff from Kimbra's 'Settle Down'

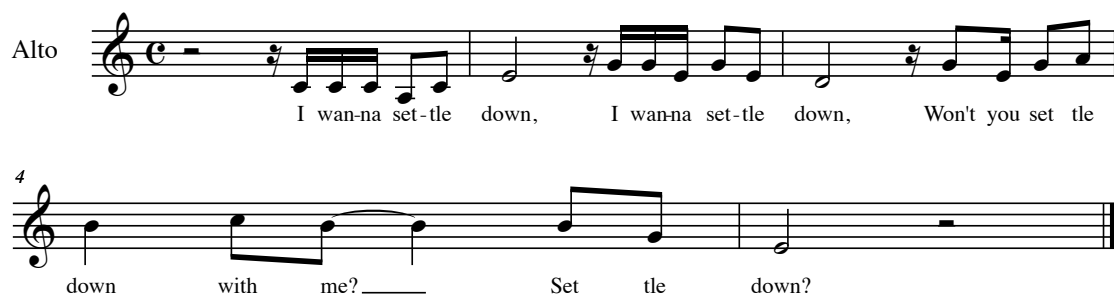


Figure 6.30. Verse 1 Kimbra's 'Settle Down'

But discrepancies emerged when transitioning between the Canon and Kimbra sections. The new section was in A minor and at a faster tempo, in contrast to G major for the Canon material. Although, as the new material had been learned by ear without accompaniment, the girls seemed unaware of the disparity created.

I ventured to critique their work, and in turn the girls attempted to address my concerns. They decided to pre-empt the new Kimbra section by including borrowed motifs from the pop song and working them into the earlier Canon material. Eventually, these started to fit with the ground bass accompaniment and forced them to make compromises between the different tempos. For clarity, a complete transcript of the pitched parts for the Canon section is provided in Figure 6.31. Importantly, each line in the arrangement entered separately, layer by layer, from the top voice down over the repeated ground bass and chords:

♩ = 40

Monique
Ooh

Emily
dah dah dah dah

Tiffany
dah da da dah da da dah dah

Anne
I wan na set tle down Won't you set tle down with

Piano Comp
G D Em Bm

M

E
dah dah dah dah

T
dah da da da da dah

A
me?

P.C.
C G C D

Figure 6.31. Canon group vocal parts (in full)

Although these changes unified the arrangement somewhat, I wanted them to address the underlying tonal relationships as well, which were central to my critique. However, only Emily and Lucy seemed aware that the arrangement had changed key for the new section. Emily attempted to tie the two sections together by singing the Kimbra riff (Figure 6.29) in G minor—the same tonal centre as the Canon material, and strengthened this by doubling her voice on piano. Despite this intervention, the Tiffany, Monique and Anne continued to sing the Kimbra melody a tone higher against her, creating a highly dissonant result in two keys simultaneously. A similar

problem had occurred earlier in the generation of vocal ‘harmonies’ (discussed in Chapter 5). The girls again appeared stuck—somehow aware they were singing out of tune, but unable to fix the problem. With modelling from Emily, Lucy, Justin and myself, the girls eventually re-learned the melody in the key of G minor, but remained oblivious as to why “pitch issues” occurred (Lesson footage, March 1, 2012). Their final performance was deemed successful by the teachers and students, and featured three balanced sections: the opening Canon section, modulation to the Kimbra material, and then a return to the Canon material for the close. Justin further assisted the transitions by showing Emily some useful chords to strengthen the modulations. Their performance is recorded in full in Appendix J, Track 4.

Summary

The above description revealed that some of the vocalists were yet to acquire a conceptual understanding of key. Seemingly, the vocal placement of the material in the Kimbra section had generated a form of embodied memory—similar perhaps to the act of learning a melody or a chord progression on an instrument that would always be remembered and executed in the same way each time. Limited by this strategy alone, they had been unable to solve the issues that emerged in the arrangement process, which required a more conceptually grounded understanding of key. Blom echoes these sentiments in relation to vocal students studying at the tertiary level. She states:

As the song has been learned by ear, the song’s ‘persona’ is learned as well, and often a pale ‘facsimile’ of another artist’s interpretation is delivered by the student performer. Students often find it difficult to rethink and reinterpret for performance a song that is very familiar to them and has been learned by ear—in other words, when the recording has become the ‘score’ or text (2006, p. 159).

These observations require further research, and outline limitations in the use of aural-based learning especially for vocalists and in particular for those seeking to undertake further tertiary study or professional work arranging and covering songs. Clearly for the singers in the classroom case study, instrumental skills and related theoretical knowledge had proved an asset in the situation at hand and potentially to situations yet faced either inside or outside the classroom.

Concluding Analysis

The students in each of the four groups had displayed a variety of strategies in response to the tensions presented by the given task. Due to the rather open ended instructions and the less directive role played by the teaching staff during this point in the research, the classroom learning situation presented the students with the opportunity to employ a number of musicianship strategies and a range of musical knowledge they had acquired outside the classroom. These entailed the use of peer demonstration, collaboration and improvisation; vernacular language and metaphor to represent ‘style’ or ‘feel’ characteristics; melodic and harmonic ‘formulae’ reflecting a variety of popular music styles; repetition and layered ostinati; homophonic textures; and most importantly, a synthesis of creative processing integrating performance, listening and composition skills. These strategies and skills resonate strongly with a similar set outlined in the review of literature undertaken in Chapter 2 in relation to aural-based learning, or ‘ear playing’ outside classroom learning situations.

The recontextualisation of these skills and traits into the classroom presented problems—not just in pedagogy (discussed Chapter 5), but here also in assessment. According to the marking criteria established before the research began, each student was awarded an individual mark in line with BOSTES marking practices. However, the fairly singular notion of ‘performance’ required in assessment did not reflect the level of creative reinterpretation undertaken, nor the students’ ability to work collaboratively. Moreover, it did not reward the students who had undertaken leadership roles, those who had taught material to weaker members, nor those who had shouldered the responsibility for decision-making and problem solving for their peers. This resulted in considerable inequity within each group.

In the Toccata group, most of the students adopted a passive stance, allowing the two most confident members: Mairead and Peter, to undertake most of the decision-making and problem solving. This then exposed an interesting relationship between these individuals in terms of their default learning stances, with Peter’s more ‘valuable’ music literacy skills eventually giving way to Mairead’s creative directions. However, despite her key role as arranger, Mairead was assessed only

using her vocal skills, whereas Peter's more technical piano playing had gained him a higher rank.

Similar themes could be observed in all of the student groups. In the Fugue group, Xavier and Blaire had taken more initiative than the other boys, as had Tim and Jason in the Russian group. Likewise, Lucy and Emily had remained active throughout the problem-solving sequence for the Canon group, yet had been assessed only on their performance skills on drums, bells, voice and piano—instruments valuable to the ensemble, but requiring only basic skills to execute. Further, the students were also not assessed on their social 'meaning making' through performance. As this proved to be the strongest factor underpinning their ongoing engagement with the task as discussed, a recognition of the social dynamics underpinning style and song choices for popular musicians would appear to be of the highest need.

These findings will now be placed within the broader time scheme of the research. Again, this will be undertaken using the LCT Specialisation dimension, which shall build upon the conceptual model provided in the previous chapter, and bring the discussion of Phase 1 to a close.

LCT analysis of Phase 1 classroom music-making

The learning undertaken by the students in the earlier 'informal' response to the task (Weeks 2 and 3) had generated experimentation and playful interactions (discussed Chapter 5). In most cases these early responses had generated a *knower code*—with knowledge acquired or displayed being an expression of the students' prior learning in either aural-based or notated modes of music learning. Stronger social relations (SR+), and weaker epistemic relations (ER-) had resulted, with few students acquiring new skills or explicit knowledge at this time. To recap, this had generated a 'code match' with the same code found to represent the Music 1 syllabus as established in Chapter 4. For reference, Figure 5.10 is repeated here to assist discussion.

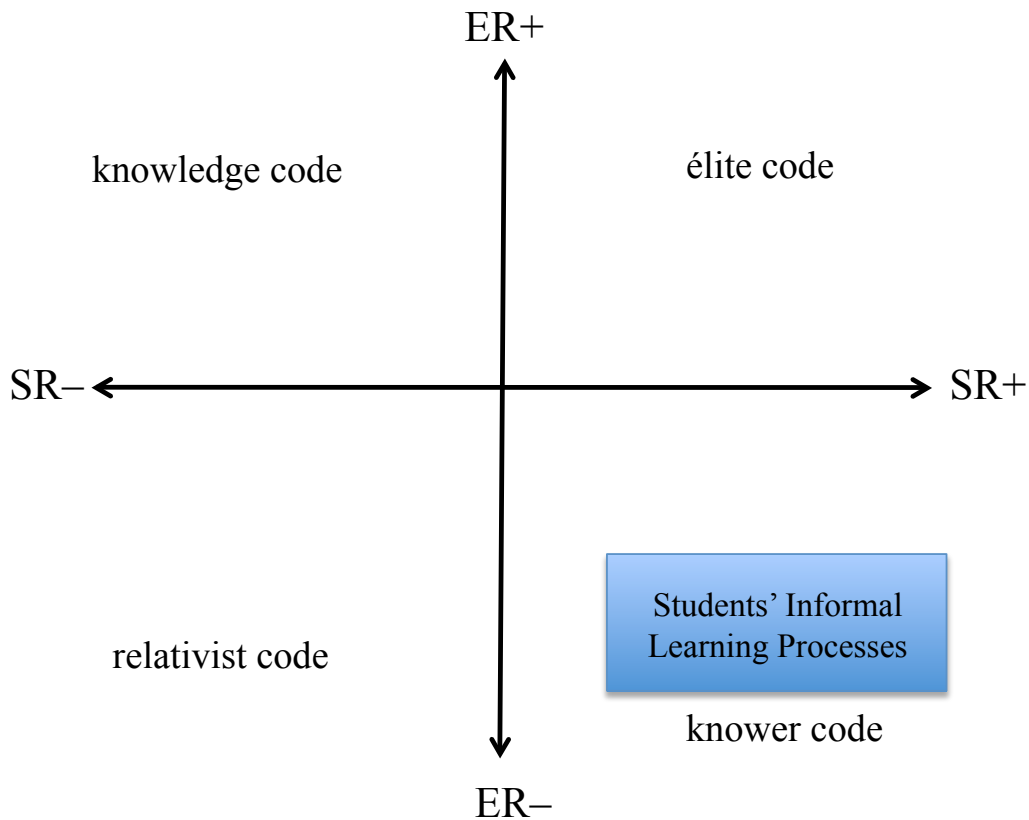


Figure 5.10. Knower code generated through initial informal classroom learning

Then, as a consequence of the various teaching interactions (and also their corresponding code alignments), a more diverse spectrum of stances was exposed. Tension resulted. In some cases, this initiated a shift to occur in students' positions to the task, and to their class members. Xavier and Blaire for example were eager to incorporate new ideas and technical concepts concerning structures, textures and key changes into their Fugue arrangement, with these students making considerable compromises in order to process these ideas. This resulted in a subtle shift toward a knowledge code (stronger ER), whilst maintaining stylistic coherence to metal, the common language of the group. Similar shifts had occurred in the Canon group, where Lucy and Emily used their knowledge of tonal relationships in order to address my late critique of their arrangement (ER+). However, this learning was secondary to their primary decision to incorporate the pop song, through which the girls maintained strong identification with their performance (SR+).

For the majority of the students however, minimal change was evident over the course of Phase 1. High levels of tacit knowledge resulted from the exercise, with students having difficulty articulating reasons for their musical choices and the relationship these bore to the original Baroque works that had been their initial inspiration. This was particularly evident in the Russian group who worked spontaneously with only pastiche reference to the score material (arguably ER-). For them, the social aspects of the learning situation (SR+) had remained central, that each student in effect 'have their musical say'. This meant that in performance, students such as Matt and Jack who featured as soloists received higher marks than the students who deliberated in making decisions. In contrast, the Toccata group had shown a rather insightful reworking of the original score material, and a more varied use of texture and tone colour in their arrangement as a result. As their arrangement was deemed the most thoughtful reinterpretation' of the original work (ER+), it was also deemed the most cohesive and successful adaptation.

So, Phase 1 had provided an opportunity for the more socially orientated aspects of musicianship or the 'extra-musical' to emerge in the classroom. This meant that ownership of learning and music-making remained high, as the students invested themselves personally in making choices reflecting their musical likes and tastes (for all SR+). Yet as a consequence of the aural learning process undertaken, repetition, truncation and simplification of the score material had featured across all student groups to some degree (a limitation arguably reflecting lower epistemic relations). These strategies reflect Ong's description of mnemonic devices required in oral (or rather in this case 'aural') learning traditions. He states:

In a primary oral culture, to solve effectively the problem of retaining and retrieving carefully articulated thought, you have to do your thinking in mnemonic patterns, shaped for ready oral recurrence. Your thought must come into being in heavily rhythmic, balanced patterns, in repetitions or antithesis, in alliterations and assonances, in epithetic and other formulaic expressions, in standard thematic settings (Ong, 1982, p. 34).

These strategies had limited the students' ability to access or reproduce much of the original thinking laid out in the original scores, featuring textural variation (specifically polyphony), complex harmonic and modulatory structures, methods of resolving dissonance, voice leading, and longer more varied melodic lines. Working by ear, these concepts currently remained out of reach. Their knowledge and knowing

had shifted somewhat, but remained tied to the style language frameworks in which their prior learning was based.

In summary, the following figure depicts the position of each group in relation to their earlier informal responses (as discussed in Chapter 5), and their new position. The figure captures significant movement in three of the four groups as a consequence of classroom music-making, and, considerable variation within the *knower code* quadrant of the Cartesian plane:

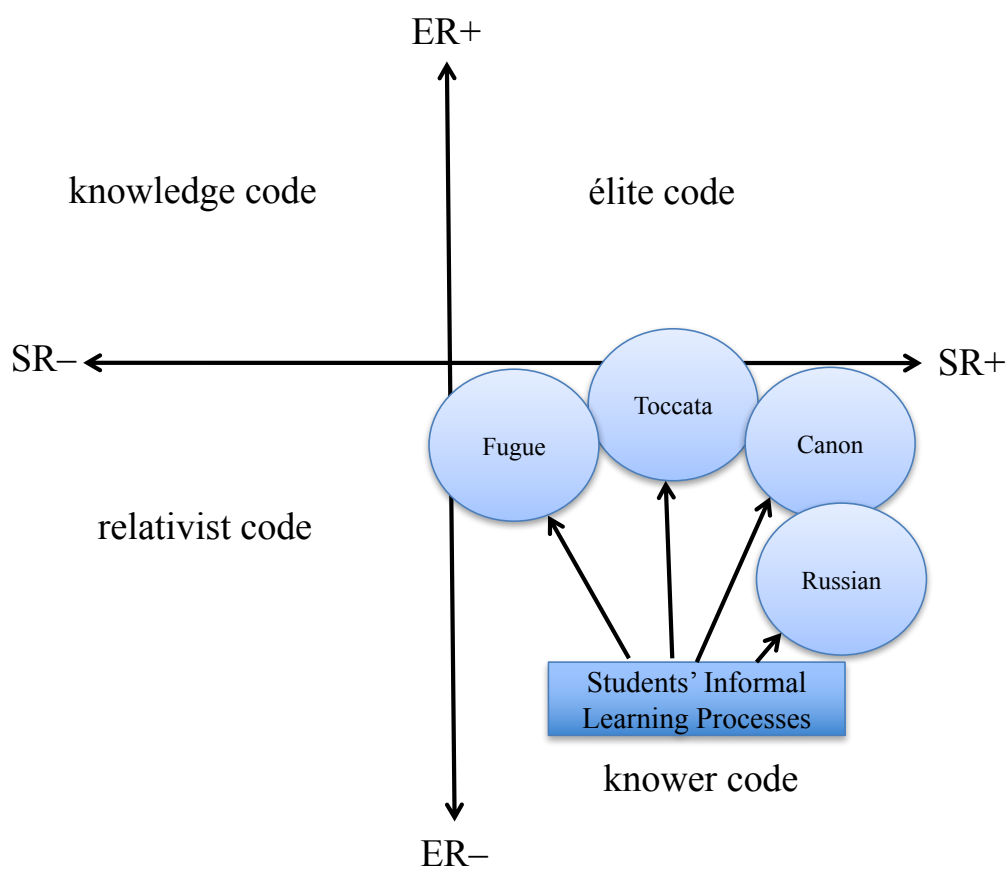


Figure 6.32. Phase 1 classroom music-making specialisation code alignments

The classroom learning ‘experiment’ had provided both conceptual, and social stretching as has been discussed. This was first shown by the students’ responses to the Baroque texts, then by the different teaching stances, and, finally, by the need to reconcile each of these factors with their own music-making and musical identity. In keeping with previous discussion, the figure represents general patterns of *relationship* and *influence* only, and is not an absolute depiction of all student

knowledge or knower attributes. What can be seen however, are four distinct communities of learning, each with an internal leadership hierarchy (as stated) but developed and maintained around a common set of goals and identity.

As the next phase of learning was conceived in order to stretch the students much further cognitively, these informal knowledge and skills would become the basis for knowledge construction of a more formal kind in tasks involving transcription and analysis. These tasks were devised in order to address some of the aural and musicology components for the Music 1 and Music 2 courses. As yet, the generation of abstract or conceptual learning from ‘informal’ learning experience has not featured prominently in the research literature for either popular music pedagogy or informal learning, with most research studies focused only on music-making and music creation. The focus of the next two chapters addresses this need.

CHAPTER 7: TRANSCRIPTION AND SCORING

Introduction

The relationship between abstract, conceptual or symbolic forms of sound representation and practical music-making remains something of a mystery in music learning. According to Swanwick, there is a tendency to keep separate “intuitive and analytical ways of making sense of the world” (1994, p. 4). Yet the premise that the two are linked continues to underpin constructivist educational ideology, upon which school curricula for Music in NSW and elsewhere are founded. Today, the syllabi for both Music 1 and 2 courses rest upon the premise that knowledge acquired in ‘learning experiences’ or ‘learning activities’ such as performance, composition, aural and musicology will “develop knowledge and skills about the concepts of music” (Board of Studies, 2009c, p. 9; 2009d, p. 9). But exactly how the *knower* constructs conceptual knowledge, and how teachers can facilitate this process remain largely unproblematised in the music education research literature. Questions remain as to how patterns of abstract thought are generated from more innate forms of practical ‘know-how’, hidden in layers of meaning that are both personal and experiential—yet are somehow still permeable to “talk, instruction and analysis” (Swanwick, 1994, p. 1).

The teacher of the student popular musician faces an even more challenging task due to the complete absence or minimal use of music notation as an anchor for discussion. Ear players tend to generate hidden or tacit knowledge (as has already been observed throughout the study thus far), and rely upon known and shared working formulae affecting the music produced and hence also the learning experience. Chapter 6 documented these as featuring verbal metaphor (descriptive terms or other forms of vernacular language); collaborative rather than individual processing; sonic and social factors underpinning musical choices; mnemonic aids such as repetition and homophony which affect the structural and textural organisation of sound; and most importantly, a holistic integration of performance, listening and composition skills throughout the music-making and learning encounter. Such knowledge is difficult to itemise, articulate, let alone notate, as the present chapter will serve to document.

Firstly, an overview of Phase 2 pedagogy is required. After the first task, the students moved to complete two interrelated tasks, the first a transcription and scoring exercise (completed in groups), and the second, a comparative written analysis (completed individually) using the music Concepts framework of the syllabi (Board of Studies, 2009c, pp. 16-19; 2009d, pp. 15-19). Due to the volume of data generated by these tasks, the transcription and scoring task is the focus of this chapter, and the written analysis task the focus of the next.

The choice of tasks for Phase 2 is significant. Both tasks involve two contrasting but interconnected ways of expressing musical knowledge: staff notation and spoken and written language. As outlined in Chapter 4, staff notation is a central fixture of the Music 2 course, which assumes instruction and assessment will be delivered through the use of scores from the WAM tradition. The Concepts language framework, is treated as knowledge common to both courses, but is the only vehicle currently provided for building and assessing focal knowledge for the Music 1 course and hence, the student popular musician. By bringing the tasks together, the relationship between these two different forms of knowledge and their perceived value in the classroom can be revealed.

In Chapter 4, ‘music literacy skills’ were deemed the chief marker differentiating student suitability for these courses, despite the fact that a range of stances, and historic connections between notation- and aural-based learning were outlined in the review of literature in Chapter 2. In order to explore these connections in greater detail, the pace of discussion and analysis must slow considerably at this point in order to tease out this relationship fully within the context of the case study at hand.

Importantly, the choice of tasks also brought a shift in focus. Beyond moving from practical to written activities, what framed the teaching and learning interactions revealed an underlying shift in legitimation code: from the facilitation of student creativity and personal expression in Phase 1 (a *knower code*, SR+, ER–), to a more clinical and objective expression of this learning on paper in Phase 2 (a *knowledge code*, SR–, ER+). In order to see the internal workings of this code shift, a different set of theoretical concepts are employed. These draw from the Semantics dimension of LCT, originally introduced in Chapter 3, briefly in Chapter 4, but here used in full.

Unlike Specialisation, which conceptualises social and epistemic relations between actors and their knowledge practices, the Semantics dimension provides a way of examining the constituent features of the musical knowledge actors use. Semantics articulates the degree to which meaning operates on a spectrum of relative strengths and weaknesses by employing two key concepts: *semantic gravity* and *semantic density* (Maton, 2013, 2014). In this, and the following chapter, semantic gravity (SG) provides a way of describing how meaning relates to a specific learning context on a continuum of strengths and weaknesses (+ or -). Learning based in practical experience, a specific musical work or music genre engenders a greater degree of semantic gravity, which metaphorically draws the learning down to the specific and concrete level. In contrast, semantic density (SD) encapsulates the degree to which meaning is condensed and then expressed in hierarchic, abstract, conceptual or theoretical form similarly on a continuum of strengths and weaknesses (again + or -). For music, this could entail the use of music terminology, forms of notation, analysis, music theory and so on. Semantic gravity and semantic density can be viewed not as static or unrelated ways of classifying meaning, as theoretically an infinite number of gradations and potential connections link the two.

Tracing the sequence of events from the classroom research project, the discussion moves once again between the four student groups: *Fugue*, *Toccata*, *Russian* and *Canon*, with classroom video footage, follow up interviews, written drafts and completed student scores constituting the primary forms of data. However, as data relating to the Fugue group proved the most comprehensive, discussion, analysis and theoretical appraisal of this group is used to demonstrate many of the broader trends observed within the classroom case study representing student popular musicians. Accordingly, the presentation of data and themes relating to the Fugue group is presented at length, and is supplemented by references to the research literature contextualising the emergent findings in relation to my observations as teacher and researcher. The remaining groups then follow, and the data confirms the same general pattern, but raises a number of problems that also emerged in association with the task. As both transcription and written analysis tasks were introduced at the same time (with intended overlap between the two), an overview of the entire second phase of learning is provided next to contextualise these findings.

Overview of Phase 2 Pedagogy

Phase 2 of the classroom research took place in weeks 6 and 7 of the project, directly after Phase 1. Two parallel tasks were introduced. The first was undertaken in the existing student groups, involving the creation of a single musical score to represent their performance arrangements. The second was a written task completed individually, using the syllabus Concept areas (pitch, duration, texture and so on) to compare both the arrangement and the original Baroque work upon which teaching and learning had been inspired. The design and rationale for these tasks addressed aural and musicology objectives for both Music 1 and Music 2 courses concurrently (Board of Studies, 2009c, p. 12; 2009d, p. 12).³⁶ The tasks were designed with the intention that the transcriptions would naturally scaffold the Concepts analysis exercise. The task instructions were presented as follows, and are included in full in the teaching program provided in Appendix A:

In the same groups as Task 1, create a transcription (score) of the arrangement performed in Task 1. Then, using this transcription and the original score and recording of the work, prepare a comparative analysis discussing the original in light of its relationship to the new arrangement. Focus your discussion on ONE of the musical concepts (pitch, duration, texture, tone colour, dynamics and expression, and structure), making sure that a different musical concept is analysed by each individual group member.

As teacher, I addressed the whole class together in order to establish a common framework and set of expectations. This was done in a traditional classroom setting at desks rather than in the rehearsal spaces used for Phase 1. I began by reading the assignment instructions above. I also introduced some of the conventions behind the organisation of scores, providing historic and pedagogic grounds for the exercise. However, as I anticipated a variety of competency levels and experience with notation, a spectrum of scoring modes and tools were provided within my teaching sequence and in the assessment outcomes (see Appendix A). These included the

³⁶ As outlined in Chapter 4, Music 1 and Music 2 syllabi state that activities involving notation of various kinds accompany the study of repertoire from chosen and set topics, with the music Concepts serving as a common overarching framework for both courses. Transcription and score reading skills employing Western staff notation, however are more clearly mandated in the Music 2 syllabus (Board of Studies, 2009d), with notation requirements for Music 1 less well defined and subject to the needs and interests of students (Board of Studies, 2009c).

provision of A3 graphic paper to facilitate graphic scoring, guitar tablature, and also the use of digital notation software.

I then initiated question and answer sequences to generate definitions for each Concept area (pitch, duration, texture, tone colour, dynamics and expressive techniques and structure), anchoring student discussion to the scoring exercise.³⁷ As each Concept area was defined, I made reference to possible visual representations. For example, as *duration* and *structure* are typically associated with issues of timing, these concepts often affect the horizontal layout of scores. As *pitch* is associated with height and depth, and *texture* associated with foreground and background layers, these more often affect vertical layout, and so on. I also demonstrated the process of melodic transcription using the iconic bar 12 theme from J.S Bach's *Organ Toccata in D minor* (BWV 565) as two of the groups had featured this melody. Melodic transcription was demonstrated in two ways, using both graphic and staff notation. My intention at the time was to make as few assumptions as possible, providing the students with the broadest possible definitions for the syllabus Concepts and their potential visual representation. The students were offered a variety of notation types with which to complete the exercise, these including graphic symbols, guitar tablature, chord symbols, Western staff notation or any combination of these as desired.

Transcription: Overview of Results

As the transcription exercise was completed in groups, the students needed to reach a consensus regarding visual format. At times this proved difficult, as the discussion below will show. It had been my assumption that the groups would continue to collaborate during transcription as per Phase 1, and that different competencies would be mediated as before through peer teaching, modelling and facilitation. I also believed that my preceding scaffold and demonstration, plus the rich learning experiences provided thus far would be ample foundation. What I was unaware of were the implications of underlying shifts in codes of legitimation, from a *knower* to a

³⁷ Cain (2013, pp. 82-83) provides a detailed discussion of the use of 'Initiation – Response - Feedback' sequences in formal classroom learning, which typify the classroom exchanges used at this point in the research.

knowledge code, and with this shift exposing the students' and teachers' value of staff notation as a form of 'powerful knowledge' (discussed later in the chapter).

As my preceding demonstration had outlined scoring conventions for Western staff notation, all four groups submitted scores using this format. Despite many of the students already being able to read guitar tablature or 'tab', none chose to use this. Two groups submitted scores by hand, and three using digital software. As the digital program provided had a playback function, the groups that used software to create scores were able to reconstruct visually that which had been previously learned by ear.

The task generated enthusiasm from the students, but unveiled a series of implicit stances. Many of these aligned with the students' original learning profiles in aural, mixed or notation based mediums (provided in Chapters 5 and 6), so these again foreground the discussion of each group. In line with previous discussion, the students most familiar with staff notation were those who generally undertook leadership roles. However, many of the student popular musicians were eager to become proficient with staff notation, despite receiving minimal instruction in using it prior to this task. The strategies they employed not only showed ingenuity, but also revealed a spectrum of knowledge connecting individual strengths in ear playing with possible visual representations. As stated, findings from the Fugue group will be discussed first with detailed analysis revealing a semantic profile representative of the broader student cohort.

Fugue Group: Transcription Learning Processes

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Conrad	M	Music 1	Guitar/Composition	Government	Ear
Klein	M	Music 1	Guitar/Composition	Government	Ear
Blaire	M	Music 1	Guitar/Drum Kit	Government	Ear
Xavier	M	Unsure	Guitar	Catholic	Ear
Oliver	M	Music 1	Composition/Drum Kit	Independent	Ear
Ned	M	Music 1	Contemporary Guitar/Composition	Independent	Ear

Table 5.1. Student survey results Fugue group

The students in the Fugue group were those least experienced with staff notation, as their prior learning had been undertaken by ear. Noting their hesitance to begin the process, my colleague Justin decided to step in to assist the boys in the early stages of Phase 2. Justin began by asking the students to make a decision about how they would measure the lengths of sections played in their arrangement. The conversation that ensued unveiled the boys' rich understanding of their performance, not easily expressed in words, but rather, through the use of gesture and improvised syllable patterns known as non-lexical vocables. Recorded here in full, the teaching exchange began as follows:

Justin: What I would do from here is work out what the tempo or feel is...so, the number of bars if you like that go past. (To drummer, Oliver)... Can you sing me a little bit of the time so I can hear it?...Show me the count in!...What do you do?..[Oliver claps a bar of 4/4 at approx 140 bpm]. Ok, now these could be a number of things...[Justin joins Oliver in clapping the pulse]...These [claps] could be quavers...[Justin counts to eight and demonstrates the relationship of this beat to Oliver's beat by adding a crotchet pulse against it]...Or, these could be like minims! It really depends on what else is going on. So that's determined by you guys as to what your count in actually represents...(to guitarist Conrad), So sing what you're doing...

- Conrad: It just chugs.
- Justin: Let's just hear it...[Justin is still clapping Oliver's earlier pulse beat. Conrad uses the spoken syllable 'da' to articulate the rhythm for the break-down power chord riff against Justin's clapped pulse beat. After several repetitions Justin joins Conrad in repeating the syllables to confirm his understanding of the pattern]. What could they be?...[Justin isolates and repeats the syllables for just the opening bar of the riff]...What would be logical?
- Oliver: Quavers
- Justin: To me it sounds like quavers... (to Oliver) Now sing me your drum feel...[Oliver used the syllables 'du' and 'ka' in order to differentiate the tonal qualities of the bass drum rhythm (du) from the snare drum hits (ka) on beat three of his drum pattern. As before, Justin imitates the pattern, this time confirming his recognition of the meaning behind the different syllables used by mirroring Oliver's hand gestures to ghost the snare drum hits on beat 3 of the pattern in each bar]...So you hit the snare there?...So it sounds to me like your beat is crotchets...Your count in is crotchets. If you can get a firm sense of that it's going to make life a little bit easier.
- (Lesson footage, March 8, 2012)

By using echoing and mirroring strategies, Justin reinforced the importance of the students' aural and kinaesthetic memories of their playing, and used these to build consensus concerning the value of durations (bars and note values). His strategy also weaved in unfamiliar rhythmic terms ('minims', 'crotchets' and 'quavers'), using student responses as demonstration for these. From there, Justin used the pulse (now consolidated as a crotchet), in order to count the number of bars for each section. A sound recording of the performance aided this process.

Next, the boys' four bar melodic subject came into focus, as it featured in most sections of the arrangement. Using the graphic step diagram that I had modelled earlier, Xavier created the following representations, against which Justin introduced

equivalent sketches of the same material using staff notation as is shown in the following work samples:

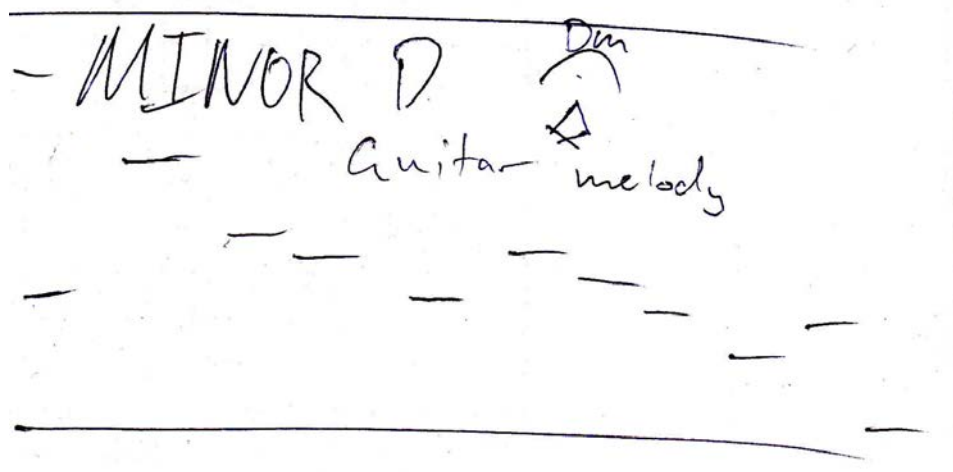


Figure 7.1. Xavier's graphic fugue subject melody, bars 1-4



Figure 7.2. Justin's fugue subject, bars 1-4



Figure 7.3. Xavier's graphic fugue subject melody, bars 5-6

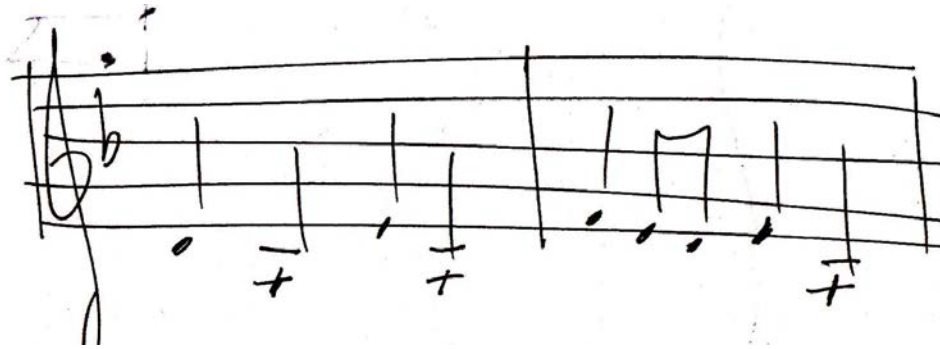


Figure 7.4. Justin's fugue subject, bar 5-6

Although given the choice to continue using graphic symbols, tab or other means, the students were keen to continue to use staff notation to complete the exercise. Using a template created by Justin, the boys began to piece together their score by sketching out the broader structural units in terms of bars, and then inserting the melodic material provided by Justin at the appropriate structural points. Xavier then derived the melody in A minor for the second subject, by recalling the notes he had played in relation to their positions on the fretboard of his guitar. Unassisted he then notated these in the score at the correct structural points.

By Week 7, the focus of the transcription process turned to the accompaniment riffs played by drums, bass and guitars. Here problems began to surface as the boys' break-down riffs featured complex syncopation. Noting they were struggling, I provided some extra scaffolding for the exercise:

Christine (to Oliver): So your basic pattern...how does it go?... [Oliver uses the syllables 'du' and 'ka' as before to denote different parts of the drum kit, while simultaneously tapping the pattern on the desk]. Exactly...so the time signature is what?

Oliver: It's 4/4...[I tap out a crotchet pulse while Oliver continues to demonstrate the pattern using the spoken syllables as before].

Christine (to Oliver): So if that's the beat...[I continue tapping crotchets while speak]... then what kind of notes are you playing at the start?

Oliver: They're quarter notes?...[I continue to tap the crotchet pulse]... I mean whole notes?...

Christine: So there are actually two notes inside each beat...[I continue to tap the crotchet pulse, but slow down the pattern in order to make the relationship between the pulse beats and the quavers or 'eights' more deliberate]...So they're actually?...[pauses for response]

Oliver: I don't know the note names very well yet.

Christine: They're eighths... which I would call quavers.

Oliver: Oh yeah.

(Lesson footage, March 15, 2012)

Despite Oliver's tentative responses, I decided to press on and provided graph paper in order to illustrate the exchange visually rather than using words. As Oliver's pattern was based on a sequence of quavers, I asked him to recall the pattern again and used the graph paper provided to notate the bass drum pattern as a series of 'X' symbols corresponding to the subdivided quaver pulse (Figure 7.5 'BD'). I then overlaid note stems and inserted rests to complete the illustration:



Figure 7.5. Bar 1 of Oliver's break-down bass drum line

Klein and Xavier then joined in to help complete the patterns played on snare drum ('SD') and crash cymbal ('Crash') for the first two bars of the drum riff:

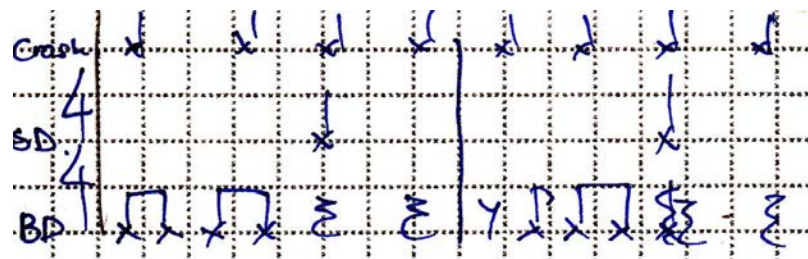


Figure 7.6. Break-down drum riff, bars 1-2

But then the process became more complicated as the riff for bars 3 and 4 of the pattern involved syncopation. The conversation records this:

- Christine: Ok, anything else happening?
 Oliver: Yeah the second time it goes...[Oliver uses spoken syllables and hand gestures to demonstrate bars 3 and 4 of the pattern].
 Christine: Ok, so it has a slight variation... where does the crash happen in that pattern? Does it happen at all?...[Oliver gestures a crash cymbal hit on each crotchet beat].
 Klein: Yeah...every beat.
 (Lesson footage, March 15, 2012)

Displaying greater confidence on paper than with terminology, Oliver then completed the pattern:

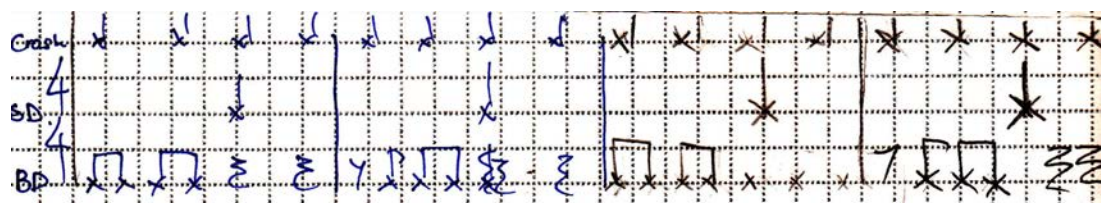


Figure 7.7. Oliver's completed 4 bar riff pattern

Oliver was unable to finalise bar 3 due to the complex syncopation (note the missing note stems in the 'BD' line above). Due to time constraints I later added these in for him, reassuring him that it was a difficult example. This rushed interaction did however highlight the pedagogic limitations of introducing notation so late in student learning, where students' technical abilities in performance far exceeded their note reading abilities.

Xavier then used Oliver's drum riff to derive the interlocking guitar and bass riffs. This required him to subdivide the pattern, using his understanding of 16ths (or semiquavers) in relation to the 8ths or quavers already displayed. Again, based in relation to the guitar fretboard, he singled out each pitch within the chord sequence and wrote these on the appropriate stave. As time was running out, Xavier took

responsibility for completing the score at home without further assistance from the rest of the group or the teaching staff. Solo passages did not require transcription, so this significantly sped up the process. Although containing numerous enharmonic and rhythmic inconsistencies and several incomplete passages, it is a remarkable attempt for a student previously inexperienced in using staff notation. A scan showing a portion of the original break-down material from the originally submitted hand-written score is provided in Figure 7.8:



Figure 7.8. Fugue group score excerpt initial break-down section, second phrase

Thematic analysis

The preceding description outlines a number of different ways the students and teachers expressed knowledge in relation to the original performance, and now, the transcription of this using staff notation. When analysed thematically, five categories emerged, which presented in roughly this order:

Knowledge expressed or generated using:

- 1) Spoken or sung syllables (non-lexical vocables) and bodily gestures
- 2) Touch and the spatial layout of instruments
- 3) Graphic representations
- 4) Excerpts of staff notation
- 5) Full scoring

Each category required investigation, which was undertaken with the support of relevant literature. Findings will be presented in relation to the preceding data. Then, in order to examine the relationship between the different categories as they emerged in sequence, the LCT Semantic concepts highlight connections between the categories.

1. Vocables and bodily gestures

The body, as a primary agent for music cognition has recently been acknowledged as foundational to music learning and music perception (Broughton & Stevens, 2009; Juntunen & Hyvonen, 2004; Snell, 2009). As Bowman states, “the body is an inextricable, constitutive element in music cognition” (2000, p. 48). However, just how this internal ‘felt’ knowledge connects with external modes of musical communication remains an area currently requiring further address in popular music pedagogy. For the Fugue group, embodied knowledge manifested in two ways: non-lexical vocables (nonsense vocal syllables such as ‘du’ and ‘ka’), and through physical movements or ghosting gestures (tapping, strumming, ‘air’ drumming etc) mirroring the somatic experience of the live performance event.

In the preceding transcripts, both students and teachers improvised non-lexical vocables during the formative stages of the transcription task to recall and re-enact rhythmic and pitched memories.³⁸ The vocables were also frequently accompanied by physical gestures or ghosting movements to reference bodily memory. Physical gesture has been documented as integral to popular musicians’ performance, improvisation and ensemble communication (Snell, 2009), but as yet remains absent from research undertaken in classroom learning. Together, the presence of the vocables and gestures worked to generate a basic form of abstraction, providing the means to itemise, verify and translate the students’ tacit knowledge before the process of visual depiction could begin. When referenced in terms of the students’ fine-motor

³⁸ The use of non-lexical vocables are well documented in many non-Western music learning traditions where ethnomusicologists have revealed ‘cross-modal’ connections between sound, speech, and visual domains as common in musicians who perform and learn repertoire primarily by ear (Fatone, 2010; Hughes, 2000).

or touch memory, the students' embodied knowledge extended to incorporate meaning associated with the spatial layout of instruments. This form of knowledge I shall term 'kinaesthetic knowledge'.

2. Kinaesthetic knowledge

Bowman (2000) discusses the way violinists "hear music with their fingers" as evidence of the connection between tactile sensation and aural cognition (p. 55). Further, Godøy (2003) proposes the term 'motor-mimesis' to explain cross-modal learning linking 'sound', 'visual imagery' and 'sound-producing actions' (p. 318). In the preceding account, the instrumentalists' touch memory became the basis for labeling systems representing pitch or rhythmic themes and riffs. Examples of this were observed in the Fugue group much earlier (see Chapter 5, pp.138-139), with previous classroom discussion revealing Xavier's understanding of pitch linked to the physical layout of his guitar. The same kind of processing is evident here, with Xavier able to work backwards from Justin's notated examples to transpose the fugue subject, and deduce the pitch and duration patterns of the riff material by similar kinds of processes. These strategies remained relatively tacit, occurring spontaneously and never requiring further discussion. Together, they provided foundation for the students' use of graphic symbols, and, the introduction of staff notation in the teaching and learning sequence.

3. Graphic representations

The use of graphic symbols provided an easy way of depicting embodied and kinaesthetic knowledge. Although remaining inconsistent in design and presentation in each case—dashes to capture pitch by Xavier, or grid diagrams to depict rhythm by Oliver and myself—the use of graphic symbols provided a way of isolating individual riffs, melodies and rhythms and so on, and writing them down. When studied closely the boys' graphic diagrams reveal insights into their established analytical thinking. For example, Xavier's melodic graph (Figure 7.1) shows remarkable accuracy in representing like pitches within the key of D minor (the 1st, 5th and 8th notes all use the same latitude line for the tonic note 'D'), with the two phrases for the theme reflected in separate graphic depictions (Figure 7.1 and 7.3). The graph is however

limited to pitch and phrase structure, and does not capture note lengths or metre. Conversely, the graphs constructed between Oliver and myself (Figures 7.5 and 7.6) depicted pulse and rhythm, providing a template by which to measure the process of subdivision in his drum line. These representations would prove useful pedagogic tools linking embodied and kinaesthetic knowledge with short staff notation excerpts, introduced next by the teachers, but then taken up by the students.

4. Staff notation excerpts

Staff notation excerpts were introduced via the graphic representations, and each time in sketch form of individual instrumental parts. The fragments served to provide a more stable and consistent format through which to capture not all, but multiple forms of knowledge relating to both pitch and rhythm simultaneously. As the teachers introduced these, staff notation also provided the means to visually reinforce new and known pitch and rhythm terminology in relation to the boys' playing. From here, this visual medium provided a context by which to piece together all of the preceding information.

5. Scores

The scores provided a single format in which to align discrete pieces of notated information generated in relation to individual learning, and then align these to represent the whole ensemble performance. From here, the scores would generate further discussion in the coming week concerning theoretical concepts such as textures, chords, keys, and so on, and increased awareness of the differences between individual performance parts and those played by other ensemble members, and in time, the content of the original Baroque works already provided in score form.

When aligned, the five distinct classifications—embodied vocables and gestures, kinaesthetic knowledge, graphic symbols, staff notation excerpts and whole scores—reveal 'cross-modal' links between aural, kinaesthetic and visual modes of communication (Fatone, 2010, p. 397). As each knowledge type occurred in a general sequence, a theoretical analysis was undertaken using LCT semantic concepts in order to reveal potential connections between embodied and tacit knowledge (representing

context dependence or SG) and more abstract representations (representing higher condensations of meaning or SD). As findings for the Fugue group were representative of broader trends within the whole case study (discussed later in the chapter), these theoretical tools have been used only with regards to the preceding summary.

Fugue Group: Semantic Profile for the Transcription Exercise

A series of transitions took place for this group, translating individual learning experiences gained in performance into a collective abstract score representation. The instigator for this process was the group performance. Importantly the performance and arrangement process undertaken to this point (discussed in Chapters 5 and 6), had already involved primary analysis, without which it would have been impossible for the boys to learn and structure the musical material. However, performance knowledge had been gained cross-modally, involving the integration of a number of individual tacit skills or particulars including muscular and auditory memories associated with physical touch. Such knowledge is embedded in layers of *context dependence*, exhibiting strong semantic gravity (SG+), and was different for each ensemble member.

The first step away from this very rich context dependent learning involved the use of non-vocables and ghosting gestures, which served to represent, for the purposes of communication, ideas implicit in the performed musical event. In other words, musical actions (SG+) were subsequently expressed using embodied vocables and gestures—entailing a very simple or basic form of generalisation or abstraction (or moving toward SG–, SD+). Equally embedded in memory is knowledge gained through the physical touch and spatial layout of instruments (again strong SG+). This kinaesthetic knowledge is also situated bodily, but is capable of generating simple abstract labels in regular units of sound or ‘notes’ (again toward SG–, SD+), arguably exhibiting more condensed meaning than the preceding vocables and gestures. As this sequence was observed across the group (although not by all members), a series of upward waves were generated in the groups’ semantic profile as shown in Figure 7.9:

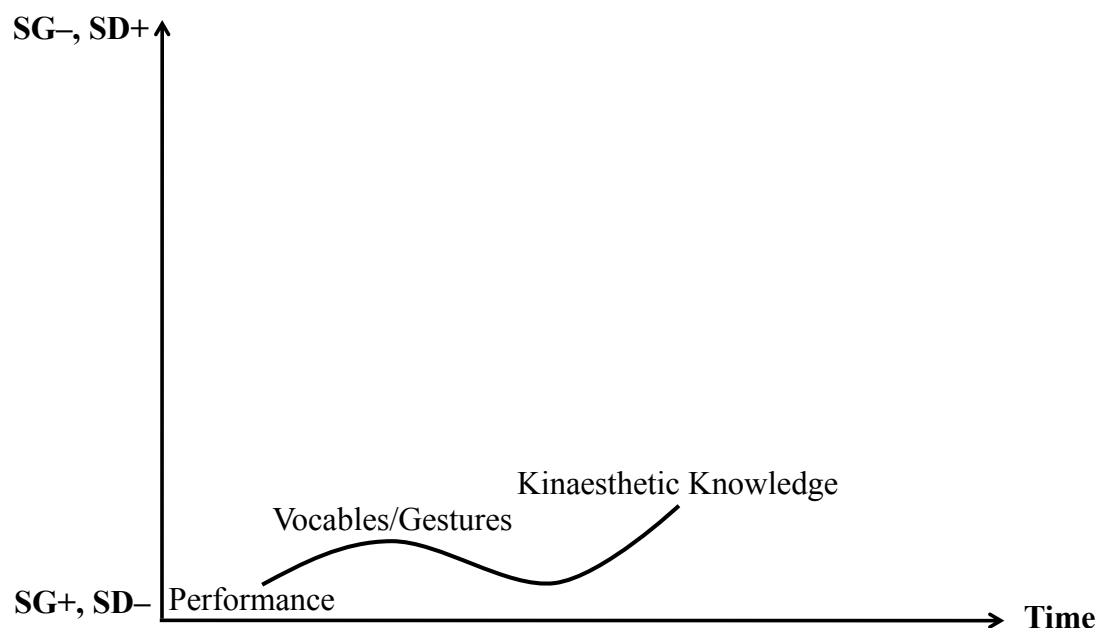


Figure 7.9. Fugue group initial semantic profile

Once graphic depictions were attempted, individual memories of the performance (SG+, SD-) are capable of progressively representing more and more information: pitches, intervallic relationships, and phrase structures, rhythmic subdivision, polyrhythm, syncopation and so on, although these terms were not explicitly labelled as such. This entailed a synthesis of meanings from singular (or weaker SD-) toward more abstract or condensed form (SD+). When standardised using staff notation excerpts, more meanings can be represented using singular symbols, capable of representing tonality, pitch names, phrase structures, exact note durations and subdivisions simultaneously (progressively stronger and stronger SD+). To then compile these into a score, each of the individual performance parts and their abstract depictions needed to be aligned, in order to reconstruct visually music played by the whole ensemble. Hence, learning must return to the memory of the performance exhibiting strong context dependence (SG+), in order to be depicted collectively in increasingly abstract form (SD+). The resulting profile shows the series of upward sweeping waves generated through the expression of these knowledge types over time:

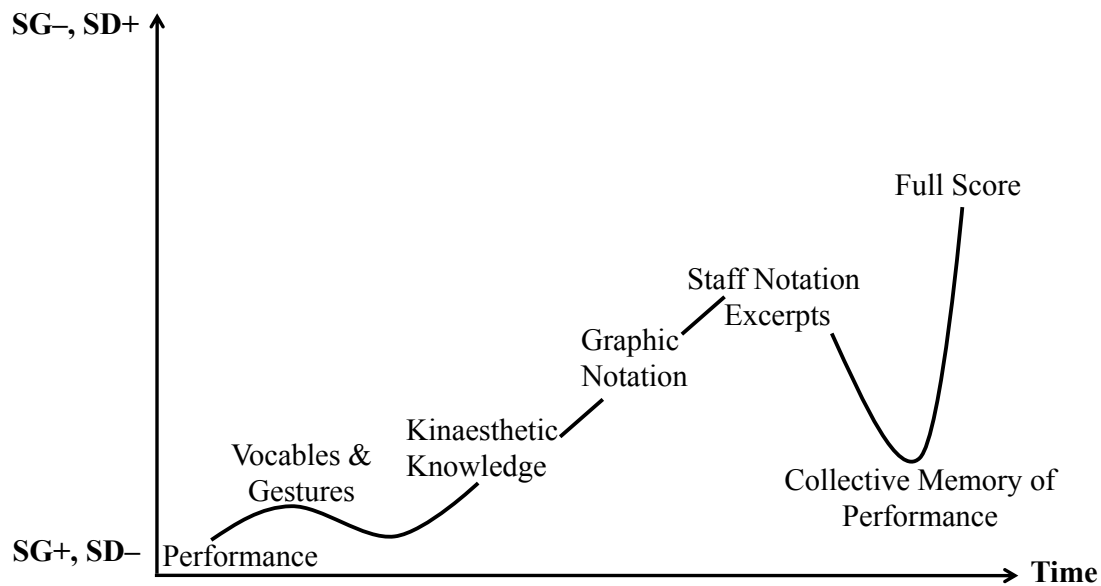


Figure 7.10. Fugue Group semantic profile for transcription exercise

The figure depicts how information contained in the original performance was made transparent—pulled apart, itemised, labelled, manipulated and systematically put back together in progressively more highly condensed form. At the same time, the exercise took the boys’ learning on a specific trajectory, not involving full participation by all members, with Xavier taking more responsibility for the completion of the full score than the other boys. As such, an evaluation of the task is needed in order to place these findings against those established in the earlier chapters.

Evaluation

Firstly, the boys’ choice to use staff notation to complete the task highlights a theme emergent in Chapter 4 concerning the perceived value of staff notation in classroom music education. With multiple modes of scoring available, I asked the boys during the course of the exercise why they had decided to use staff notation. They replied simply, “because it might get us more marks” (Lesson footage, March 10, 2012). I was quick to dismiss this assumption, assuring them that consistency and accuracy were more important. At the same time, I was aware that both Justin and myself had used staff notation to demonstrate the transcription process, and that this had very likely implied a preferred scoring medium. Yet there were other factors involved. In a later interview, Xavier stated the transcription exercise had been the task he “valued

most”, precisely because he enjoyed the challenges it had entailed (Xavier, interview, June 6, 2012).

Yet, whilst new skills were gained, equally something was also lost during the exercise. The construction of the score did not allow for all of the information learned in performance to be visually depicted. This meant that an inevitable prioritisation took place, with precedence given to pitched and rhythmic content over variations in tone colour and expression. Moreover, the construction of social meanings in association with their love of metal here became overshadowed through the need to prioritise knowledge only relevant to scoring.

In contrast with these limitations, a very different trend can be witnessed in pedagogy. Due to the implicit focus on knowledge of a specific kind, surprising uniformity can be witnessed between Justin and my own teaching strategies for transcription—despite the fact we did not confer during this process. However, where the exercise provided a clearer set of boundaries and purpose for the teachers, a number of specific tensions also surfaced in association with the exercise. These shall now be explored in depth with reference to the remaining student groups, with an analysis using LCT specialisation codes provided in the final summary.

The Remaining Groups: Tensions Emerging During Transcription

The three remaining groups participating in the research generated a similar semantic profile to the one just described, but alongside this finding a number of tensions also emerged. These manifested for two reasons. The first was pragmatic, and stemmed from difficulties in depicting the looser improvised elements of the performance arrangements. The second was more axiologically charged—meaning, proficiency with staff notation became a way for certain students to elevate their status above other group members. This did not happen as markedly in the Fugue group, as all of the students had more limited music literacy skills at the beginning of the task. For the remaining groups, specific individuals had existing expertise. Instead of these students adopting a pedagogic role as they had done in the past, this existing knowledge would become a point of tension, despite there being considerable room for flexibility and negotiation in the presentation of each group score. The

forthcoming summary of the remaining three groups will highlight similarities to the preceding sequence and also document these tensions. For clarity, each remaining group, its members, and their original learning profiles are again provided to preface the discussion.

Canon group

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Lucy	F	Music 2	Voice/Guitar/Song writing	Government	Mixed
Emily	F	Music 1	Voice	Independent	Ear
Tiffany	F	Music 1	Voice	Catholic	Ear
Anne	F	Music 1	Voice	Government	Ear
Monique	F	Music 1	Voice	Steiner	Ear

Table 5.2. Student survey results Canon group

As previously stated, the Canon group were all singers with a variety of prior vocal and instrumental training. Like the Fugue group, the girls initially worked together, with analysis of the lesson transcripts displaying a very similar semantic profile to that already outlined. Yet, there were also differences as Tiffany, Anne and Monique had no instrumental skills so were unable to generate pitch names for their vocal parts in relation to touch (kinaesthetic knowledge). Emily and Lucy could more easily do so.

Sometimes teamwork overcame these obstacles. Tiffany decided to work with Lucy to find her sung notes on the piano. Tiffany generated a series of graphic representations, transcribing the vocables already present in her sung melodic line as pitch names, with arc shapes and spacing used to indicate relative durations as follows:

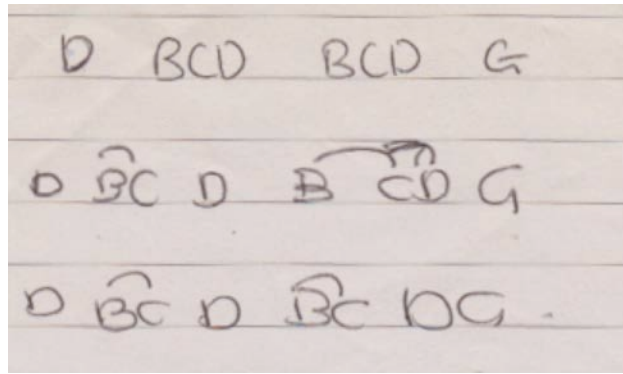


Figure 7.11. Tiffany's initial graphic representation of her sung melody

Next, Tiffany added beats against the pitches to represent pulse and metre, increasing the semantic density of her graph:

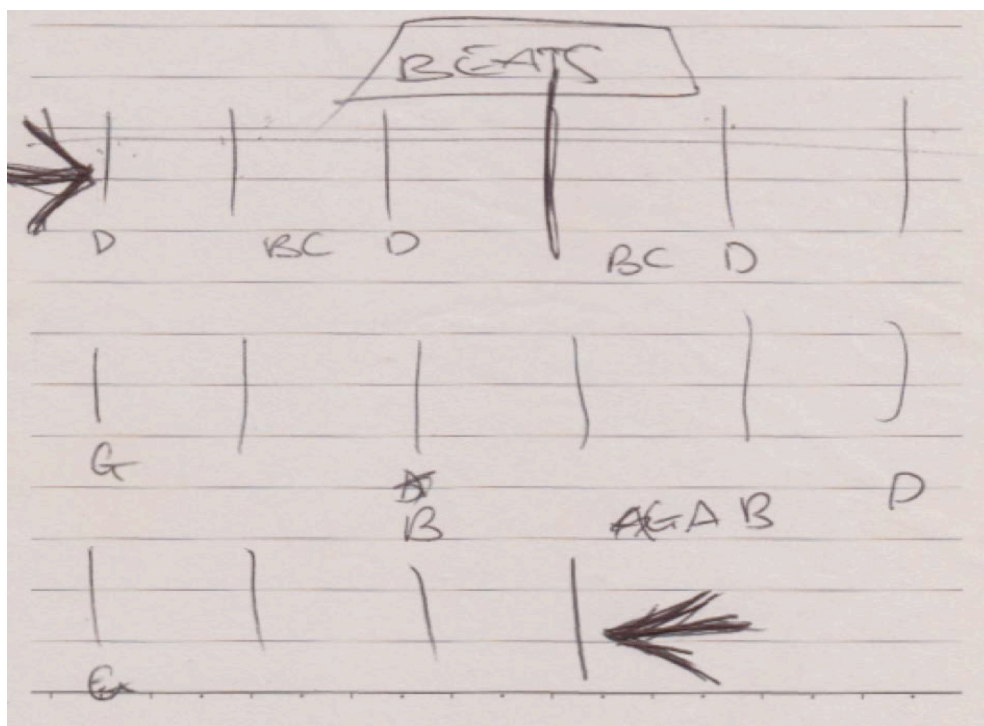


Figure 7.12. Tiffany's second graphic representation of her sung melody

Andrew then assisted Tiffany to translate these graphic symbols to staff notation. This required he explain the process of subdivision, as the melody used a relatively complex sequence of dotted and semiquaver note lengths.

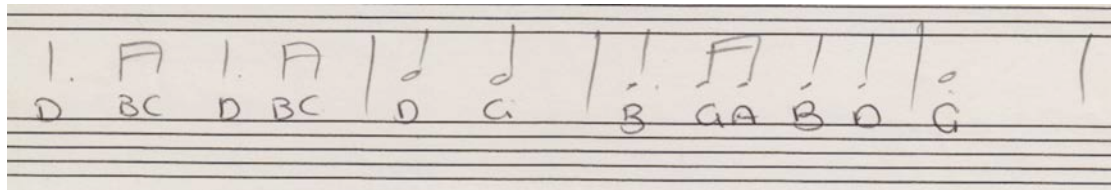


Figure 7.13. Andrew's demonstration of Tiffany's melody using staff notation

However, unlike the riff and thematic material in the Fugue performance played in strict time, the girls were working within a looser rhythmic framework. This meant that when Anne attempted to follow the same learning sequence as Tiffany, she experienced problems as her melody had been borrowed from the Kimbra recording. Like the pop song, Anne had incorporated not only the lyrics from the recording but also all of the nuance, timbre and rhythmic accent of Kimbra's vocal line (stronger SG+), and, in keeping with the style, had varied its execution each time she performed it. The following transcript relays Andrew's challenges in helping Anne draft the melody onto paper:

- Andrew: So I'm going to clap quavers now...[Anne sings the melody as Andrew claps a quaver subdivision].
- Anne: I think I just do it differently...[Anne repeats the phrase without Andrew's subdivision and varies the rhythm].
- Andrew: Sometimes you slow down and you interpret the rhythm differently, but when I'm clapping time...
- Anne: I need to do it straight?
- Andrew: What I'm hearing is...[Andrew claps the quaver subdivision again and mimics Anne's vocal melody including the lyrics placing the 'with' syllable on beat 4&].
- Anne: Yep... I think in the recording [of the group performance] I'm going...[Anne sings the phrase differently with a full crotchet on beat 4]... but other times it's...[Anne repeats the phrase copying Andrew's rhythm on 4&].
- Andrew: Sometimes you might sing it like this, and other times you might move it somewhere else. It doesn't really matter as long as the notation is approximate.

Anne: Ok, thank you.
 (Lesson footage, March 10, 2012)

Understanding the ‘approximate’ nature of notation was a difficult concept for Anne to grasp. This was made more complex again, as the girls wished to finish the score using notation software, and this was only capable of playing back exactly what had been entered in. Equally, Emily became frustrated when her improvised piano ‘comping’ could not be notated to show varied rhythmic nuance and her syncopated feel. This resulted in a code clash when knowledge allied to performance (again strong SG+) could not be replicated with consistency via scoring (strong SD+). As the exercise drew to a close, Lucy took control of the completion of the score, as she was the most competent music reader, with the other girls taking a more passive role. A similar set of difficulties played out for the Russian group, not only in moving between different modes of thinking about sound, but also, revealing an internal hierarchy within the group as to who would control the final outcome.

Russian group

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Jack	M	Music 2	Guitar	Catholic	Mixed
Alan	M	Music 1	Voice	Independent	Ear
Jason	M	Music 1	Drum Kit	Independent	Ear
Lex	M	Music 1	Guitar/Composition	Steiner	Ear
Matt	M	Unsure	Classical Piano/Composition	Government	Notation
Tim	M	Music 1	Guitar/Voice	Steiner	Ear

Table 5.3. Student survey results Russian group

Unlike the Canon and Fugue groups, the boys in the Russian group divided their efforts with transcription from the beginning. As a classical pianist, Matt was already a capable music reader, so he preferred to work alone to transcribe his piano line without teacher assistance or the use of graphic symbols as scaffolding. The remaining students however chose to work together, and, produced a similar semantic profile to the preceding groups, facing also many of the same difficulties. For

example, the vamp or comping pattern the boys had generated rather effortlessly in rehearsal had used a swung rhythmic groove. This meant that each beat was played with a triplet rather than duplet feel, a convention learned relatively easily in performance, but one more difficult to write down. When transcribed, swing rhythms require a specific convention where even quavers are used to represent the lilting bounce characteristic of most swung performances in jazz and blues.

Jason discussed his drum pattern with Andrew, again, using vocables and ghosting strategies. Andrew then recorded Jason's pattern using graphic symbols in the block diagram (Figure 7.14). This referenced the piano scroll function of the computer software Jason was familiar with at the time. Andrew then provided an equivalent in staff notation underneath, with the term 'swing' indicated in the sketch. From there Jason inserted the pattern into a notation program, and this provided the beginning of a template for the guitarists to include their lines above. As the program had a playback setting altering the rhythms automatically to generate the swing feel, the midi recording successfully emulated the sound of their performance. However, many of the rhythmic details such as drum fills and improvised solos again proved a challenge to write down.

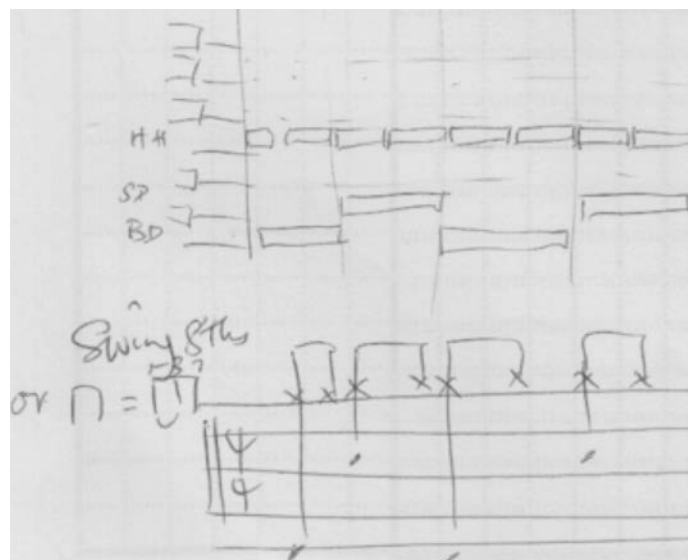


Figure 7.14. Andrew's graphic sketch of Jason's drum pattern

To add the guitar parts, Tim and Lex decided to work together as they had performed very similar material. They sketched the chord sequence they had recalled playing (Figure 7.15), including their reckoning of the notes used in each of the chords underneath:

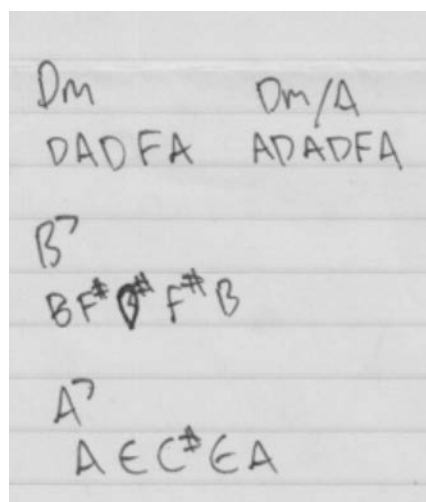


Figure 7.15. Lex and Tim’s initial vamp chord sketch ‘Dm – Dm/A, B⁷ - A⁷’

However, when they entered these notes into the program they realised they were incorrect, as the sound did not replicate their playing. Needing a strategy, they created a graph (Figure 7.16) to locate and label each string and note position on the fretboard of their guitars. The graph proved a powerful learning tool, as it allowed them to connect their kinaesthetic knowledge (stronger SG+)—again in relation to the guitar—with their understanding of harmony via chord symbols (stronger SD+), which then proved correct when entered into the notation program. A copy of the graph used to generate pitch names is provided:

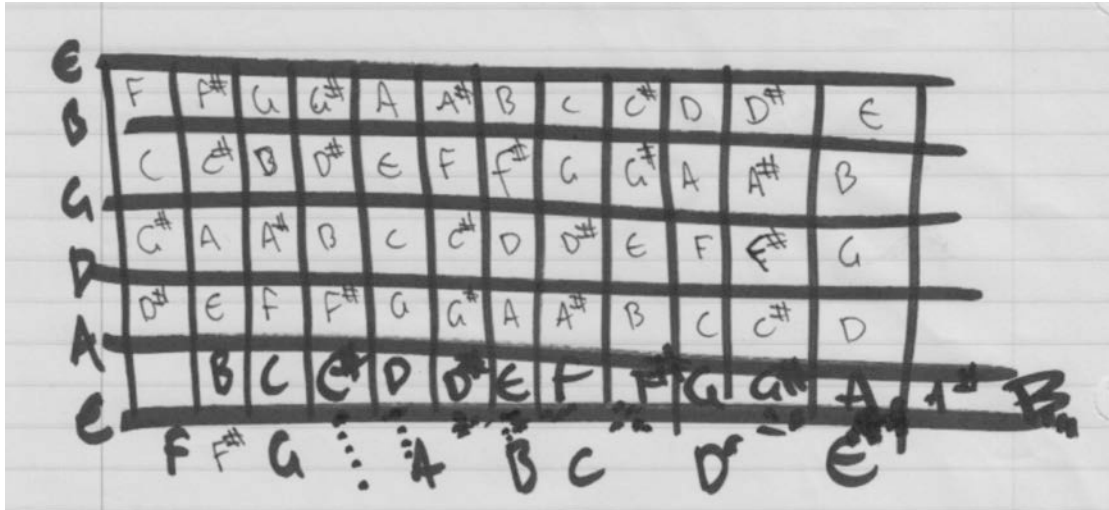


Figure 7.16. Tim and Lex’s fingering graph of a guitar fretboard

The boys also worked to grapple with the structural and rhythmic alignment of their parts. Soon, the assumption that they were playing 8ths (or quavers) also proved incorrect as they could now see (and also hear through playback) the correct alignment in crotchets against the swung quavers in Jason’s hi-hat line. An excerpt of the boys’ accompaniment ‘vamp’ material occurring in their final score is provided in the following figure:



Figure 7.17. ‘Vamp’ sequence in score form using swung quavers in midi playback

In later interview, Jason confirmed Xavier’s comments in relation to his perceived value of the scoring exercise, stating that he had never before attempted to transcribe “anything longer than a single bar of a drum pattern”. The task had given him a

feeling of accomplishment as the group worked toward the “completion of an entire score” (Jason, interview, September 19, 2012).

Despite this steep learning curve, these exchanges went unnoticed by Matt who continued to work alone. Yet as he was classically trained, the boys decided that he should oversee the completion of the score before submission in the following lesson. As Matt was unaware of the scoring conventions for swing, he ‘corrected’ the boys’ original attempt, believing his alternative (Figure 7.18) to be a closer reflection of their playing. A final portion of the riff material is provided, with my corrections overlaid in pencil above (for comparison, the same passage using swung quavers was included in Chapter 6, Figure 6.23 for research purposes):

The image shows a musical score for a piece of music. The score is written for six instruments: Piano (Pno.), three Electric Guitars (El. Guit.), Drums (Drs.), and Trombone (T.). The Pno. staff has a handwritten note "straight swung" with a musical notation symbol above it. The El. Guit. staves show a complex rhythmic pattern of eighth notes and sixteenth notes. The Drs. staff shows a drum pattern with a snare drum and a bass drum. The T. staff is mostly empty.

Figure 7.18. Matt’s transcription of a ‘swung’ quaver riff

Regardless of the intricacy of Matt’s very literal attempt, I was aware of the underlying dissonance revealed through his ‘correction’. Matt had worked to replicate the rhythms from the recording but the other boys had worked from memory. Further, the assessment process had not recognised notation as a style specific rather than

exact or ‘verbatim’ skill. Turning to address the final group, a similar set of tensions and circumstances played out.

Toccatà group

Student	Gender	Intended Course	Intended Music Major	Previous School	Learning Mode
Peter	M	Music 2	Classical Piano/Composition	Catholic	Notation
Juliet	F	Music 1	Piano/Voice	Government	Ear
Mairead	F	Unsure	Voice/Composition	Steiner	Mixed
Madeline	F	Music 2	Voice	Independent	Mixed
Zali	F	Music 2	Classical Voice	Independent	Ear
Josie	F	Music 2	Classical Violin	Catholic	Notation

Table 5.4. Student survey results Toccata group

It had been my assumption that the students from the Toccata group would require the least assistance with the transcription exercise, due to their existing competence with staff notation. This proved not to be the case. To add further complication, Mairead the most active group member during the arrangement process in Phase 1 was absent for the entirety of Phase 2 due to illness. This meant that Peter and Madeline who again displayed the most confidence with notation assumed group leadership.

Like the other groups the students began with graphic notation, using the earlier model I had provided of the bar 12 melodic theme from the original score (see Chapter 6, Figure 6.15). The lesson transcript records their early progress in completing the depiction. Their strategies mirroring those of the preceding groups, integrating the use of vocables, kinaesthetic knowledge (via a phone app.) and graphic depictions as follows:

Zali: [Zali sings the bar 12 melodic theme slowly and deliberately to the syllable ‘da’ and Peter repeats her vocal pattern while completing the graphic notation using the graph paper I had provided. At the peak of her vocal phrase Peter interrupts her].

Peter: That’s Bb?

Madeline (to Peter): And then you go down...you go down two, back up one, go down two, go back up one, and so on.

Zali: [Zali uses her smart phone and opens a piano keyboard app. to find the notes she has just sung. At the top of the phrase she plays a B natural instead of Bb].

Madeline: No, it's a Bb not a B natural.
(Lesson footage, March 8, 2012)

As the transcript relays, the exercise soon became emotionally loaded with Peter and Madeline preoccupied with producing the 'correct' answers, despite the flexibility of the graphic format in which they were working at the time. Seeking to represent their work in exact form, pitch labels and half steps were added to the graph, but soon, Peter persuaded the others to abandon the exercise in preference for staff notation. The transition to staff notation occurred away from teacher oversight, and much earlier than for the other groups who continued to move between graphic and staff notation when approaching the transcription of each new idea.

Working with manuscript paper, Peter then transcribed his solo piano part while Madeline oversaw the completion of the vocal and violin lines. He chose to proceed by hand as he believed that the freer tempo he had used in his "impressionist style" introduction would be difficult to notate using a digital score. However, this meant that he was also unable to play back his work, so disparities soon emerged concerning the rhythmic details. For example, his attempt at the syncopated 'Justin's chords' (Chapter 6, Figure 6.10) adopted a simplified 'straight' pattern as follows:

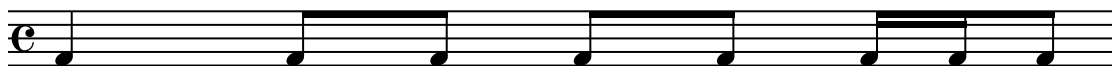


Figure 7.19. Copy of Peter's rhythmic transcription of syncopated chords³⁹

³⁹ For readability, Peter's original pencil sketch has been reproduced digitally here and in the following figure.

Aware that the rhythm was a challenge for him, I offered to help refine the pattern:

Christine: Now what you have written is...[I tap a crotchet beat on the desk and use the vocable 'da' to sing Peter's version of the notated ostinato above. Peter taps the pulse in time with me]. How does that rhythm differ from what you played in the performance?..[Peter then taps the correct syncopated rhythm on the desk].

Christine: Yes, that pattern is your right hand part.

Peter: But that's really hard!

Christine: Yes it is...[I repeat tapping the pulse and singing the vocables for the performed syncopated rhythm more deliberately]...It's really syncopated so it's going to be hard to write down...So, it's four beats long right?

Peter: It's just all nonsense.

Christine: So you've written it as a straight pattern, and what we want to find out now is how can we write it using syncopation, more like the one you are playing.

(Lesson footage, March 10, 2012)

Unable to transcribe the pattern and unwilling to risk the 'wrong answer' I eventually gave in and completed the pattern, hoping my demonstration would help him with similar rhythms used in the rest of the arrangement:



Figure 7.20. Christine's transcription of Peter's syncopated ostinato

Peter was uncomfortable that I had exposed a possible weakness in his learning. Equally, I did not take the time to explain the process more thoroughly, believing his existing skills would allow him to process the critique first hand from the page, rather than explore graphic alternatives to scaffold the process further.

With Peter increasingly difficult to work with in the final week of Phase 2, the group stopped working together, and required a follow up reassessment in order to finalise their results. Two separate submissions were made, a piano transcription by Peter, and the other by Madeline who transcribed the upper lines. During a later interview, Peter explained some of what had motivated this breakdown in communication. His perception was that the transcription task had been included as a ‘test’ or ‘audition’ for the Music 2 course. This test was one he was eager to pass, as he deemed this course the more credible of the two, because he “took his education pretty seriously” (Peter, interview, June 23, 2012). This outcome stood in stark contrast to the creative collaboration I had witnessed from the group during Phase 1. Clearly the underlying code shifts were somehow perceptible to the students though never explicitly stated, with a similarly divisive outcome in their group dynamic.

The transcription task had framed music literacy skills as the defining knowledge trait by which legitimacy could be claimed. Proficiency with staff notation thus served as an example of what Beck (2013) and Young (2013), describe as ‘powerful knowledge’ not only serving to represent more condensed or abstract musical knowledge (exhibiting strong SD+), but equally, in its association with the musical practices of WAM reflecting high or ‘powerful’ cultural status. This finding will be explored further in the following summary using LCT Specialisation codes to bring the chapter to a close.

Summary: Staff Notation as ‘Powerful Knowledge’

The transcription task had proved a meaningful learning exercise, drawing together individual knowledge and skills situated in the performance context to generate a collective representation of this learning in score form. It had generated a series of upward moving semantic waves over the teaching and learning sequence, with a semantic profile of increased range. Nonetheless, it also divided the groups according to their existing proficiency with these skills. The few with prior classical training were elevated above their peers despite many in the cohort working to bridge this gap by making speedy advances in their music reading and writing abilities. This occurred despite the difficulties they faced in transcribing improvisatory playing and complex

syncopation on paper: musical traits inherent to most forms of popular music performance. These dissonances confirm those highlighted in Chapter 4 concerning the need to mediate between different views of the music ‘text’ in the classroom (here score or live performance recording), and the significant limitations of basing popular music pedagogy and assessment solely in staff notation.

A code shift had occurred between the phases. In Phase 1 a *knower code* (SR+, ER-) had resulted, with classroom interactions resulting in both cognitive challenges (ER+) and ownership of learning and music-making maintained (SR+). In Phase 2, a *knowledge code* (SR-, ER+), had framed teaching and learning interactions with music literacy the defining skill attribute by which students could claim legitimate status within the student cohort. This series of shifts is represented as follows in Figure 7.21:

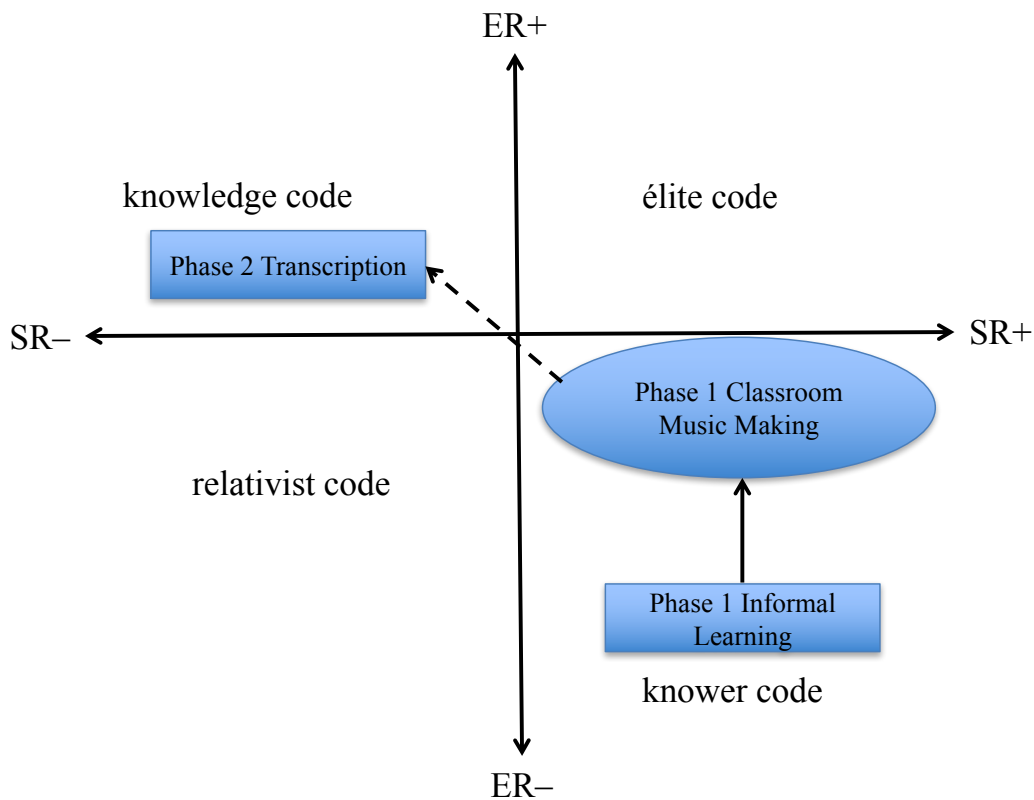


Figure 7.21. Specialisation code shifts from Phase 1 to Phase 2 Transcription task

A broken line has been used to represent the transition from Phase 1 to Phase 2, as not all students contributed equally, and for those that did, there were potentially divisive consequences as described.

To investigate student perceptions of these tensions, I undertook further interviews. During Matt's interview, he relayed his understanding of musical intelligence as synonymous with competence with notation: "Music might be easier for me than others [as] the majority of students [in the class] struggled to even read music" (Matt, interview, September 9, 2012). Believing the research had not provided Matt with adequate challenges as a solo classical pianist, I enquired as to what other knowledge or skills he may have gained over the period of research. Although he had enjoyed the ensemble experiences in Phase 1, he had equally found these confronting, as he was not able to "control all aspects of the performance" and needed to accommodate different "ability levels" in the group (ibid). Remembering the challenges Matt had experienced playing by ear, I was surprised that he had not considered the ensemble work more of a challenge. Rather, Matt perceived ear playing of secondary importance, perhaps irrelevant to his future development as a classical soloist.

Competence with notation had proved him more intelligent, and hence more powerful than the other students in the class. Similar echoes of this kind had resonated throughout the research, with classical training seen as 'valuable' on a range of grounds even for students such as Lucy who no longer wished to use these skills (see Chapter 6, pp. 173-174). Yet transcription—the task seemingly irrelevant to competent ear players—had been embraced by many of the students who had previously missed out on this kind of instruction. Further, these students had completed the task collaboratively, creatively and flexibly, using social skills not typically associated with this kind of classroom task.

Conclusion

The transcription task exposed a clear precedence for staff notation as representing a powerful (if not problem free) medium for representing musical knowledge in the research project. This finding was echoed in the review of literature in Chapter 2, in the analysis of historic curriculum documents and reforms in Chapter 4, and here

again in the classroom research data. Student interviews had confirmed this, with competence in music reading and writing synonymous with notions of ‘musical knowledge’ itself, despite the narrowness and conservatism inherent in this assumption.

At the same time, the task had also offered cognitive challenges, and, the opportunity for further collaborative strategies for those who preferred to work as a team. Detailed analysis using LCT Semantic concepts exposed a series of unexpected connections between hands-on, embodied, tacit and implicit ‘informal knowledge’ (exhibiting strong SG+) and more abstract, explicit, focal or ‘formal’ types (with stronger SD+). However, these connections were not made by all students, and would have typically been overlooked in the general business of classroom activity. A kind of reconciliation between these different forms of knowledge therefore appears possible, but requires deliberation, empathy, and patience in classroom communication. The use of digital notation software also provided an effective medium in which to base learning and discussion, as these tools enabled students to use both aural and notation based thinking together, via the midi playback function available in these programs.

Although the scope of this study is small, these findings challenge the omission of more explicit requirements for notation skills within the Music 1 course, the course most frequently undertaken by student popular musicians in NSW. The study shows how quickly these skills can be acquired even as late as the Stage 6 level, providing potential access to higher levels of music study at the tertiary level for students wishing to deepen their formal knowledge. Instead, instruction for the Music 1 course centres on the music Concepts framework of the syllabus (outlined in Chapter 4), which remains central to classroom instruction and formal examination content. Due to its flexibility, the framework is believed appropriate for general study across multiple music style contexts including popular music. However, its use by student popular musicians has yet to feature in research, and so becomes the focus of the next chapter of this research thesis.

CHAPTER 8: MUSIC CONCEPTS ANALYSIS

Introduction

The music Concepts framework is an overarching component of school curriculum framework for the systematic expression and organisation of musical knowledge (Rose & Countryman, 2013). In Chapter 4, the development and implementation of the framework was traced with regard to curriculum reform in NSW Australia, and, the entry of popular music and musicians into school classrooms. The framework predates these reform initiatives, but proved useful in widening the content base of school music by providing foci—*pitch, duration or rhythm, texture* and so on—in order to frame student learning. The language-based schema has gained broad acceptance, as it is believed capable of addressing all music styles including those outside of the WAM tradition. Labelled elsewhere as ‘music elements’ or ‘music materials’, the approach is employed at all curricular levels in NSW (Board of Studies, 2003, 2006, 2009c, 2009d), and in documents used in other Australian states and territories (Queensland Studies Authority, 2013; SACE Board of South Australia, 2010; Victorian Curriculum and Assessment Authority, 2010; Western Australian Curriculum Council, 2014). It also features in documents recently proposed at the national level (Australian Curriculum, 2016), and those used abroad (International Baccalaureate Organisation, 2010). As stated in Chapter 7, the framework is used in both Music 1 and 2 courses, but is organised less definitively for Music 1—the course typically undertaken by student popular musicians in NSW.

Despite the prevalence and longevity of the Concepts or Elements in curriculum documents, effective and equitable models for using the framework still feature hotly in research and academic debate (Burton, 2015; Cutietta, 1993; Rose & Countryman, 2013; Weekes, 2014). Additionally, there remains a lack of research investigating how students use the Concepts to clearly articulate knowledge acquired through concrete learning experiences—despite the core syllabus objective in NSW and elsewhere that students “develop knowledge and skills *about* the concepts of music” through engaging in “learning activities” or learning experiences across multiple modes and contexts (Board of Studies, 2009c, p. 9; 2009d, p. 9 italics added). This is

potentially problematic for student popular musicians, as aural-based, informal, tacit and non-verbal learning processes are central to their music-making, as outlined in Chapter 2, and further substantiated in Phase 1 of this research project as discussed in Chapters 5 and 6. The present chapter explores this dilemma within the context of the classroom case study at hand, and seeks to establish to what extent this syllabus objective achieves or falls short of meeting its intended aims for these students.

To tie findings to discussion in the previous chapter, video footage featuring pedagogic interactions with the Fugue group are discussed first and in detail. The Semantics dimension of LCT is again used to link these emergent findings to those previously established in Chapter 7, with Specialisation providing broader context to the emergent findings. In alignment with these preliminary findings, thematic analysis of all submitted student reports across the class revealed a series of problems in relation to the exercise. These will then be presented thematically, and coded for clarity. To conclude, pedagogy and accompanying work samples from two successful reports provide clues to enabling meaningful discussion and analysis with the Concepts framework. To begin, a general overview and evaluation of the task is provided.

Overview, Results and Pedagogy with Concepts

As stated, the students submitted their written reports using the music Concepts framework in conjunction with the transcribed scores discussed in the previous chapter. Each of these tasks was weighted evenly in assessment. Both were submitted at the end of Week 7 of the classroom research project. In the reports, each student was required to choose one of the six Concept areas listed in both the Music 1 and 2 syllabi (i.e. pitch, duration, texture, tone color, dynamics and expressive techniques, and structure), with the intention that a different student in each group cover a separate component to minimise the duplication of content (Board of Studies, 2009c, 2009d). From within each Concept area, the task required the students to make analytical comparisons between the arrangements performed a few weeks prior, and the original Baroque works upon which they had been loosely based. The students were encouraged to use both the scores and recordings for each as a guide. As the transcriptions were completed in groups and the analyses completed individually,

most of the class time allocated for Phase 2 was spent on the scoring exercise. As a consequence, there was limited time for the teachers to direct the analysis process. The task therefore exposed the extent to which the classroom learning experiences gained to this point had built competence in expressing the kind of knowledge required by the syllabus.

To prepare the students, the Concepts task had been supported by additional homework exercises set throughout Phase 1. These were devised in order to assist the students to place the Baroque works in a historic context in terms of original instrumentation, structural forms, composition techniques and any unknown terminology or notation devices (see teaching program Appendix A). In further support, a list of corresponding terminology, definitions and question prompts were provided to direct student discussion and the flow and organisation of writing (see ‘concept prompters’ Appendix K). Not all students completed the homework tasks nor did they all use the question prompts, however, I had judged that the immersive nature of learning to this point would provide ample basis for analytical insight. At the end of Week 7 of the research project all of the student groups submitted scores, and 28 of the 30 students submitted individual analysis reports.

The general quality of the submitted reports was poor, revealing oversights on my part as teacher, and, possible deficiencies with the Concepts framework—in particular for the student popular musicians. There were examples of poorly worded, brief and late submissions, even from students who had performed competently and enthusiastically to this point in the research. The assessment results for the class substantiated these observations. The average grade scored was only 52%, compared to 67% for the earlier performances, and 69% for the transcriptions. This outcome was due to a range of problems, chief among which concerned the limitations in using language to articulate and assess musical understanding. The preceding transcription exercise had seemingly framed a clearer set of learning and assessable outcomes than did the Concepts task, resulting in a clearer sequence between concrete learning and abstract representation in score form in the transcription exercise. Written commentary functioned differently as the discussion will show, and did not flow automatically from the scoring task, nor from earlier practical learning encounters. As discussion will outline, this occurred for both students who participated actively and

those whose participation was more passive during the preceding tasks. In LCT terms, another code shift—or rather code clash had occurred, with much of the informal and vernacular language of Phase 1 reflecting a *knower code* which provided inadequate foundation for the *knowledge code* required in the assessed reports.

Although this study remains small in scope, this finding highlights a core problem with the way the framework is taught and assessed. The Concepts schema—although open-ended enough to address multiple music genres including popular music—is an example of curriculum knowledge that is weakly framed (McPhail, 2012b; Weekes, 2014). What this means, is that by omitting a definitive list of terms and processes for their use, but applying the framework to *all* musics and all student musicians, only select forms of knowledge are in reality formally recognised. This select knowledge reflects a bias towards terminology and thinking developed for WAM, and hence, analytical observations more easily discerned from a score. For example, the marking process I had employed at the time of the research aimed to reflect best practice in HSC written examinations for Music 1. Although these examinations include music from a range of genres including the popular, the language actually found in marking exemplars is more selective.⁴⁰ Analysis related to music production and sound recording, the influence of music video, and, socio-cultural references integral to a more holistic study of popular music are excluded. This situation reflects earlier observations outlined in Chapter 4 concerning conflicting views of ‘music text’ in classrooms, with the score remaining a silent authority determining what language is used and legitimated when using the Concepts schema.

To flesh out the mechanics behind this code clash, a detailed account of the Fugue group’s attempt at the analysis exercise will be offered first, as these students had limited prior experience with written analysis tasks, and with the preceding transcription exercise. The account begins with a teaching exchange between the boys and my colleague Justin, which serves to highlight some of the internal dynamics perpetuating these tensions. Building on previous discussion for the transcription task,

⁴⁰ For examples of 2014 HSC examination exemplars and marking bands, see the following links http://www.boardofstudies.nsw.edu.au/hsc_exams/2014/pdf_doc/2014-mg-music-1.pdf and http://www.boardofstudies.nsw.edu.au/hsc_exams/2014/pdf_doc/2014-mg-music-2.pdf

LCT Semantics serve to make transparent the learning profile generated in association with the task.

Justin's Teaching Exchanges with the Fugue Group

As stated, the transcription and analysis tasks were commenced simultaneously, with a considerable degree of overlap intended between the two. With this in mind, a teaching exchange was recorded at the beginning of Phase 2 between Justin and the Fugue group concerning the syllabus concept *Structure*. The exchange preceded the sequence featuring non-lexical vocables and ghosting gestures discussed in Chapter 7, which had initiated their scoring process. To begin, Justin asked the boys to create a common list of terms to describe the sequence of sections that had structured their performance. This meant that informal structural terms generated in rehearsal became the basis for more official classroom discussion—a considerable shift and one that neither party was necessarily prepared for.

At Justin's request, the boys each produced from memory an idiosyncratic list of musical events conveying their understanding of the 'order of the performance'. Conrad was asked to read his list first and chose to use the names of the performers featured in each section of the piece, (including their musical role) as the basis for his summary. Klein then contributed with the terms: "Intro, Chorus, Melody, Break-down, Harmony, Improv", revealing his identification with the piece in terms of the style and the musical features used in the various sections. Similarly, Xavier's list used the terms: "Intro, Melody/Chorus, Improv, Key-change Chorus, Chorus (in original key), Outro", conveying his understanding in relation to changes in tonality and the unifying features between the sections (Lesson footage, March 8, 2012).

As a consequence of the earlier teaching exchanges between myself and the boys (recorded in Chapter 5), both Klein and Xavier's lists used the term 'melody' and 'chorus' interchangeably. In the context of their arrangement, this revealed their understanding of the melodic subject as serving structural and textural roles concurrently, both unifying the sections, and featuring in the foreground melodic layer each time, much like a 'chorus' would function in popular music. At the same

time their lists also revealed an omission, the term “break-down” (discussed Chapters 5 & 6), even though they had used the term frequently when arranging and rehearsing.

Oliver’s list was the most cumbersome and as a result was largely overlooked by Justin in the discussion to follow. His terms revealed a drum centric view of structure, with changes in tempo, feel and dynamics added in to the discussion. Oliver’s list read: “Intro, Melody/Build-up, Drop...quiet for a second and then I count in...Break-down...heavy, 2nd half of Break-down... goes half-time and then gets heavier with the melody over the top, Improv, Key Change”...at this point trailing off, as Justin had become lost in the detail, and as a consequence had moved on to discuss how the group might create a more systematic and common list of structural terms (Lesson transcript, March 3, 2012). These responses highlight how differently each of the boys had experienced learning to this point, with each student acquiring knowledge only in relation to their individual skills and distinct musical contributions.

To address this problem Justin then attempted to create a set of uniform terms and symbols he deemed more appropriate to the exercise. In doing so, he introduced a number of unfamiliar words more appropriate to classical analysis in order to modify and consolidate their lists. The following exchange illustrates how this process began:

- Justin: What is the intro?
- Xavier: Blaire comes in and then I play the melody and then it goes like straight into a break-down.
- Justin (to Xavier): So you play like an improvised or a *rubato* melody at the start?
- Xavier: Um...What’s rubato mean?
- Justin: It’s kind of out of time, is that what it was?
- Xavier: [Hesitant]...I think so?
- Oliver: Is this when it’s during the opening?
- Xavier: But we didn’t have like a set time there...
- Justin: It was very slow was it?...[re-iterating this after one of the boys mumbles the word ‘slower’]
- Xavier: Yeah.
- (Lesson footage, March 8, 2012)

Justin continued to construct a formalised labeling system for the students by condensing and modifying their vernacular terms. However, as the transcript demonstrates, his attempts to standardise terms also introduced foreign and stylistically inappropriate terminology. The comparison in Table 8.1 summarises the verbal exchanges unfolding from this point onwards over the next 20 minutes of lesson footage:

Justin's terms	Fugue Group's terms
Figure A: Introduction – Rubato	Free time, Xavier plays the melody and Blaire and Ned hold the chord underneath
Figure B: First theme – Tempo 1 Half-time	Break-down, Blaire plays the melody and band plays the rhythm
Figure C: Interlude – Held Pause or Fermata	Blaire plays a solo with the melody including the next part of the song—no band
Figure D: Improvisation – Double-time	Where we improvise in double time
Figure E: Modulation – Tempo 1	Key-change melody in half-time
Figure F: Original Theme – Tempo 1	Same melody but in original key
Figure G: Coda – Original Theme with Fermata	We play the melody alone as an Outro with a held note to finish

Table 8.1. Comparison of Justin and the Fugue Group's use of terminology to describe the *Structure* of the student arrangement (Lesson footage, March 8, 2012)

As Justin attempted to bring a sense of order to the boys' account of musical events, a degree of synthesis is brought to their collective discourse. If understood, these terms could have provided access to music terminology potentially useful in further study. Unfortunately, his recasting of their list superimposed classical terminology unfamiliar to them over their own, instead of exploring connections between the two. Further, Justin's insistence that the boys then copy down *his* list further emphasised its importance as the *correct* set of terms. Yet confusion and lack of confidence result when his terms are not fully explained or contextualised against their working descriptions. For example, he omits the term break-down (a style and feel related

structural term which may have been unfamiliar to him) and replaces it with ‘first theme’, a melody dependent term more consistent with classical structural analysis. In a similar vein the terms ‘key-change’ and ‘solo’ are replaced by ‘modulation’ and ‘interlude’, without exploring the students’ understanding of these terms, their origins in WAM, nor their contrasting meanings within these different style contexts.

Eager to investigate Justin’s perspective, I replayed some of the lesson footage during a later follow up interview, where I asked him to provide insights with reference to the preceding exchange and the Fugue group’s completed student score. The interview contained the following question and response:

- Christine: To what extent do you think that we can accommodate their language in a formal scoring and analysis situation?
- Justin: Well it’s funny that you should say that, because I remember saying that if you don’t know what something is, if you don’t know the Italian term, then use the English term, which they’ve done just here in their score with the term ‘freely’... see? But my understanding was that after all it is still Baroque right? So, no matter what it boils down to, it is still *that* right? So you need to use some terminology that shows the relationship to Baroque music right?...That was my understanding (Justin, interview, June 6, 2012).

The interview transcript highlights some of the underlying tensions concerning the framing of musical knowledge in the classroom. During the informal learning processes facilitated during Phase 1, the music style at the centre of learning was seemingly undergoing a process of negotiation, with Justin in particular facilitating arrangement choices across a range of music style idioms, as well as demonstrating a few of his own stemming from the jazz tradition. Here, in the context of formal discussion, the music at the centre of the exercise, (and hence the accompanying terminology) reflect Baroque music, or as the preceding lesson footage displays, a more general set of WAM based terms.

The unfortunate consequence is that the opportunity to engage with student terminology, and here the terminology associated with metal, is overlooked, disempowering the students instead of enabling them to make connections between

words associated with distinct musical discourses. These tensions continued to play out as the boys completed their individual reports, which show a combination of learned or new terms and symbols, and those acquired through more informal learning processes. A detailed account of their submitted responses and an analysis using LCT Semantics is provided.

Fugue Groups' Concepts Analysis Reports

Oliver, the groups' drummer chose to address the syllabus concept *Duration*, articulating clear responses concerning the rhythmic content in the metal arrangement. He used the term 'free time' (rather than Justin's suggested 'rubato') to describe the introduction section, and the beat divisions and feel changes in the break-down riffs using the terms 'sixteenth', 'eighth' and 'quarter notes' (terms typical in drum pedagogy), within 'half-time' and 'double-time' tempos. Oliver included examples of graphic notation similar to those learned in the transcription exercise (see Chapter 7) to strengthen his responses and demonstrate his growing confidence with notation. Included alongside choices in terminology, these depictions increased the semantic range of his work. This meant that he was able to couple descriptive context dependent examples from his playing (or SG+) with abstract music symbols (or SD+) in the commentary addressing his drum line.

However, Oliver's report centred almost solely upon the accompaniment material he had played, omitting discussion of rhythmic relationships within the ensemble. Also, he only briefly ventured to discuss the original version of the Bach Fugue, and was limited by his impressions of the recording, unsubstantiated by reference to the score. Unable to discern the rhythmic complexities of the recording by ear, he listed tempo changes that did not occur, but rather, were confused with surface level complexity and ornamentation. His concluding observation that "Bach seems to use trills on the organ the way a drummer might use a drum fill" confirmed his analytical framework as firmly situated within his own—drum centric knowledge and terminology (Oliver: Analysis Report).

In keeping with Justin's earlier example, Conrad's discussion of *Dynamics and Expressive Techniques* employed classical Italian terms. Although accurately used,

these terms appear incongruous with the discussion of their metal performance. His analysis of the arrangement read:

The group arrangement opens with *poco a poco crescendo* and then a sudden *diminuendo* that ends with a count in. The next section is *fortissimo ma non troppo* and moves quickly into a fast *decrescendo*. This part ends quickly with a double-time *fortissimo*, then returns to A Tempo. It then changes key and ends with *calando*. The performers use tremolo and aggressive hard picking during the rhythm sections and the keys hit with more aggressive pressure. There are trills and other ornaments. In the overall choices of the group the effect was more a hard metal style of music (Conrad, Analysis report—italics included in original).

Like Oliver, Conrad's discussion of the Bach Fugue was less convincing. He concluded that the end "is a very calm and smooth sounding style with a hint of cheer"—showing his impression of the final major chord (technically a tierce de Picardie), without the term 'major chord' being applied (Conrad: Analysis report). In this way Conrad's Baroque report exhibited limited semantic range (or SG+, SD-). A similar pattern can be seen in Blaire's *Structure* analysis. Blaire competently fleshed out Justin's structural outline of the metal arrangement showing in depth understanding of the performance. Again, his consideration of the Bach Fugue was less convincing. Although Blaire showed initiative in researching the formal structure of the original work, his application of the terms 'exposition', 'subject', 'tonic' and 'counter-subject' (arguably terms exhibiting strong SD+) were not supported by reference to relevant examples from the score or the recording (and hence lacked semantic gravity or SG-)(Blair, Analysis report).

Ned's analysis of *Texture* employed appropriate terminology, but again, focused discussion on the student arrangement over the original work. For example, he described the arrangement as 'thick and heavy homophonic texture' (SD+), and expanded in detail by describing the varied roles played within the student ensemble (effective use of context SG+). However, to the Bach Fugue he offered only a general description of the texture as 'polyphonic', 'dense and cluttered' (SD+), with no detail provided or listed examples (Ned, Analysis Report).

The remaining reports from Klein and Xavier were even less convincing again. Klein's discussion of *Tone Colour* attempted very limited discussion of this concept area, instead confusing tone colour with textural and structural descriptions evident in

student playing (again SG+). Xavier's *Pitch* analysis appeared rushed and incomplete, containing broad generalisations and misused terms. However, evidence of earlier learning could be seen, with him describing the melodic theme as moving "in steps and leaps" (SD+) but omitting more precise detail evident in his earlier graphic depictions (see Chapter 7, Figures 7.1, 7.3). Xavier also relied on guitar centric language and thinking not clear to an outsider. For example, the return to the final theme in the tonic key he described as follows: "when the main theme starts again it starts on a D which is the 4th". The term "4th" only makes sense in relation to guitar string tunings, his response hence displaying strong context dependence (or SG+), rather than the more objective term 'Dominant key' or '5th' the typical analytical response (Xavier, Analysis report).

Summary

Now, a synthesis of this commentary is provided to link the preceding summary with the semantic profile generated in Chapter 7, which as stated lead to the present exercise. Where the boys' conceptual thinking was articulated clearly, a relationship can be seen between the students' ability to bridge various learning experiences undertaken over the seven-week course of the research and use these as the basis for written analysis—accumulating learning and coupling new terminology with old along the way. This at times occurred, particularly when incidental classroom discussion or the transcription exercise had generated common understanding of either new terms or music symbols in relation to their arrangement. For example, Oliver's report set out an advanced, although drum centric, understanding of *Duration* supported by graphic symbols and illustrative commentary (SG+ coupled with SD+). Ned's account of *Texture* exhibited the same properties, combining his understanding of ensemble roles within the band, with insights gained through their visual representation in the student score (again SG+ and SD+). Blaire's *Structure* report exhibited these same properties.

These students were able to build on their preceding knowledge, albeit in a fairly ad hoc fashion as evidenced by inconsistencies in these same reports. The semantic profile generated is represented in Figure 8.1, which builds upon the existing profile provided in Chapter 7, requiring the students combine all prior learning of the

performance experience (a downward swing towards SG+) with technical terms and symbols relevant to analytical discussion (an upward swing towards SD+):

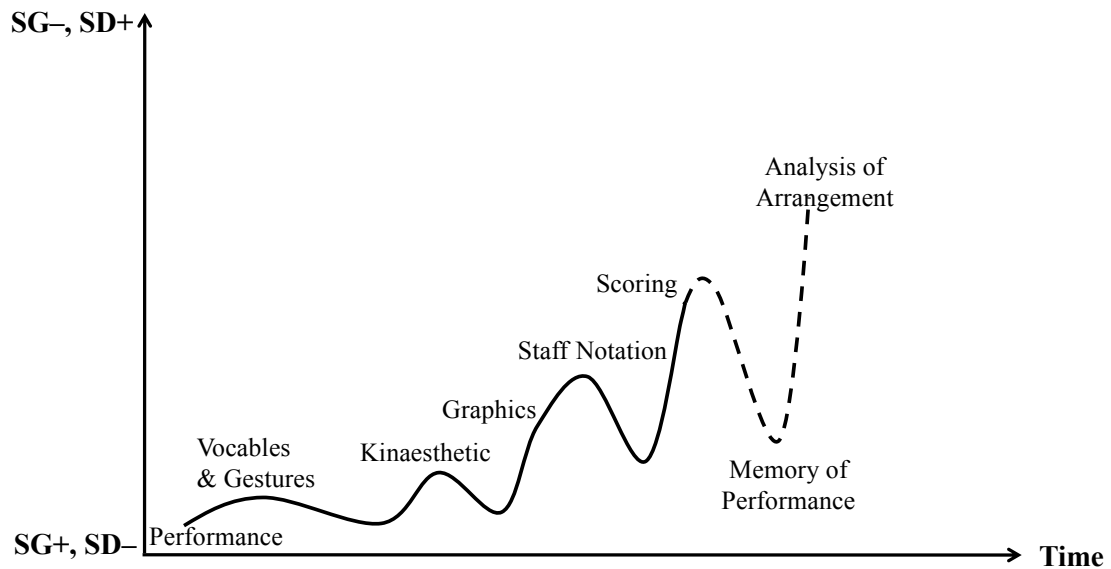


Figure 8.1. Fugue group semantic profile transcription and Concepts analyses of arrangement

But this learning worked mainly to equip the students to discuss the student arrangement, and did not prepare them to address the Bach Fugue. As ear players, their written descriptions of the Fugue were based upon their aural impressions of the organ recording, which had generated inaccurate, or descriptive language (such as that offered by Conrad in preceding discussion). This outcome is reflected in a weaker dotted line in Figure 8.2, with students unable to use their existing knowledge and skills to competently address the workings of the Baroque text:

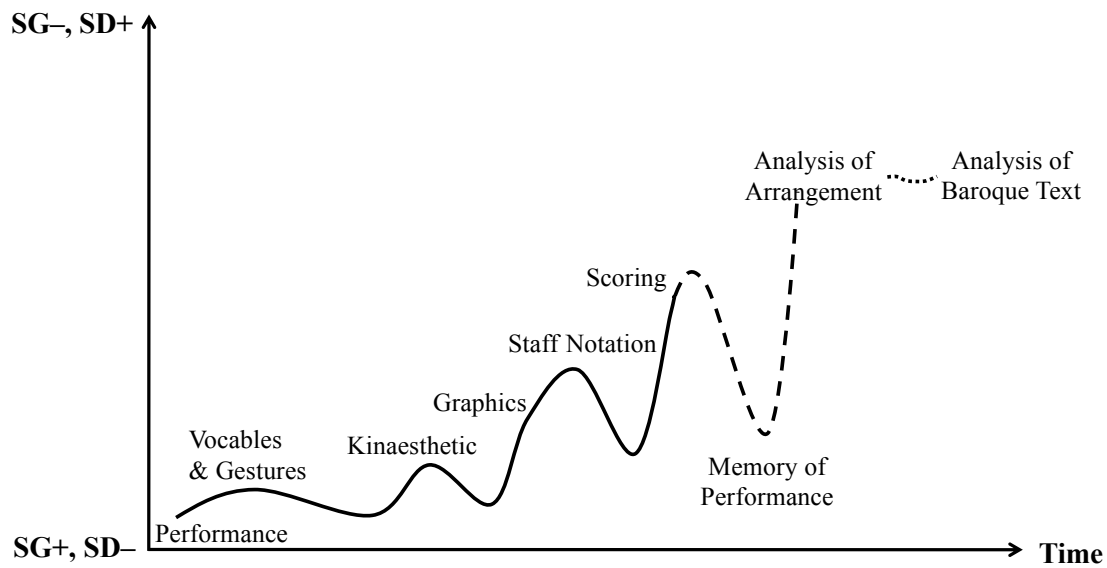


Figure 8.2. Fugue group semantic profile transcription, and Concepts analyses of arrangement and original Baroque text

However, these findings imply two outcomes. The first outcome had connected all previous learning, resulting in a profile of increased semantic range, coupling abstract terms and symbols (SD+) substantiated by written description and examples (SG+, an upswing in the semantic wave). The second outcome remained more closely aligned to the boys original learning experiences, reflecting language used in conjunction with their playing and hearing, and hence, exhibiting more limited semantic range (or SG+, SD-, a semantic flat line). This outcome is reflected in a semantic flat-line, aligning their expression with more context-dependent memory and related language and skills as is depicted in Figure 8.3:

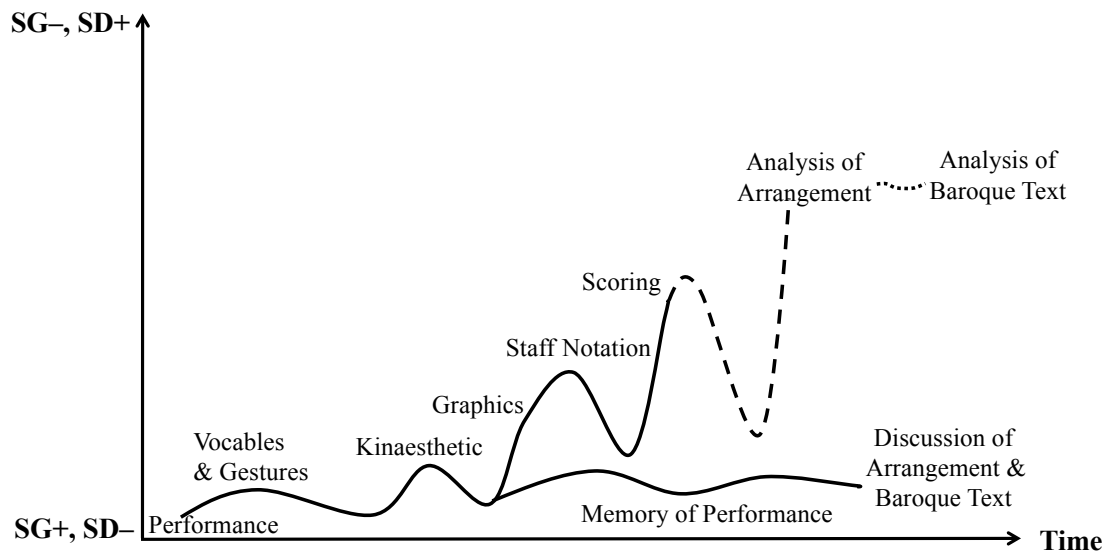


Figure 8.3. Fugue group complete semantic profile for transcription and Concepts analyses

As is substantiated by the preceding discussion, the boys' earlier learning experiences did provide foundation for cumulative knowledge-building, but with inconsistencies. Two distinct outcomes had resulted, and due to the weak framing inherent to the task, at times both outcomes were reflected within a single written report, further complicating the marking and assessment process.

Analysis of the preceding data reveals that the present task was deceptively difficult, requiring a subtle coupling of formal analytical terminology (SD+) with examples from two distinct contexts (SG+) namely, the student arrangement, and the Bach Fugue, in order to generate and substantiate coherent analytical comparison. Importantly, comparison between the two texts had required the transfer of knowledge and skills from one learning context (the arrangement) to address another (the original work). For the most part, the exercise had generated knowledge best described as *segmented* (Maton, 2009): as the learning undertaken to construct the student arrangement did not readily transfer to address a musical work less closely aligned with the processes that led to the creation of the first.

This is not to say that later learning opportunities would not allow the boys to build upon the knowledge and skills acquired at this time, nor, that teaching could not make more explicit connections between the two. However as curricular structures and

current classroom pedagogies for popular musicians fail to make these connections explicit, these results highlight the limitations of informal music learning as the sole foundation for constructing formal musical knowledge.

With these findings in mind, the remaining student groups will now be discussed in order to flesh out further some of the problems touched on here in association with the Concepts analysis task. A thematic analysis of the remaining reports revealed a series of six distinct problems. Although these have been outlined in prior discussion with regard to the Fugue group, they will now be addressed in full. As the reports were completed individually, discussion will be situated with each problem substantiated by relevant examples, rather than by surveying each group, as has been the case in the preceding chapters. To conclude, the analysis of two successful reports and the teaching interactions that lead to their completion provide insights worthy of further consideration in using the Concepts framework.

Music Concepts: Problems Enabling Cumulative Knowledge-Building

When coded thematically, several problems emerged across the cohort that consistently affected successful completion of the Concepts analysis task. In every case these problems manifested when students were unable to differentiate between the informal language and skills promoted in Phase 1, with the kind of objective discussion the task had implied. These problems were encountered across the cohort independent of prior learning, however, students with pre-existing skills in score analysis, music theory and formal terminology were more successful in addressing the original Baroque texts, and hence scored higher results in assessment. These themes can be summarised as follows: the use of vernacular rather than formal language; discussion of learning process rather than musical product; limiting discussion to individual ensemble parts rather than the whole; discussion of multiple rather than single Concept areas; affective instead of objective descriptions of the Baroque texts; and finally, general problems with written expression and readability.

Vernacular rather than formal language

At times when teachers had introduced students to formal terminology, and the terms had become the basis for classroom discussion and demonstration, new terms, symbols and concepts had been retained and were used effectively in student writing. For example, Lucy's *Duration* report reflected a synthesis of both her performance and transcription experiences, describing in detail how the concepts 'ostinato' and 'pulse' had worked together to achieve 'unity' in the student arrangement (Lucy, Analysis report). Conversely, where knowledge was contingent on informal processing, they were less able to articulate these processes without reverting to the vernacular language generated in rehearsal. Tim's discussion of *Dynamics and Expressive Techniques* illustrates this point: "On the first repeat of the second melody, the drums beat on the toms to produce a build-up to lead back into a quieter vamp" (Tim, Analysis report). The vernacular terms 'build up' and 'vamp' had provided effective rehearsal terms, but here required explanation indicating both dynamic, rhythmic and texture changes. The alternatives 'crescendo' and 'ostinato' or 'chordal riff' would have been clearer, or, the boys could have provided notated examples from the transcription task to illustrate their commentary.

Discussion of learning process over musical product

In addition to these challenges, some students mistook the point of the written task as engendering personal reflection upon the learning process undertaken, rather than an analysis of the finished musical product. This meant, that students documented the decision-making processes of arranging and versioning undertaken in Phase 1, rather than the musical processes which unfolded as appropriate to a specific Concept area.

As an example, Alan's *Structure* report for the Russian group read:

The opening section takes the introduction of the original piece and makes it our intro, this is mainly so if we fell into the trap of going off course, which we did quite a bit, we would go back to the introduction and rework out new things in accordance to that and the original score (Alan, Analysis report).

The same kind of issue manifested when students had difficulty addressing the musical whole played by the ensemble, and instead limited discussion to their individual part, which rarely demonstrated all of the analytical concepts required.

Individual rather than ensemble analysis of arrangements

When addressing the student arrangements, many students chose to address only their individual contribution to the ensemble, rather than address the musical outcome achieved by the whole group. For example, Jack's discussion of *Texture* focused almost exclusively on his own guitar line, describing his solos as 'little monophonic melodies', which ignored the contribution of the accompanying instruments and their harmonic foundation. His statement was hence judged an inaccurate description of the musical events (Jack, Analysis report). Similar echoes could be seen also in Peter's and Matt's *Pitch* analyses, which focused almost exclusively on the material played in the piano lines rather than that played by other ensemble members contributing additional melodic and counter melodic material.

Multiple instead of singular Concept areas

Frequently, the students found it difficult to focus their discussion on one singular Concept area as the task had required (i.e. pitch, OR duration etc). Instead, they addressed multiple Concepts simultaneously, or simply a different Concept from the one required. The earlier learning undertaken in the performing, arranging and even transcription tasks had provided a fairly holistic encounter with multiple Concept areas simultaneously (again strong SG+) rather than a singular, compartmentalised exploration of a singular Concept along with appropriate corresponding terminology. For example, the scoring exercise had prioritised *Pitch* and *Duration* concepts simultaneously in the use of graphic symbols and staff notation, and also *Texture* and *Structure* in the design and layout of the scores: not one of these areas in isolation. The Concepts *Dynamics and Expressive Techniques* and *Tone Colour* had rarely featured in isolated discussion during transcription or in Phase 1, with students making volume, style and tone-colour choices implicit to them within the performance situation at hand and rarely involving discussion. Not surprisingly, these two Concept areas were those most frequently confused or poorly discussed in assessment.

Affect rather than effect descriptions of the Baroque texts

The students who worked mainly by ear experienced problems moving beyond surface level impressions of the Baroque works, and were confused as to the kind of terminology to use to describe them. Without teacher direction, the students turned instead to their impressions of the recordings, listing personal, affective words along with descriptive metaphor to describe what they heard, rather than employ language describing operational processes. Earlier in Phase 1 these responses had greatly assisted their engagement with the Baroque recordings and been of use in inspiring creative processes, but here these descriptions were deemed out of place. As an example, Lucy's *Duration* report read: "the gentle tones of Pachelbel's Canon weave in and out of rhythmic waves. It has an 'ocean' feel like a swaying palm tree, which is calm and relaxing" (Lucy, Analysis report). This form of expression stands in contrast to Lucy's discussion of the student arrangement discussed earlier (see point 1 above: 'vernacular versus formal language'), where she successfully applied formal rhythmic terminology as introduced through classroom discussion.

General readability

Finally, the mode of written assessment provided an extra level of challenge, privileging not only the students with higher levels of music literacy skills, but also those more comfortable with written expression. Matt's *Pitch* report provided technical terms as brief bullet points, listing tonal structures and modulations along with graphic depictions of the melodic themes. However, he did not provide explanations or written examples to substantiate his observations, limiting the semantic range of his work. In contrast, Peter's *Pitch* report demonstrated his ability to link formal language with illustration, identifying and providing score examples including specific keys, modulations, melodic themes, chords and intervals used. Using his skills in score reading, he was also one of the few students to competently address the original Baroque text. A comparison of Matt and Peter's writing is therefore pertinent, as musically, these students had followed a similar pathway of formal training in classical piano to this point in their music education. However, it was Peter's skills in written expression coupled with his formal knowledge and training which made his report the more credible of the two.

Summary

Many of these problems seem to have manifested themselves due to underlying clashes in codes of legitimation. Despite some of the reports exhibiting the properties of cumulative learning—connecting the various forms of knowledge expressed over the course of learning to this point, tensions manifested when students were unable or unaware of how to move beyond their personal, very context-rich learning (strong SG+) to see the musical whole, and to see it from an analytical stance. This had required specific terminology (SD+) supported by relevant and select examples from both the student arrangement and the Baroque texts (SG+).

However, a bigger tension characterised this problem. Unlike the preceding transcription task, which had a more clearly framed knowledge outcome (a *knowledge code* SR–, ER+), the weaker framing of the Concepts task had caused confusion resulting in six specific problems, as discussed. Although a *knowledge code* was again implied in the task instructions and upheld during the marking process, many of the students misinterpreted the task as one which required personal descriptive responses regarding their individual playing, or, their emotive impressions of the Baroque texts. Hence, the *knower code* dispositions of the students fostered in Phase 1 (SR+, ER–) had proved a poor foundation to meet the *knowledge code* (SR–, ER+) expectations of the Concepts analysis task. Further, many did not understand how to use the preceding transcription exercise to scaffold the more difficult analysis exercise. The series of code shifts from Phase 1 through to Phase 2 is therefore represented as a series of broken arrows in Figure 8.4 as follows:

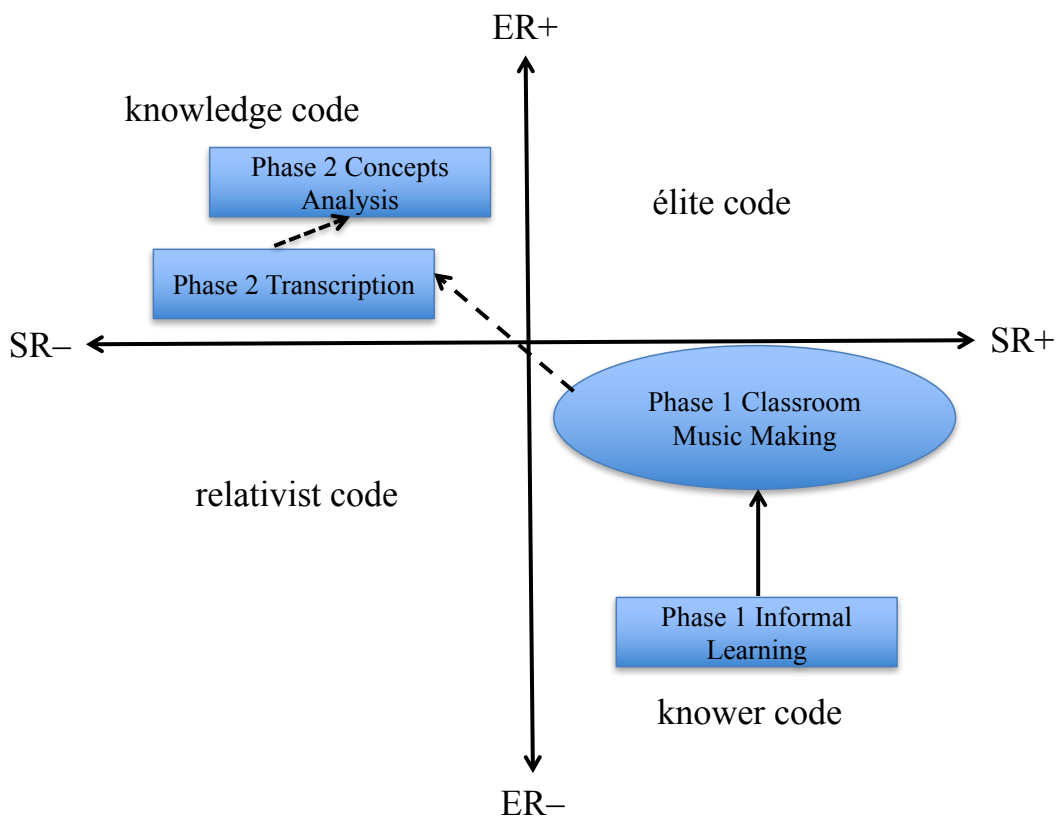


Figure 8.4. Specialisation code shifts from Phase 1 through Phase 2

Irrespective of these shortcomings, two reports were deemed to be successful submissions worthy of final discussion. These reports were submitted by two members of the Canon group, singers Emily and Tiffany, who as stated, had limited formal knowledge and music literacy skills prior to enrolment at the school. In both cases, an analysis of their reports and the learning and pedagogy leading up to their submission provide clues as to potential strategies to address the code clashes listed above.

Clues to Cumulative Knowledge-Building with Music Concepts

The reports submitted by Emily and Tiffany, were graded in the highest band for the Concepts analysis task. Reasons for their success were varied and thus require individual discussion. For Emily, her success appears dependent upon exceptional musical and academic ability. For Tiffany, pedagogy assisted the process more directly.

Emily: The exceptional learner

Emily was a student of considerable intellect, with high levels of drive and ambition not only in Music, but all subject disciplines at AMC. Although her early training was in Suzuki violin, she was an accomplished vocalist of considerable skill and as mentioned, a self-taught pianist. Her submitted report showed her ability to articulate musical processes with clarity and objectivity, as she had retained the concepts introduced in passing and those gleaned during the homework tasks set alongside classroom learning.

As Emily had played both accompaniment and vocal roles in the group, the ground bass line and chords provided a useful start pointing for her analysis of *Structure*.

Focusing on this device, Emily's report concerning Pachelbel's Canon report read:

The piece combines two main structural techniques of canon and ground bass, which are the two main ideas in the song. The ground bass is the name given to the bass line of the piece of music that is repeated throughout and usually played by a lower pitched instrument...and Canon is a composition which employs a melody and one or more imitations of this melody played and repeated after a given duration. During a canon there is usually a 'leader' melody which is introduced first and then copied by the 'follower'. During Pachelbel's Canon the canon is very clear with three violins playing the canon part of the song, each sequence is passed through the different players at different times whilst also introducing new ideas...(Emily, Analysis report).

Unlike some of the other reports which also included terminology learnt for homework, Emily displayed the ability to actually contextualise her new knowledge by locating the named features at specific points within the score, as shown in the next excerpt of writing:

These are the two main structural elements of the piece of music and these are also visually evident throughout the piece. On the score you can clearly see the bass line beginning, then the leader coming in and introducing the melody, then passing that melody on to the follower and so on. (Emily, Analysis report)

Emily's report thus exhibited considerable semantic range, and, the ability to make meaningful comparisons between both the original canon and the student arrangement. There are however several limitations with her analysis, and confusion over terminology intended for one style context used in another (note her use of the word 'song' to describe Pachelbel's Canon in the initial transcript), and, the need for

style-appropriate terminology for popular music for the arranged version. Here the term ‘canon’ is used to describe vocal layering techniques employed by the girls, rather than layered vocal ‘riffs’, ‘hooks’, or ‘ostinati’ which would have provided a closer depiction. She explains:

[The arrangement] starts with the bass line like the original and then enters with four different melody voices in a canon each with a different idea. But the difference with this canon and the original is that the voices in the arrangement don’t swap melodies they just keep on repeating it instead of passing it on like a chain (Emily, Analysis report).

Despite these limitations, Emily’s report displayed some of the features of cumulative learning. With more focused teacher lead discussion, comparative analysis between the versions could have provided further insights and more style appropriate terminology. Tiffany sought out this kind of assistance directly, as outlined in the following piece of classroom ethnography.

Tiffany: The assisted learner

As Tiffany was unsure how to approach the analysis task, she sought to verify her responses with me in person before completing her report addressing *Pitch*. This exchange occurred at the end of the final lesson before the reports were due, as the students were packing up to leave the room. Had I realised the importance of the exchange, I would have made deliberate attempts to initiate this kind of discussion with the remaining students also and much earlier on. Like the majority of cases discussed so far, Tiffany had assumed that the main point of the exercise was to address the student arrangement, and was unaware as to how to address the original Baroque work. Through discussion, I was able to draw her attention to the relationship between the two as follows:

Tiffany (to Christine): Can I ask a question about the analysis? So, when I describe the shape of the main melodies should I describe all of them? Because there are four?”

Christine: Well probably you would want to identify which of those melodies are more important than others... for example Monique’s melody is just a single note...

Tiffany: Wouldn’t Anne’s be the most important?

- Christine: Probably...because it ties together what she sings in the second [Kimbra] section... but in terms of comparison it is important to say that both pieces, both the original and yours have melodies in them. How do they work in the original canon?
- Tiffany: I can't remember.
- Christine: Well you might need to go back and have a listen to it...remember that when one instrument comes in, the next one will copy what the first one does and so on?
- Tiffany: Yes but ours didn't do that.
- Christine: No that's right, but it's important that you make that distinction.
- (Lesson footage, March 15, 2012)

I then asked Tiffany to describe each of the vocal melodies used in the arrangement in terms of their shape, phrase structure and so on. Tiffany sounded out her responses tentatively, and slowly began to differentiate her personal performance experiences with a more objective view of melody. In time, this allowed me to again draw her attention to the relationship between the performance and the original canon, as follows:

- Tiffany (to Christine): Emily's melody is just a downward scale.
- Christine: Where does that melody come from?
- Tiffany: That's almost matching what she's playing on the piano.
- Christine: That particular melody is also in the original.
- Tiffany: It's just the chord progression.
- Christine: The notes are in the chords, but the actual notes that she is singing, that was originally a violin part. Maybe you can try to find it?
- Tiffany: Ok.
- (Lesson footage, March 15, 2012)

As the discussion continued, Tiffany began to separate the listening, versioning, and performing experiences, and generate a more detailed and objective account of their

arrangement. This however required very close listening to her questions, and a sound working knowledge on my part of both pieces of music. In addition, I sought to make relevant the learning undertaken in the transcription task as the conversation came to a close:

- Tiffany: Looking at each of these melodies... well, Monique's is just simple, it's just one note, but looking at Emily's, mine and Anne's they are all moving in a downward scale and then up.
- Christine: This is all great, everything you're describing is all good, you just need to get it down...and if it's too many words to describe every single shape then use a little line graph to show the shapes.
- Tiffany: Oh ok great, that makes it much clearer.
(Lesson footage, March 15, 2012)

As a consequence of these rather spontaneous teaching directions, Tiffany's report was comprehensive, and made clear connections and comparisons between the pitch content she had personally sung, that performed by the whole ensemble, and, the pitch content of the original Canon. At my direction, she also included graphic depictions of the vocal melodies featured in the arrangement, and, the chord sequences played and heard in both versions of the Canon, discussing the chord sequences and modulations used in the piano line with Emily to verify her responses. These interactions with Tiffany became instrumental in future classroom planning when teaching addressed the Concepts at AMC. Although Emily's case serves to demonstrate that cumulative knowledge-building can occur unassisted, Tiffany and the majority of the class had required specific teaching to make these connections more explicit.

Conclusion

As teacher and designer of the study, I had assumed that the hands on practical learning experiences, and the various discussions with students over the seven weeks of research would provide ample basis and insight for the analysis task. Furthermore, I had believed that the transcription exercise just completed would provide a common

platform from which students could compare both arrangement and original versions of the Baroque texts. These learning experiences and scaffolding did provoke written discussion, but not necessarily the kind later validated in assessment.

As a consequence, a series of code clashes had manifested. In Phase 1, the language used in student music-making featured vernacular context dependent terms (or SG+). In Phase 2, objective formal terms were deemed more appropriate, and further, required terms to be coupled with relevant musical examples (or SD+ substantiated by SG+). Further, this learning did not assist the students in articulating distinctions between both arrangement and original versions of their chosen works. The scoring, homework and basic scaffolding questions provided had assisted the more capable students such as Emily and others, but further oversight had been required in order to make explicit knowledge connections and relationships between the two texts. In addition, not all pedagogic oversight addressing Concepts had been beneficial, especially when classical terminology was deemed the correct fit in all analytical situations—as exhibited in the teaching sequence between Justin and the Fugue group included at the beginning of this chapter. This tension highlights the need for terminology and analytical frameworks appropriate to popular musics to be developed for the classroom, and for these to enlarge classroom discourse and hence the music Concepts schema itself. In bridging this divide, transcription appears a useful tool, as words alone can prove problematic in fostering meaningful communication between different descriptive music languages.

Although limited to the case study situation itself, this chapter identifies a series of potential deficiencies in the way the Concepts schema is usually taught and assessed. Of chief concern is the relatively bold claim in the syllabus that “knowledge *about* the concepts of music” can be gained through engaging in “learning activities” or learning experiences across multiple modes and contexts (Board of Studies, 2009c, p. 9; 2009d, p. 9 italics added). Clearly some knowledge can be gained, but the tacit, personal, embodied knowledge acquired through practical music-making was not only difficult for teachers to identify, but even harder for students to articulate. And, as expected, not all ‘modes’ and ‘contexts’ appear equal, as the syllabus for Music 1 appears to imply. The classical terms and scoring conventions later validated in teaching interactions and in assessment, were clearly regarded as superior. Further

research is clearly needed to explore these issues, as the Concepts schema appears inappropriate as the sole tool for bringing about cumulative learning in classrooms, but particularly so for the student popular musician.

CHAPTER 9: FUGUE COMPOSITION AND IMPROVISATION

Introduction

The third and final phase of the classroom research project is discussed below. Phase 3 traces the completion of a teaching and learning trajectory that began in Chapter 5. This trajectory started with informal learning, and progressed to more formal teaching and learning activities. While classroom activity to this point sought to address both Stage 6 Music streams concurrently, in the third phase, students were offered the choice of two tasks, each of which was typical of one of the separate streams. The first was an improvisation task stemming from initial harmonic instruction and analysis of a Baroque prelude by J. S. Bach. This task was designed for students interested in the Music 1 course. The second was a composition task, where guided instruction was provided in the basics of Baroque fugue writing. This task was designed for students interested in the Music 2 course. A summary of both tasks is provided; however, as the data emerging from the improvisation task repeated a number of the earlier findings from Phase 1, the composition task will constitute the bulk of present discussion and analysis. Both Semantics and Specialisation dimensions of LCT again feature throughout the analysis.

To recapitulate findings to this point, each task had displayed a number of underlying shifts in codes of legitimation, resulting in a series of code matches and code clashes in the classroom. In Phase 1, the promotion and facilitation of informal classroom music-making had resulted in predominantly *knower code* (SR+, ER-) responses in student learning—a code match with Music 1 curriculum as outlined in Chapter 4. A shift then occurred for Phase 2 as the students were required to articulate musical knowledge in two fairly typical formats: a transcribed score and a written report using the Concepts framework. Analyses of this data framed a *knowledge code* (SR-, ER+) for which much of the prior learning undertaken in Phase 1 had provided inadequate foundation. This pointed to the need for a revision of curriculum knowledge content and pedagogy for Music 1, with staff notation providing a potential missing piece in the pedagogic puzzle for students seeking more rigorous cognitive challenges in the classroom.

In Phase 3, separate codes resulted from the two tasks offered. Learning and pedagogy for the Music 1 styled *improvisation* task reflected skills and knowledge similar to those seen earlier in Phase 1, again replicating a *knower code*. Learning and pedagogy for the Music 2 styled *composition* task framed an *élite code* (SR+, ER+), since a narrower set of principled WAM knowledge (ER+) and an established ‘ear’ were required (SR+) to process the task instructions. This finding confirms the earlier analysis of curriculum for Music 2, as outlined in Chapter 4. Unfortunately, because not all who attempted the task possessed the required skills and internalised musical disposition with which to complete the task successfully, a further code clash resulted. To begin, an overview of teaching and learning for both tasks is provided.

Overview of Phase 3 Teaching and Learning

As outlined in Chapter 3, the design for Phase 3 of the research intended to transition the students from the integrated class into separate class groups, by offering distinct tasks reflective of learning and pedagogy in the different Stage 6 courses, Music 1 and Music 2. Phase 3 was implemented over Weeks 8 to 10 of the project, the remaining three weeks. The first of these tasks was undertaken in groups, and involved ensemble improvisation using the harmonic material from J.S. Bach’s *Prelude No. 1 in C* (BWV 846). The second was an individual composition exercise, which included technical instruction and guidance in the basics of Baroque fugue writing, using the now familiar ‘*Little*’ *Organ Fugue in G minor* (BWV 578) by J.S. Bach as a compositional model. Students interested in studying the Music 2 course were asked to attempt the composition task, although were not obligated to remain in this course at the conclusion of Phase 3 should they so choose. Students interested in studying Music 1 were directed to undertake the improvisation task, and would remain in Music 1 as a consequence of this choice. Without any form of coercion, the cohort decided to divide themselves evenly between the two tasks with exactly 15 students attempting each. The task instructions are provided in Appendix A and stated:

Option 1: Improvisation

In groups of four or five (these may be different groups from the first two tasks) improvise original rhythmic and melodic material over the given harmonic structure of Bach's *Prelude No. 1 in C* (1722) from the *Well-Tempered Clavier* (the score is provided). You may not change the chords used, but you may alter the voicing of the chords and also the performing media to fit the specific make up of your group. Vocalists will need to find suitable lyrics, and/or use scat syllables. Your assessment will be based on the effectiveness of the new melodic/rhythmic material generated from Bach's existing chords.

Option 2: Composition

Using the melodic subject provided below, compose a short three-part Baroque fugue for any chosen combination of voices or instruments. Your finished fugue should be between 20 and 30 bars duration.



Notate your composition using Musescore or equivalent program and submit your composition as both a hard and soft copy score.

Tables 9.1 and 9.2 provide lists of the students who chose to undertake each task. For clarity, the students' original performance groups for Phases 1 and 2, their corresponding learning profile, and, the HSC course they originally indicated they intended to take in the Week 1 survey is provided. The tables reveal shifts in some of the students' perceptions of course suitability as a consequence of the learning undertaken thus far in the research project. Note that students from all five groups have been included here.

Improvisation Task Students	Original Group Phases 1&2	Original Learning Profile	Original Course Choice
Ned	Fugue	Aural	Music 1
Jack	Russian	Mixed	Music 2
Caleb	Air	Aural	Music 1
Klein	Fugue	Aural	Music 1
Brittany	Air	Notation	Unsure
Jason	Russian	Aural	Music 1
Juliet	Toccat	Aural	Music 1
Tim	Russian	Aural	Music 1
Conrad	Fugue	Aural	Music 1
John	Air	Aural	Music 1
Lex	Russian	Aural	Music 1
Tiffany	Canon	Aural	Music 1
Jim	Air	Aural	Music 1
Oliver	Fugue	Aural	Music 1
Monique	Canon	Aural	Music 1

Table 9.1. Students undertaking the Phase 3 Improvisation task intending Music 1

Composition Task Students	Original Groups Phases 1&2	Original Learning Profile	Original Course Choice
Peter	Toccat	Notation	Music 2
Alan	Russian	Aural	Music 1
Mairead	Toccat	Mixed	Unsure
Mark	Air	Mixed	Unsure
Madeline	Toccat	Mixed	Music 2
Zali	Toccat	Aural	Music 2
Emily	Canon	Aural	Music 1
Janet	Air	Aural	Music 2
Josie	Toccat	Notation	Music 2
Blaire	Fugue	Aural	Music 1
Matt	Russian	Notation	Unsure
Xavier	Fugue	Aural	Unsure
Anne	Canon	Aural	Music 1
Cheryl	Air	Mixed	Music 2
Lucy	Canon	Mixed	Music 2

Table 9.2. Students Undertaking the Phase 3 Composition task intending Music 2

Both tasks began with teacher-led instruction for the first week, followed by student-centred learning for the following two weeks. I undertook direction of the composition task, and my colleagues Justin and Andrew directed the improvisation task. As the classroom video footage, lesson transcripts and follow up interviews from the improvisation task generated a repetition of themes already discussed in Chapters 5 and 6, my discussion of the Improvisation task has been limited to the following overview and provisional analysis. The remainder of the chapter will address the classroom data emerging in relation to the composition task, as this contributes new findings to the study.

Phase 3 Option 1: Improvisation Task

The improvisation task was conducted in the same rehearsal spaces used for Phase 1, with the students and teachers initially gathered in the one room for guided instruction. This began with Andrew providing guided harmonic analysis of J. S. Bach's *Prelude No. 1 in C* (BWV 846). Andrew introduced each chord one at a time: isolating, notating, and labeling each as Justin demonstrated from the keyboard. With the teachers' assistance, the students then generated a chord chart from the score for ensemble improvisation in their newly formed student groups. An excerpt of a student work sample is provided below to illustrate this process. The student's hand writing shows overlaid chord symbols labeling the broken chords found in the score underneath:

CPS-700	CPS-300
20	20

Praeludium 1/Das Wohltemperierte Clavier I BWV846

平均律 第I巻 プレリュード 1番 J. S. Bach

Figure 9.1. Student work sample Phase 3 Improvisation task

The students with limited existing knowledge of harmony found this exercise very demanding, although others more accustomed to playing chords enjoyed the challenge. Once completed, the students formed groups different to those in the preceding phases. Although I had designed the task for small groups of only four or five members, Justin and Andrew decided that two larger groups would better suit their teaching style, with each of facilitating one of these groups for the remaining weeks of Phase 3.

As for Phase 1, the students chose to approach the improvisation exercise using known popular music style idioms, incorporating rhythmic and melodic features representing blues (Justin’s Group), and reggae (Andrew’s Group). This meant that the chord sequence was substantially shortened and repeated in order to facilitate aural-based learning and improvisation. In the end, only the initial 8 to 12 bars of the prelude were explored in performance, omitting the more challenging and unfamiliar dissonant material occurring later in the score. The video footage of classroom interactions, the final performances and the follow up interviews revealed that student engagement and ownership of both the learning process and the final improvisations was lower than in Phase 1. Progress was also slower with both groups reporting that they “needed more time” in order to complete the task satisfactorily, Andrew and

Justin eventually deciding not to formally assess their work in Week 10 as a consequence. Several students commented that the task was also “too similar” to Phase 1, although they had enjoyed working with new group members (Student interviews). Also, some of the old classroom tensions in ‘facilitation’ outlined in Phase 1 re-emerged, showing little change in Justin and Andrew’s pedagogic approach to practical learning at this time.

The music produced by the students at the end of Week 10 reflected these issues, with short, chordal, repetitive formulae the foundation for music-making. However, unlike Phase 1 where the students had explored the task to construct personal and collective identity through their music-making (stronger social relations or SR+), the students were now working in closer proximity to the teachers and were therefore less able to maintain autonomy over their decision-making and the musical outcome (a relative weakening or SR-). Learning processes were also compromised, with the classroom footage showing that most of knowledge acquired through analysing the Bach prelude was not applied in performance (a substantial weakening of epistemic relations or ER-). This overall result generated a *knower code* as depicted in Figure 9.2, with prior learning over the preceding two phases included here to complete the code trajectory for these students over the period of research:

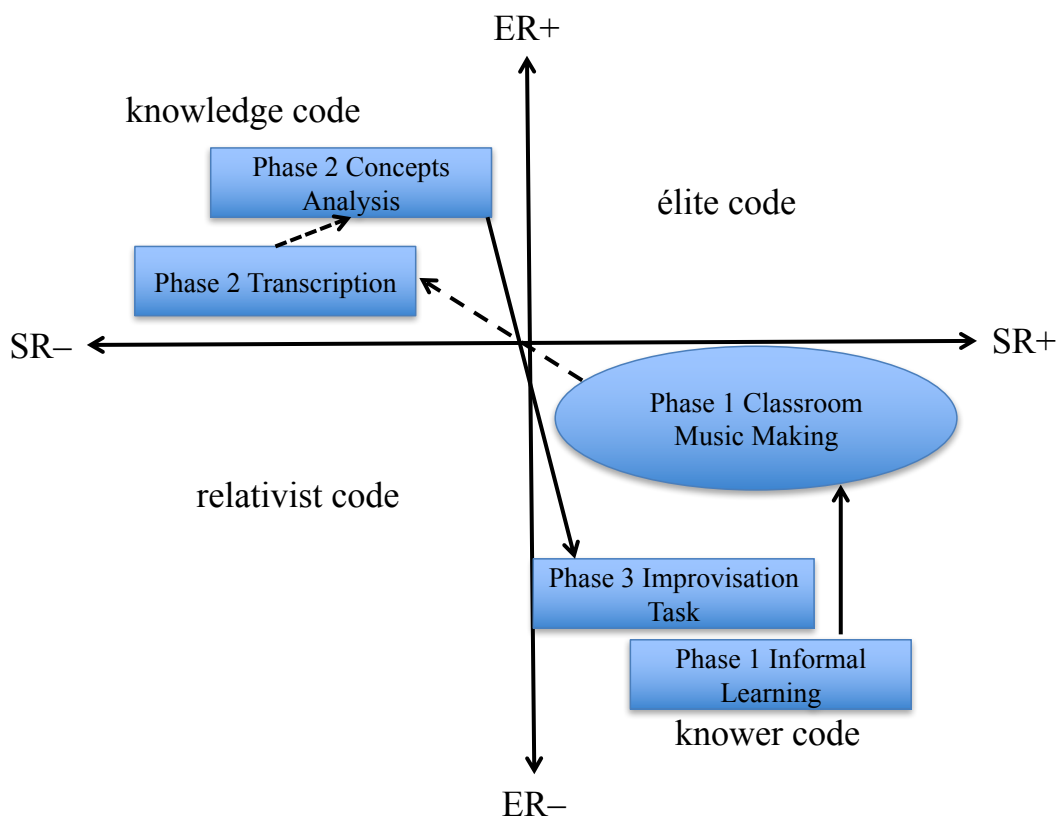


Figure 9.2. Specialisation codes displayed by Phase 3 Improvisation task students

In keeping with the findings generated throughout Chapters 5 and 6, these results reveal that the task had repeated or recycled much of the existing knowledge and skills already acquired before the research began. In light of these observations, I will provide a more detailed account of the more demanding composition task chosen by the other half of the student cohort. Analysis using LCT Semantics provides insights into how the teaching exchanges presented differed from the patterns observed throughout Phases 1 and 2. In addition, Specialisation allows comparison between the overall results from the Improvisation task, and, the earlier research phases.

Phase 3 Option 2: Fugue Composition Task

Before any instruction had been given, the students who chose to undertake the composition exercise did so with the understanding that the task would present academic challenges. As teacher, I also commenced the exercise with a considerable amount of apprehension. I was encouraged that the students were keen to be stretched,

however, I had reservations as to how successful their attempts would be considering that pedagogy would be undertaken from a notation-centric stance—my typical mode of delivery in teaching the Music 2 course. For most, these skills were still in the early stages of development. The following piece of lesson footage recorded before I had entered the room captures something of the students' perception of this situation:

- Xavier: Is everyone freaking out?
Blaire: I think that we should all just leave now!
Xavier: Except that if we go to Music 1 it will be way too easy.
Lucy: You may as well push yourself.
(Lesson footage, March 22, 2012)

Aware of these challenges I had decided to limit the scope of the exercise, requiring the students compose for no more than three separate melodic instruments in order to recreate only the opening portion of a three-part Baroque fugue. This would entail only 20-30 bars of writing, but provision was made for students wishing to extend their compositions beyond these constraints. My original design of the task had intended certain playfulness, basing the melodic subject upon a known pop riff: Lady Gaga's 'Bad Romance' (see Appendix A). Using this theme, the students needed to apply the fugue writing knowledge and skills I would impart. The teaching space chosen was a classroom with desks, with the schools' computer lab used for individual composition in the later weeks of the phase. Entering the classroom, I planned to lead the students in a score reading and analysis exercise, in order to establish a context for more specific instruction in fugue writing. The piece chosen was the now relatively familiar '*Little*' *Fugue in G minor* (BWV 578) by J.S. Bach, also chosen by the Fugue group for informal learning and versioning earlier in the research.

I intended that the first lesson aim to address two objectives. The first, that the students listen to and study the Bach fugue in order to generate a list of preliminary composition and style features using the Concepts framework. The second, that their work not only reflect correct compositional procedure, but also, the style traits of a Baroque fugue.

Upon this foundation, new terminology and composition techniques specific to contrapuntal writing would follow before individual work would begin. To assist their progress, online resources were provided as referenced in the teaching program provided in Appendix A.

None of the students had attempted a task of this nature before. As teacher I also felt somewhat unprepared, but had conducted shorter exercises in canon and chorale writing as part of my typical Music 2 program, and had studied advanced counterpoint and harmony at university. With this in mind, I decided to attempt the task at home in parallel with them in order to fully familiarise myself with the processes required. Importantly, with only a single week in which to deliver the instructions before individual work began, I decided to provide a very clear set of boundaries for reaching the second objective—that their work not only reflect correct compositional procedure, but also, the style traits of a Baroque fugue. The latter objective would prove much harder to address, as the students drew only from their limited exposure to this music gained over the previous weeks of the research. A discussion of the teaching and learning exchanges that took place over the first week reflects these challenges, with subsequent analysis using LCT Semantics revealing a series of profile patterns distinct from those observed in Phase 2.

Formal Teaching and Learning Exchanges

To begin, I initiated a teaching sequence to find out what the students already knew about fugues. The transcript provided below captures this opening exchange:

- Christine: What I want to find out from you all first is...*What is a fugue?*
- Madeline: Does it have three sections?
- Christine: Ok sections... When you say sections what might those sections look like Madeline?... (Pause)... Not sure?
- Lucy: I read it somewhere that one changes down to a fourth below or something?
- Christine: Ok yep
- Lucy: Like it modulates?

Christine: Ok, so perhaps there is something about sections, and something about modulating, which means changing key...
(Lesson footage, March 22, 2012).

Realising that they needed to dig deeper, I directed them to the Bach score in order to unpack some of the key concepts. Through direct questioning sequences I attempted to flesh out a definition for the concept 'fugue'. This exercise itself was problematic, especially for those with established strengths in aural rather than notation-based learning—the majority of those attempting the task. However, I pushed on as planned because I was committed to implementing the exercise, and also encouraged by the level of enthusiasm the students were displaying towards their learning. I began by addressing texture, believing it key to progress in this task:

Christine: So in terms of this piece we have just listened to, who can tell me firstly something about the *texture*, something about the layers?

Lucy: It actually builds

Christine: Yes. Ok so we start out with how many layers?

All: One

Christine: Very good. Where does the second layer come in?

Emily: Bar 11?

Zali: Bar 7?

Matt: Bar 6

Christine: So you should be able to see that from bar 6 there is a new part coming in underneath the top part. Ok so we have a second line coming in, and then you have two parts until where?

Lucy: Bar 12?

Christine: Very good. So, in bar 12, half way through bar 12, we get a third part coming in... So in terms of texture, let's focus on just the entry of these first three distinct layers... (I create a graphic representation for the opening three entries of the fugue on the board).

(Lesson footage, March 22, 2012)

Next the tonal relationships between the layered entries were explored. I demonstrated Bach's opening fugue subject on the piano in order that the students become familiar with the melodic and rhythmic features. This demonstration then became the basis for exchanges to verify tonality and changes in key, as the now familiar subject entered in each new voice in the score and on the recording. Based upon these observations, I created a graphic sketch on the board that replicated but enhanced a similar diagram offered to the Fugue group in Phase 1 (see Chapter 5, Figure 5.15). As each Concept area was addressed both compositional and style features were summarised. I then offered a condensed summary at the end of the lesson to my initial question prompt: "What is a fugue?":

Christine: So we've talked about *texture* and we've talked about the fact that it uses layers. Each layer is *melodic*. Each layer enters with a *theme*—a *melodic theme*. It starts the same way each time but the *key* changes. We've looked at the *rhythm*, it's in 4/4 time, the rhythms stay fairly much on the beat, other than *semiquavers* that's about as complicated as it's going to get rhythmically. In terms of the *melody* it does use quite a lot of *leaps*, the *theme* starts out relatively simply each time and becomes more complex as the melody progresses. Each melody is based on a *subject* or a *fixed idea* that doesn't change. Each time it comes in it is the same but the *key* is different. In terms of the *keys* used we've worked out that it starts in the *Tonic* key and then it moves to the *Dominant* key and then it moves back to the *Tonic* key.
(Lesson footage March 22, 2012, italics added for key terms).

In the next lesson, I came with a printed hand-out which included a number of basic rules I wished them to observe regarding Baroque counterpoint. In following the model provided in the previous lesson and the rules on the hand-out, I believed that the students' work would reflect both the composition features and some of the basic style traits of a Baroque fugue. A copy of the hand-out is provided in Figure 9.3, with each question directing the students to the same Bach score and organ recording used in the previous lesson:

Baroque Counterpoint: The art of polyphonic composition

Here are some rules and guidelines for the composition of multiple simultaneous melodic lines:

1. Keep parts balanced. Remember which line needs to feature at any given time.
e.g. bar _____
2. Try to keep parts rhythmically independent.
3. Avoid all parts moving in the same direction (similar motion).
4. Avoid parts moving in parallel 4ths, 5ths and octaves. 3rds and 6ths are preferable. e.g. _____
5. Dissonant intervals e.g. 2nds and 7ths must be resolved by step to consonant intervals. e.g. 2nd – 3rd etc.

Baroque Composition Techniques: Tools frequently used by Baroque composers

6. Melodies often imitate between parts. e.g. _____
7. Bass may use pedal notes (long/sustained bass notes over which melodies and harmonies move). e.g. _____
8. Melodies may move in sequences (or short repetitive melodic ideas that move up or down in steps). e.g. _____
9. The ending will be marked by a Perfect Cadence: Chord V – Chord I
e.g. _____
10. Ideas may be further developed through:
 - Augmentation (double-note values) or Diminution (half-note values)
 - Motivic Development (borrowing a small idea from the theme and re-using or manipulating it)
 - Inversion (placed upside-down) or Retrograde (played backwards)

Figure 9.3. Classroom Composition hand out: Phase 3 Lesson 2

In order to unpack each rule and technique listed, the unfamiliar terms required definition and explanation. This was a complex process requiring staff notation, and performed demonstrations from the piano. In order to explore Rule 4 above concerning ‘parallel intervals’, I first needed to explain what intervals were, how they

were measured and labelled, and then how parallel motion was achieved when like intervals moved in the same direction. Then, a distinction was made between ‘incorrect’ and ‘correct’ parallel intervals using the Bach score as an exemplar. This was a lengthy and challenging process with the students becoming less focused as the lesson progressed.

The teaching exchanges from the first week of Phase 3 became increasingly technical and teacher directed. An analysis of this preceding classroom footage using LCT Semantics provides insights as to how these teaching interactions differed significantly from the earlier more student-centred tasks in Phase 2, where knowledge was constructed more directly from student experience. Overarching comparisons with the Improvisation task are then made using the Specialisation dimension.

LCT analysis

The teacher directed lessons to initiate the composition task had exhibited strong *semantic density* (SD, or abstract condensed meanings), with *semantic gravity* (SG, context dependent meaning) generated only through limited interaction with the Bach score and recording provided. As these interactions with score and recording remained relatively superficial, the resulting learning profile exhibited a relatively narrow semantic range compared to the earlier phases. In the first lesson, a definition for the key concept ‘fugue’ was attempted. As a complex and multifaceted term (very strong SD+), the students were unable to comprehensively define the term from prior learning or experience. However, using guided exploration of the Bach fugue example, a fuller definition was generated within the parameters of this specific score (implying a relative weakening of SD– and strengthening of SG+). A theoretical model by way of a graphic diagram then visually reinforced some of the key features outlined (strengthening SD+). Finally, my teaching summarised both the verbal and visual concepts generated, with the final definition generated towards the end of the lesson revealing an upswing in the learning profile, as is depicted in Figure 9.4:

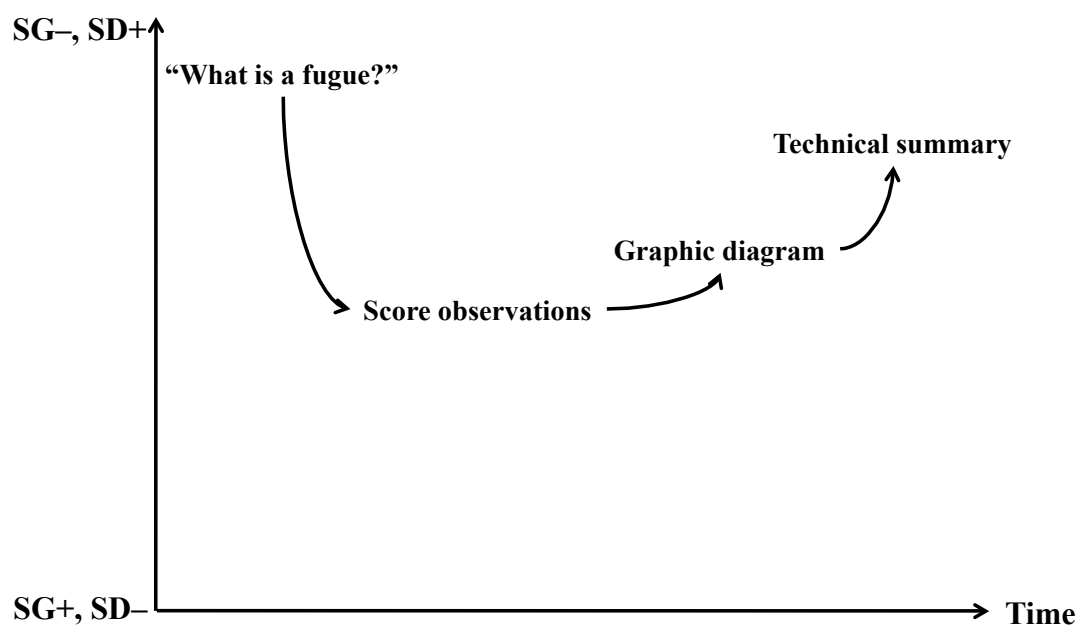


Figure 9.4. Semantic profile for initial formal teaching exchange “What is a fugue?”

Critically, the waveform generated here in ‘formal’ learning differed significantly from those recorded in Chapters 7 and 8 where student music-making provided the foundation for learning. In Phase 2 knowledge was built upon experience from the ground up, thematic analysis revealing a series of links between hands-on embodied and kinaesthetic knowledge, and more abstract symbols and technical terms introduced. Here, learning remained relatively abstract especially for those unable to audiate directly from the score, or read it competently using the recording as a guide. The result generated an inverted semantic wave profile, with teaching directed only to address my initial question prompt.

Analysis of the second increasingly rule-based exchange revealed a different semantic profile. Using the counterpoint hand-out as a script, each rule or technical term (again very strong SD+) was outlined and unpacked, with verbal and notated explanations provided and examples gleaned from the Bach score (a relative weakening of SD– and strengthening of SG+ for each exchange). Yet as time was short, and each rule or concept required separate explanation and examples, the profile generated became increasingly fragmented, failing to connect new with old knowledge as the lesson progressed. The resulting series of downward moving profiles is depicted accordingly in Figure 9.5:

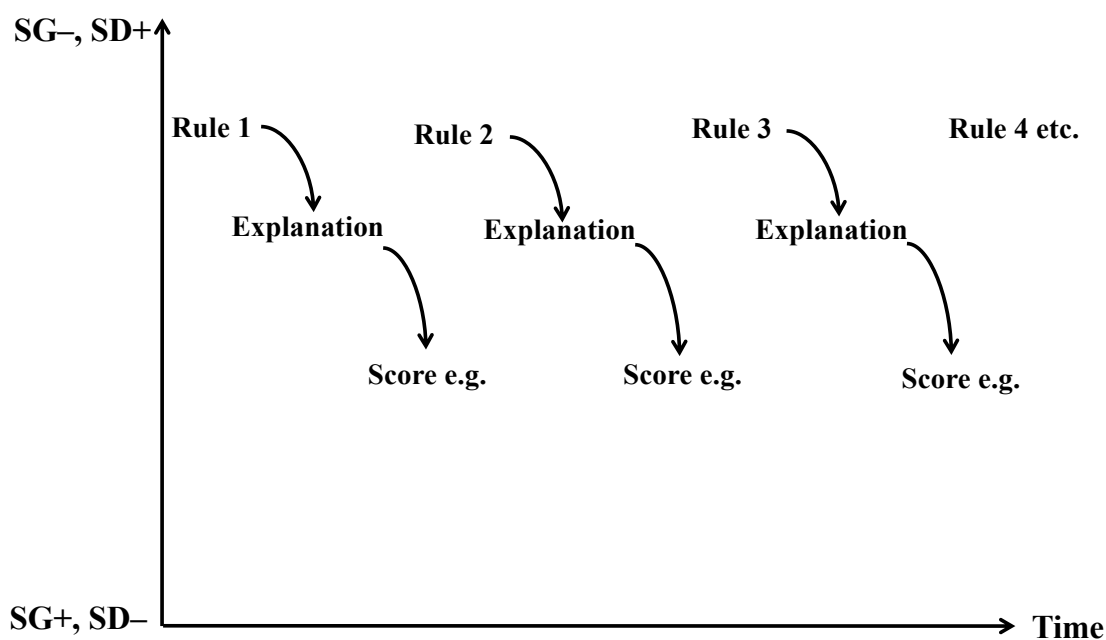


Figure 9.5. Semantic profile for formal rule-based teaching exchange

Further to these challenges, the classroom transcripts also revealed a further underlying tension. Perhaps fatigued at the length of the counterpoint list, some of the students began to object, questioning not only my instruction, but also, the validity of the task. The following exchange captures something of this tension at the end of the first week of Phase 3:

- Blaire: Why do we have to write a fugue?
 Christine: Because this is quite possibly one of the most highly developed forms of composition in Western art music.
 Matt: Why are we studying Western art music?
 Christine: Because for Music 2 that's the mandatory topic.
 (Lesson footage, March 24, 2012)

A rift had started to open up in the classroom, between my maintenance of the task objectives, the steep challenges presented, and, the narrowness of my pedagogy directed to meet only these specific aims. As a consequence, instruction had become procedural: limiting the students' creative autonomy and engagement with the exercise. This final exchange provides insights as to how this rift widened during the

close of the second lesson. My instruction had turned to address intervallic dissonance (Rule 5), But a deeper underlying conceptual dissonance, or code clash, came to the surface as seen in the following piece of classroom footage:

Christine: Right, now dissonant intervals including 2nds and 7ths, when they are played together at the same time...Ok give me an example of a second?

Matt: C and D

Christine: Yes, they are next to each other in the scale. And also 7ths?... (I play both dissonant intervals to demonstrate the clashing sound on the piano)... So, what you can hear from both of those examples is that they don't sound very nice do they? So, both of these are called dissonant intervals.

Blaire: I think they sound nice.

Chris: Now you can use these, but you must follow a dissonant interval with a consonant interval, and I will show you how...

Blaire: (Interrupting): But 2nds and 7ths when they are played at the same time sound really cool.

Christine: Yes they do, but Baroque composers would use them in a certain way, and if you do it this way it will sound fantastic. So here is our 2nd, now what Bach would do is follow this with a 3rd... (I demonstrate both intervals using notation on the board and then play the results on the piano)...So, a dissonant 2nd is raised to a 3rd, because 3rds are nice and 2nds are not.

(Lesson footage, March 24, 2012)

Aware that I was quickly losing my pedagogical footing, my teaching had become draconian; in order to quickly impart clear and explicit rules and procedures to train student response. In LCT Specialisation terms, this required not only engagement with the epistemic procedures involved (ER+), but also, the correct internalised disposition or 'ear' in which to generate the required 'sound' in both style and form (SR+). Unlike my earlier interactions with Blaire and the Fugue group in Phase 1, where knowledge was presented more objectively and then used adaptively (a

knowledge code SR-, ER+), these transcripts show a further code shift. A fugue was now a fugue not only because it adhered to certain constructional formulae, but also because it sounded like one. Blaire on the other hand had questioned the very foundation of my address. Who was this intended ‘sound’ to please and why?

The exchange went to the very heart of the problem and would affect the rest of the research from this moment onwards. My justification for the narrowness in delivery sought to maintain *élite code* expectations in student learning (SR+, ER+), with ‘good’ writing adhering to the compositional features and tonal sensitivities of the WAM tradition, and hence ‘bad’ writing falling outside these boundaries. Seeking to now fully acknowledge the formal objectives of the Music 2 course that mirrored my own passage of music learning acquired over many years, my pedagogy had shifted to reflect this code. This outcome is depicted in Figure 9.6 tracing the code trajectory for the students completing the composition task:

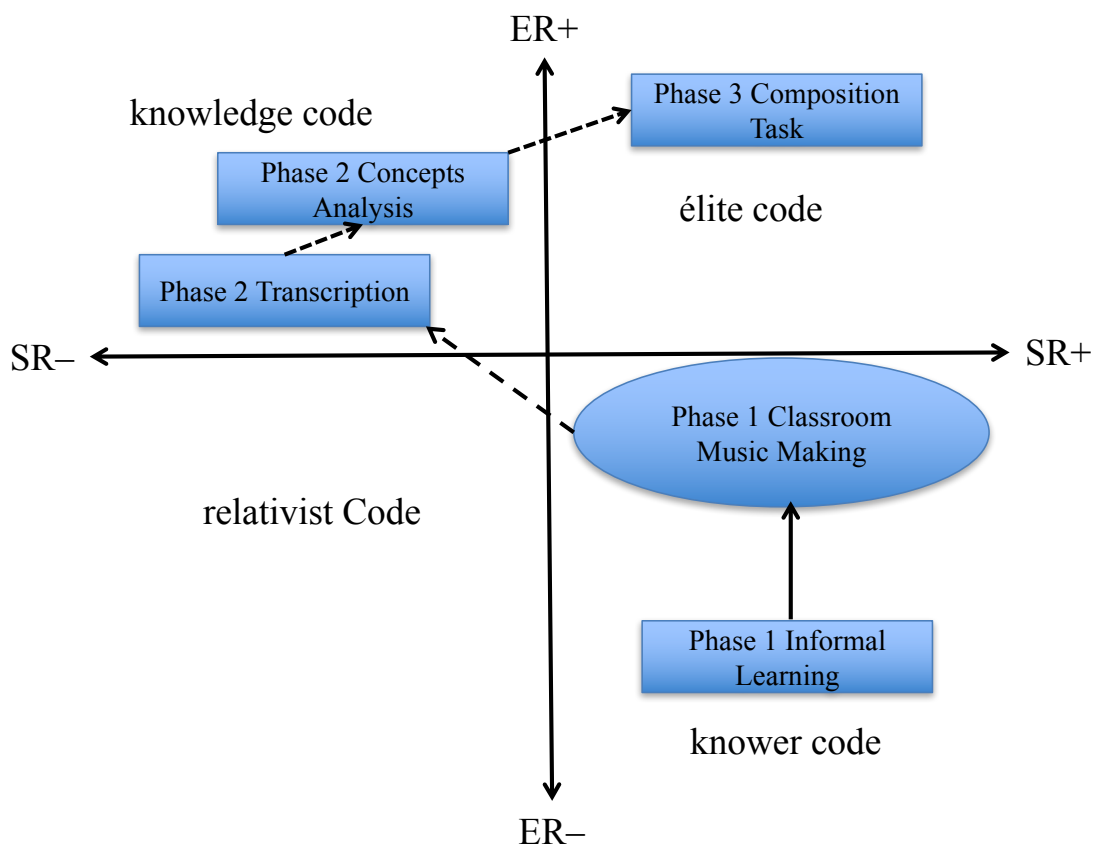


Figure 9.6. Specialisation code alignment for students involved in the Phase 3 Composition task

Regardless of the classroom tensions noted I remained unmoved, despite the increasing distance or rather *dissonance* of a metaphoric kind that had emerged as a consequence of the underlying code distinctions. These tensions continued to resonate in all further classroom discussion as I transitioned to monitor individual completion of the task in the remaining weeks of the research project.

Student Fugue Compositions

Moving to the computer lab, I soon realised how ineffective the initial week of instruction had been in imparting the requisite skills needed to complete the task. Again and again as I observed individual progress, it became apparent that most had either not understood or not valued my earlier instruction. Although I was extremely impressed with some of their creative responses to the task, I found myself restating the instructions over and over again. The following excerpts of transcribed lesson footage capture some of these issues with individual students:

Christine: [Listening to Peter's composition using midi playback]... Ok, very theatrical Peter, but this is not a fugue.

Peter: Oh ok.

Christine: Now I love the drama of this opening but we're going to have to lose that because fugues always start with the melodic subject in solo monophonic form. I'm not saying you can't use these ideas later in the piece...but not here.

(Lesson footage, March 29, 2012)

And here with Matt:

Christine: Ok let's go back to the beginning shall we?...[Listening to midi playback of student composition]...Can you tell me what's going on here with this new entry?

Matt: It's copying the first one.

Christine: What's your second part supposed to do in terms of key? What did Bach do?

Matt: I don't know.

Christine: Well we looked at it for a whole week, so I'm assuming that some of it went in. Look, don't get me wrong, there is some great stuff in here but at the moment it's not quite a fugue.

Matt: Aha.

(Lesson footage, March 31, 2012)

Peter and Matt were classically trained and working with well-developed notation skills. Students without this advantage found processing the instructions even more of a challenge. However, working directly to a computer program proved advantageous for the aural-based learners. Blaire circumnavigated the score-centric instructions, and managed to complete an initial draft by ear using his guitar at home to generate a score using midi software. His initial attempt was an ingenious and highly flamboyant piece of writing, but there were numerous problems with scoring and readability and again, little evidence of fugue conventions in his work. The transcript below relays some of these tensions:

Christine: Let's have a listen to what you've got here... (Listening to student work)...Ok now this part is working well. Let's have a look at the beginning here. So, this first entry is in D minor but you've written it as a C## which is a really bizarre way of writing a D.

Blaire: But it sounds right.

Christine: It's playing the right notes it just doesn't look right...Now tell me what should the second entry of the fugue do?

Blaire: You said to do the melody again but it's just a bit like...

Christine: You didn't want to?

Blaire: Um, I tried but ended up doing this other stuff here instead.

Christine: You can experiment later on in, but here in the introduction the entries need to work with the set conventions otherwise it's not a fugue...we'd have to call it something else.

(Lesson footage, March 29, 2012)

I soon began to realise that like Blaire, most of the ear players were writing from a sonic rather than scripted position, using their ears rather than their eyes to evaluate their work. This was only possible via the midi playback function available on the scoring programs used. With this in mind I allowed the students to listen to excerpts of my own fugue example completed at home in order to further guide their composing. Their preference for listening to evaluate their work in many cases had real value, but it also presented problems, as their ears were tuned to a different set of musical norms than the one the task required.

Four issues continued to surface as a consequence of this problem, echoing throughout the research to this point but coming to the fore in the present exercise. Firstly, the students had difficulty thinking and composing polyphonically, reverting to using chords even though these were uncharacteristic of fugue writing. Secondly, they used and preferred dissonant and non-diatonic tonalities instead of strict diatonicism. Thirdly, their melodies tended to feature even four bar phrases, with repetition and ostinato used throughout, rather than the longer varied phrase lengths of baroque writing. Fourthly, the students had difficulty with orchestration, choosing instrumentation that sounded good to them, rather than composing for ease of scoring layout and playability.

Examination of the submitted fugues substantiated these observations. For example, Xavier's fugue explored modal inflections rather than straight major and minor tonality. Following my earlier instructions, an excerpt from his score below shows the use of E major in bar 8 (the secondary dominant) in preparation for the intended dominant key required for the entry of the second subject in the key of A minor in bar 9. However instead of A minor, he wrote in A Aeolian mode with G naturals instead of G#'s in the line above. There is also uncharacteristic dissonance, bare octaves and parallel 4ths and 5ths used (see bars 9 and 10) typical in metal, but not in Baroque counterpoint. An excerpt of his submitted composition is provided with a midi recording included in Appendix J:

The image displays a musical score excerpt for a piece titled 'Xavier: Fugue composition score excerpt'. It consists of three systems of staves, each containing three parts: Violin I (Vln.), Violin II (Vln.), and Viola (Vlc.). The key signature is one flat (B-flat), and the time signature is 4/4. The first system starts at measure 8. The Violin I part features a complex melodic line with many sixteenth and thirty-second notes, including some accidentals. The Violin II part has a more rhythmic, eighth-note pattern. The Viola part is mostly silent, indicated by a horizontal line. The second system starts at measure 11. The Violin I part continues with a melodic line that includes a vibrato marking. The Violin II part has a similar rhythmic pattern. The Viola part remains silent.

Figure 9.7. Xavier: Fugue composition score excerpt (Audio file, Appendix J, Track 5)

Blaire’s fugue also exhibited similar stylistic tensions. Like Xavier, his opening included reference to the secondary dominant in bar 5 in order to modulate to the dominant of A minor in bar 6. However, his work also features pop and rock references in his use of vibrato markings for the upper strings which when played back sound reminiscent of guitar pitch bends and wammy-bar effects common in rock and metal (Appendix J, Track 6). The scanned score excerpt below displays these features, with excerpts from my marking commentary provided in pencil:

Moderate ♩ = 120

Violin 1
Violin 2
Cello

1 Maybe just write for 3 violins if you wanted 3 voices?
more conventional to use 9: for cello...this is very high for cello.
Use G# in this context as you are outlining an E major chord
do you mean vibrato or trill?

Violin 1
Violin 2
Cello

again G#
trill
vibrato?

Violin 1
Violin 2
Cello

Figure 9.8. Blaire: Fugue composition score excerpt (Audio file, Appendix J, Track 6)

Blair's score used unconventional enharmonic labels and clefs, unresolved dissonance, bare intervals and high levels of repetition uncharacteristic of Baroque fugue writing. The ending also repeated the subject in ostinato or riff-like fashion (see cello line in Figure 9.9), with rhythmic drive maintained in the upper voices, rather than feature a traditional resolution to a perfect cadence:

The image displays a musical score for three instruments: Violin 1, Violin 2, and Cello. The score is organized into three systems, with measures 22, 24, and 27 marked at the beginning of each system. The notation includes various rhythmic values, stems, and beams. A handwritten note in the right margin of the second system reads: "nice use of ~~4ths~~ parallel 3rds here."

Figure 9.9. Blaire: Fugue composition closing score excerpt

At the same time, Blaire’s was a rather ingenious piece of writing, and was easily the most effective on its own terms. Although I became increasingly frustrated that my intentions for the task had largely been unrealised, I was also genuinely delighted at some of the creative responses and the level of enthusiasm maintained during these last few weeks of the research. Many of the students appeared to genuinely enjoy the task. Recorded here in full, a classroom discussion between Anne and myself in the final lesson highlights some of the underlying code tensions, but equally, her willingness to learn:

Christine: But here you’ve got a B and an A together which is going to clash, because they are 2nds.

Anne: Oh right. Isn't that called like tension and then you can resolve it?

Christine: Yes it is...[listening to midi playback]...think about the kind of scale that you're using, what key you're in. Now where does the third part come in?...Oh, here...But you haven't started with the subject.

Anne: I didn't start with the melody line. It's down here in the harp.

Christine: But we've already heard the subject in that voice...[more listening].

Anne: I don't know if this ending fits but I thought that it sounded kind of cool. Can I show you?...[more listening].

Christine: That sounds really effective...[extended pause]...But you know what's been really interesting, is that all of your ears are attuned to popular music because that's what you spend all of your time listening to.

Anne: Yeah.

Christine: So getting you to write in a Baroque style is really, really difficult, because you just don't have that sound in your heads. I actually really like that ending you've written but it's not a traditional one.

Anne: Oh really? Thanks, heaps.

Christine: Difficult yes?

Anne: It's fun though. I do like the challenge.

(Lesson footage, April 5, 2012)

Of the fifteen students who initially attempted the task, thirteen submitted scores for assessment. Unfortunately, due to the steep learning curve faced, the average result was relatively low remaining around 50%. Regardless of this outcome, the task had provided the opportunity for genuine creative dialogue as seen, enabling further competence with notation and exposure to new theoretical concepts. Clearly, the students were happy to be presented with academic challenges and to learn from WAM—but with limited first-hand experience of the specific Baroque style upon which to draw inspiration, their individual creative responses reflected a different kind of 'sound' to the one intended for the task.

Conclusion and Research Post-script

Phase 3 opened up a rift within the classroom along the lines established in curriculum analysis outlined in Chapter 4. For those undertaking the improvisation task, a *knower code* (SR+, ER–) had resulted in line with the Music 1 rationale. For those willing to be stretched further, the composition task had required *élite code* (SR+, ER+) knowledge and skills, which few in the class possessed or could acquire in such a short time. Working to preserve and maintain normative practice across the course cohorts at AMC, this outcome was irreconcilable from my position as teacher. This is not to say that different kinds of tasks would not have affected different learning outcomes for the final phase. The use of digital mixing software could have enabled interesting outcomes for the aural-based learners, and provided an alternative to improvisation. Equally, had the fugue composition students had more time to develop competence with the kind of skills and ‘sound’ required, their assessment outcome might have been different.

At the close of the research project, morale for the composition students had remained high, with thirteen of the fifteen students present electing to continue with the Music 2 course under my instruction, despite warning that I would solely address the learning and skill outcomes required in Music 2 assessments and examinations from this point onwards. Unfortunately, this meant that ongoing code clashes continued, not when introducing new content based in WAM, but in performance and composition tasks where the students wished to maintain more creative autonomy aligned to their interests in popular music. After only one additional school term, only four students—Peter, Matt, Madeline and Mark—remained to complete Music 2 for their final HSC year, with the rest changing to the Music 1 course midway through the year 11 preliminary course. This result was rather heart breaking, as by this time I had developed ongoing rapport with the larger group. Several who chose to change courses also expressed ongoing disappointment that despite the freedom offered in Music 1, and, topics and activities more to suit their tastes, they had not again experienced the same kind of academic challenges in classroom music instruction.

Clearly, the research had not only revealed the underlying codes determining the terms for legitimacy within the separate cohorts, but also, how various teaching

approaches and assessment practices kept these in place. However, by blurring these boundaries momentarily, interesting musical and pedagogic dialogue had resulted in significant learning not just for the students, but also for myself as teacher. Further, the polarised and divided cohort appeared not to suit all students, and particularly those with an established background in popular music seeking further academic challenges which the Music 2 course appeared to offer. Formal instruction using the music Concepts framework did not reportedly provide rigorous enough challenges for these students.

The codes exposed through analysis of both curriculum and pedagogy reveal that the key to bridging the divide between *élite* and *knower codes* remained dependent upon access to epistemically challenging pedagogy (ER+), whilst at the same time allowing students to maintain ownership of learning and so preserve their musician identities in popular musics (SR+). The final chapter will summarise these findings, and attempt to provide some foundation for a series of suggestions relevant to future researchers and curriculum writers interested in building upon these results.

CHAPTER 10: CONCLUSION

Introduction

Intimate in scope, this classroom case study has provided an inside view of tensions prevailing within NSW senior secondary music education, with the intention of foregrounding and contextualising the learning experiences of student popular musicians. In NSW, curriculum acknowledging the inclusion of the ‘non-literate’ musician dates back to the late 1970s. This research investigation provides the first focused study of these students’ experience of classroom music education. Research was undertaken on three levels: historical, through a review of sixty years of curriculum documents and pedagogic trends in the state of NSW; empirical, through three distinct phases of classroom research designed to explore a range of informal and formal tasks; and theoretical, via Specialisation and Semantic dimensions of LCT (Maton, 2014). As analysis using these tools has built cumulatively from chapter to chapter over the course of the thesis, the following overview serves to provide a brief summary only, before proposing a number of areas in which these findings could provide foundation for future research or curriculum development.

Overview of Findings

Firstly, the existing definitions for ‘informal’ and ‘formal’ learning within the music education research literature were presented and problematised, revealing a need to go beyond surface level typologies that might easily align with these terms. Moreover, ongoing tensions were examined between school music programs designed to foster WAM, and the many new learning cultures aligned to the ‘popular’ that flourish outside the classroom. Acknowledging this tension, the range of available classroom pedagogies for popular music only recently accommodated in schools was outlined. These pedagogies tend to be performance based and stem typically from the learning practices associated with mainstream Western pop and rock genres, rather than represent the multiplicity of music styles, technologies and practices associated with the ubiquitous and problematic term ‘popular music’. Acknowledging these limitations, the music transmission processes typical of musicians who ‘play by

ear’—the defining music transmission approach associated with the informal learner—were explored, revealing the sophistication of embodied tactile knowledge and skills, which tend to remain tacit and context dependent in orientation. Finally, Green’s (2008a) highly influential informal learning classroom model and the plethora of research stemming from it was reviewed. A critique of these studies revealed further questions concerning the authentic recontextualisation of Green’s ‘informal learning’ in the classroom, and the need for holistic enquiry using theoretical tools capable of speaking beyond the specificities of an individual research case. With this in mind, qualitative research was designed and undertaken in NSW Australia, the context most immediate to me as a secondary teacher, with the following questions posed of curricula, practice and students studying at the senior secondary level:

1. At what points historically did NSW music curriculum documents begin to take into account popular music and musicians, and in response to what broader educational trends?
2. In what ways do student popular musicians’ ‘informal’ knowledge and skills align with, or diverge from, the ‘formal’ knowledge and skills traditionally cultivated in classrooms?
3. To what extent are the needs of student popular musicians catered for by both informal and formal classroom pedagogies?
4. Are current curriculum structures and assessment practices adequate in meeting the educational needs of student popular musicians?

The findings from each level of analysis revealed a series of legitimisation codes determining the nature of ‘play’ for the student popular musician in the classroom. Recognition of the codes determining play is key to determining why ongoing tensions prevail in classrooms such as mine, and more pertinently, provide foundation for much needed revision of curriculum and practice within the immediate research context, and potentially elsewhere.

Results

To address the first research question, a detailed examination of curriculum and practice was undertaken in NSW, where the origins of existing legitimation codes for senior secondary music education were unveiled. As defined in Chapter 3, this level of research examined play within the official *recontextualising field*, with the existence of an *élite code* (SR+, ER+) for the longstanding Music 2 and Extension stream requiring prolonged cultivation of disciplinary knowledge and skills associated with WAM. Working against the maintenance of this code, curriculum reform beginning during the 1960s and 1970s resulted in a radical weakening and segmentation of traditional knowledge structures particularly at the junior secondary level, eventually challenging access to senior music study owing to the maintenance of *élite code* prior knowledge and skills required at this level.

Coupled with increased cultural diversity, the rise in popular and youth culture and the need to make provision for the growing number of students seeking to matriculate without expertise in WAM, a new course now known as Music 1 was eventually introduced acknowledging the inclusion of the ‘illiterate musician’. Analysis of both the junior school reforms and this new senior syllabus revealed a *knower code* (SR+, ER–) required for this course. Matriculation statistics and subsequent course revisions show no attempt to bridge the code distinctions between the streams since this time, resulting in an ever-widening gap, both numeric and pedagogic, between the two course pathways and the kinds of musicianship traits they attempt to foster. Research was then presented which had been undertaken at the classroom level, the field of *reproduction*, in order to examine this situation from the ground up.

To address the second, third and fourth research questions (see above), a case study attempted to examine the relationship between students with both informal and formal learning backgrounds in the classroom, by way of musicianship traits, knowledge and skills. Equally, the study focused on the effects of different kinds of pedagogy across the informal – formal range. A series of *code matches* and *code clashes* were revealed, shedding light on aspects of the historic study of curriculum already undertaken. This was possible through the implementation of a series of teaching and learning activities undertaken in three phases. Working to address the curriculum

requirements of both Stage 6 streams (Music 1 and 2), the teaching program aimed to facilitate a range of classroom learning and teaching reflective of the terms ‘informal’ and ‘formal’, with Baroque music providing the topic context for classroom programming.

Analysis of classroom data exposed to me not a clear divide but rather a previously hidden spectrum of knowledge, skills and music-making bridging the code distinctions. The student cohort represented a broad range of knowledge and skill abilities, with the majority beginning the research project with established skills and interests in popular music, and a much smaller number seeking ongoing traditional study in WAM. A portion of the cohort also represented students with a mixture of prior learning crossing formal and informal contexts, along with a range of associated skills. There were no students with specific interests in jazz, world or traditional folk musics among the research participants. The backgrounds of the three participating teachers were also varied, and included jazz, popular music and WAM and their associated pedagogic traditions. Personally, the research provided a meeting place in which my background in WAM would be placed side by side with the students’ distinct music learning backgrounds. This juxtaposition prompted personal reflective insights that were pivotal in allowing me to momentarily step outside of my typical role in the classroom, resulting in new kinds dialogue with students and in time, and as a consequence, new forms of classroom music-making.

Drawing upon Green’s ‘informal learning’ research model as outlined in Chapter 2, the first phase of learning attempted to facilitate the recontextualisation of the students’ informal learning skills in the classroom. The task encouraged arranging or creative versioning strategies to be used with the Baroque texts as a way of promoting engagement with music previously unfamiliar to most of the students. The informal learning phase revealed a diverse array of skills and interests, as the students attempted to grapple with the unfamiliar syntax of Baroque music through the lens of their existing knowledge and skills.

For the majority, the code generated throughout Phase 1 was a *knower code* (SR+, ER–), in line with the same code generated through analysis of the current Music 1 syllabus. The teachers then responded with a series of facilitative strategies prompted

by the students, but informed by their existing knowledge and experience with WAM. Participating teacher Justin's pedagogical background with Baroque music was quite limited, so his approach focused upon hands-on ensemble work with the students, steering them to incorporate stylistic material from blues and jazz where he was able to use more of his expertise. His approach also generated a *knower code* (SR+, ER-) although one not always directly in line with student needs and musical preferences. Participating teacher Andrew's background in WAM attempted to draw students to the content of the original recordings and scores in order to help them to replicate portions of original music in their playing. The majority of the students were unable to realise his intentions, with his *élite code* (SR+, ER+) pedagogy ultimately proving divisive, although some students were stretched as a consequence. After considerable reflection, my approach sought to find points of common ground between the students' existing knowledge and my own based in WAM, with classroom discussion generating a *knowledge code* (SR-, ER+), allowing the students to choose how they would appropriate the concepts I had framed. Each teaching approach resonated in both code matches and clashes within the cohort, revealing the limitations of any singular teaching and learning strategy, and, considerable variation in student knowledge and skills also spanning the code distinctions. Further, the strategies employed by the teachers did not always promote meaningful facilitative interactions, but more often, a default set of assumptions directing pedagogy in line with their prior music learning.

To complete Phase 1, the students used a variety of self-directed learning and arrangement approaches in order to reflect an understanding of the Baroque works in their playing, and, maintain collective ownership over their group performances. This dual motivation resulted in both new cognitive challenges (ER+), and an equal if not greater need to maintain ownership over the musical outcome, by projecting collective identity through their music-making (SR+). The process stretched many of the students, as the task exposed the extent to which their informal knowledge and skills had remained previously tacit and context dependent in orientation, and was as a consequence limited to addressing only the music they were accustomed to performing.

Each group used peer demonstration, collaboration and improvisation; vernacular language and metaphor to represent ‘style’ or ‘feel’ characteristics; melodic, rhythmic and harmonic ‘formulae’ reflecting a variety of popular music styles; repetition and layered ostinati; homophonic textures; and most importantly, a synthesis of creative processes integrating performance, listening and composition skills. These strategies and skills resonated with those outlined in the review of literature undertaken in Chapter 2 in relation to aural-based learning or ear playing observed outside classroom learning situations. The students, like the teachers, were active in recontextualising their real-world music-making, and brought attributes of pop, metal, folk, blues, cabaret, classical and punk directly into the classroom arena, with ‘play’ at times challenging its underlying formal dynamics.

The recontextualisation of these skills and learning traits presented problems—not just in pedagogy, but in assessment, with the singular set of syllabus outcomes the teachers were required to assess in performance, not adequately embracing the range of knowledge and creativity displayed. Formal assessment did not reward ‘social knowledge’ (SR+) for those who undertook leadership roles, those who taught material to weaker members, and those who shouldered the responsibility for decision-making and problem solving for their peers. It did not reward versatility in crossing music style barriers, nor tenacity in using different instruments to meet the immediate needs of each group. These findings highlight the need for an expanded view of performance based competencies in the classroom for the student popular musician, and for a revision of curriculum, pedagogy and assessment practices to acknowledge the dynamic range of skills integral to popular musicianship which currently fall within this very broad skill area.

The research then turned to address existing frameworks for building and articulating focal or formal knowledge outlined by the syllabus. In Phase 2, two interrelated tasks were completed: group score transcriptions of the Phase 1 arrangements, and individual written reports using the Concepts analytical framework of both syllabus documents. Here analysis using LCT Semantics revealed connections between the students’ embodied, tactile knowledge generated through performance (strong SG+), and the abstract formal discourse legitimised and more highly prized in the

assessment of these tasks (stronger SD+), although these connections were not displayed by all students.

The first set of connections became apparent during the transcription task, where teaching consistently directed towards a *knowledge code* exposed five different forms of knowledge. Analysis using Semantics generated a gradual upward sweeping semantic wave in the student learning profile, bridging knowledge already gained in the performance (SG+, SD-) to new knowledge acquired to generate the scores (SG-, SD+). Further, the task revealed that staff notation represented for the students and the teachers 'powerful knowledge', despite its limitations in conveying much of the improvised material and sonic nuances integral to aural-based musicianship. Regardless of these tensions, many of the students were eager to become proficient with staff notation as a skill previously left unaddressed in their music education, with collaboration and digital technology providing meaningful ways to connect aural-with notation-based thinking.

Notation also provided students with useful tools with which to articulate their learning using the music Concepts schema of the syllabus. However here, a larger set of problems was encountered due to the weak framing of terminology in syllabus documents, and the difficulty in using language alone to represent musical thought. Words proved too personal and too style specific a medium in which to solely base teaching and learning, highlighting serious concerns with the Concepts framework as a solitary tool for teaching and assessing focal knowledge. The overarching syllabus rationale that knowledge 'about' the concepts is acquired through 'experiential learning' was brought under close examination. Acknowledging that the present scope of this study does not allow for a full range of learning experiences to be explored, it appears that hands-on music-making does not naturally enhance a students' ability to articulate abstract knowledge, with formal terminology supported by referenced musical examples (SD+, SG+) more highly valued in assessment than students' personal reflections or vernacular terms (SG+ alone).

In the third and final phase of research, the third and fourth research questions (see above) were more fully explored, as teaching and assessment returned to normative practice in separate course streams at AMC. For students seeking more rigorous

academic challenges, the Music 2 course proved a poor fit for the student popular musicians long-term. Reasons for this were complex. The initial composition task was reported to be a welcome challenge (ER+), however many of the students were not equipped with the correct internal ‘ear’ or musician ‘gaze’ with which to complete the task successfully. For those choosing the improvisation task, many were happy with a return to more hands-on learning, but others missed the challenges provided in the earlier phases. After the period of research had concluded, eleven of the fifteen students choosing the composition option eventually returned to Music 1, with a sense of loss expressed by some who claimed to be unchallenged in the classroom from this point onwards (ER-).

Despite the research revealing to me a previously hidden spectrum of knowledge and skills that spanned the code distinctions, the gap between the course cohorts (as unveiled in Chapter 4) had been maintained. Regardless of intellect, ambition, and the speed in which new skills were acquired, a barrier had remained, limiting access to more powerful forms of knowledge for students with learning orientations derived from their experience of popular music.

Scope and Limitations of the Study

Before presenting the list of recommendations for future research, some commentary is required outlining the limitations of the study both methodologically and theoretically. Firstly, while my position as researcher provided valuable insights which were ultimately beneficial to my teaching long term, considerable stress was encountered in trying to balance both roles during the data collection process. Further, although the dual role provided an insider position and access to a wide range of data types, equally, there were challenges in maintaining objectivity in the early stages of analysis and coding, as I attempted to reconcile the different objectives aligned to each role. The most valuable data collected was the classroom video footage, which provided incredibly rich material, both including and excluding my participation, and valuable counterpoint to interview data where my voice was always present.

Concerning the use of LCT tools, several limitations need be acknowledged. Firstly, while Specialisation provided a meaningful way of connecting research findings

between both historic and classroom levels of research, considerable variation within the code modalities were difficult to distinguish. For example, much of the classroom data concerning popular musicianship fell within the *knower code* (SR+, ER–), yet within this code modality, considerable tension was also reported between both student and teacher participants (see Chapter 5). Additional dimensions of the LCT framework could be of use in teasing out these tensions further, with Maton’s discussion of *gazes* within the arts and humanities providing deep insights into the way progression is shaped within fields dominated by knower codes (2014, p. 86-105). Further, the discussion of semantic waves in Chapters 7 and 8, did not track detailed patterns in individual student learning from task to task, nor across the learning phases, with a fuller picture emerging had the semantic codes been employed in the appraisal of data from Phase 1 (Chapters 5 and 6). Analysis using the semantic codes separately rather than together, could also have provided a more nuanced picture of classroom knowledge practices particularly for the later phases.

Significance of the Study

The purpose of this study has not been to solve ongoing problems within the field of school music education concerning provision for student popular musicians, but rather, to identify and describe some of these problems along with the mechanisms and practices that keep them in place. This study suggests that teachers cannot solve these problems, as overarching curricular objectives and established external assessment measures continue to define the terms for success. These maintain the hegemony of WAM, despite the growing presence of popular musicians and pedagogies devised to foster their informal learning in Australian classrooms, and, further afield.

Yet rather than demonise WAM as élitist and irrelevant to the student popular musician, the research has revealed the enduring validity of WAM in provoking meaningful dialogue with students, with formal knowledge and skills fostering academic rigour within music study. These findings suggest WAM and its associated canon of knowledge need to be preserved in the classroom, but not at the expense of developing new knowledge relevant to the growth of the field, including challenging

but culturally relevant popular music study. With this in mind, how might the classroom reflect a more dynamic range of teaching and learning possibilities?

Suggestions for Future Research and Curriculum Review

The following list of suggestions outline points of departure for NSW curriculum writers, assessment bodies and future researchers, interested in addressing some of the problems raised throughout this thesis.

The role of technology

Even the limited use of technology in this study outlined ways in which traditionally disparate learning traditions such as those associated with WAM and popular music now intersect both pedagogically and online, with YouTube providing a powerful and accessible learning aid and precedent for cross genre and cross modal music-making. In the popular music tertiary education sector, digital and analogue sound production skills have long constituted significant portions of training, with arranging, scoring and orchestration skills required of professional producers especially those working with large ensembles. Most school classrooms are yet to teach sound production skills, as music composition is still viewed and assessed through a score-centric lens. Music production and score based music composition require different kinds of competencies, yet these need not be viewed disparately, but rather, as potentially complementary skills. Further, mixing technologies could provide ways in which WAM, or any music for that matter, could be viewed and used in new ways, if existing recordings provided the basis for new forms of music creation through manipulation and sampling processes.

Seeing tacit knowledge

Although skills in ear playing and improvisation are currently accommodated within classrooms, true competence with these aural-based skills is rarely acknowledged and almost never assessed. Conversely, the audiation skills required to sight sing and transcribe music using staff notation often feature in formal instruction and assessment. Could improvisation and other aural learning skills feature alongside

these, and forms of assessment be devised for them? Ear playing competence could be examined by providing audio material for students to copy by ear using voice, available instruments, or both. These tasks could examine a students' ability to replicate melodic, rhythmic and harmonic material or all three simultaneously providing a way to formally acknowledge and hence validate these skills. Improvisation, although currently accommodated could be more rigorously taught and assessed by providing rhythmic, harmonic, or melodic material as inspiration for extemporisation in a variety of stylistic mediums. Further, creative versioning and re-interpretation of known music could provide avenues for extending students beyond surface level interactions with popular music repertoire.

Recognising collaboration

Many of the strengths in learning exhibited by students throughout this study occurred when they were encouraged to work collaboratively, with tasks such as transcription (typically undertaken alone) providing meaningful learning opportunities for groups of students with differing levels of existing competence. In practice however, the assessment of collaborative learning presents problems in formal examinations, as individual assessment is much easier for teachers and examiners to manage. Yet a sole focus on the individual negates the communal and collaborative orientation of popular musicianship. To address this problem, groups of students choosing to create original music together for assessment and external examination could provide evidence of their individual contributions through the use of video journaling. When coupled with performed demonstrations of ideas and their origins, video process journals could acknowledge both individual input and collaboration. Videos could provide proof of the music's authenticity, as well as be used as a reflective tool to record individual and group discussion about the creative process.

Valuing versatility

In addition to collaboration, versatility proved valuable for the student popular musicians in this study, and particularly so for those who performed in multiple music styles or using multiple instruments. Yet present assessment and examination practices in NSW can work against the promotion of such versatility, with all Stage 6

syllabus documents requiring competence using only a single instrument or voice. Further, the broadly defined topic areas for Music 1 make it possible for students to perform or compose in only a limited number of chosen styles. Without negating the value of expertise on a single instrument or proficiency within in a single music style, equally, practice should encourage students to grapple with the unfamiliar. As testament, the more stylistically versatile multi-instrumentalists participating in this research proved in the end to be the more accomplished problem solvers and leaders for their peers. To encourage both skill and music style diversity might require students to perform and compose across multiple style genres, with recognition given to students who display true competence in performing using more than one instrument.

Expanding facilitative pedagogy

The review of teacher training to acknowledge informal learning pedagogies has already begun in Australia and elsewhere, with many pre-service programs providing courses encouraging the development of basic skills in ear playing, ensemble work, digital recording and improvisation. However, as this study reveals, the acquisition of these skills is no guarantee of meaningful and adaptable facilitation, with the teachers in this study more often choosing to align their pedagogy according to their prior music learning, rather than with the direct needs of students.

To develop skills in facilitation requires critically informed pedagogy. Classroom based research coupled with self-critique can provide powerful tools in developing critical awareness in teaching, as this research investigation has demonstrated. But in order to build dialogue with students, effective patterns in knowledge-building need to feature in teacher training, with LCT providing potential tools with which to make knowledge practices more visible in classrooms, with ongoing tensions hence easier to identify and resolve. More research is clearly needed to achieve this aim, with this research providing a first attempt at implementing only Specialisation and Semantics dimensions from the five dimensions that comprise the theoretical framework. Further research could no doubt build on these findings and prove useful in developing effective models for practitioners in the future.

Acknowledging knowledge

While this research has highlighted activity in *recontextualisation* and *reproduction* fields within the NSW context, the development of popular music study within the classroom is yet to turn to the field of *production*, or, intellectual fields of popular music scholarship in order to expand knowledge discourses. To this end, historic, cultural, sociological and even semiotic analysis could provide tools with which to develop school popular musicology. Score-centric methods of analysis, while they have value, present limitations in the analysis of popular musics as noted by popular music scholars and verified throughout this research investigation (Dunbar-Hall, 1999; Middleton, 1993; Moore, 2003).

To date, researchers and teachers have looked mainly to hands on activities rather than popular music scholarship to address this need, in order that the classroom more closely mirror the world of music-making outside institutional walls. While practical pedagogies are of value to students in expanding learning experience, perhaps the ability to think critically and analytically are skills currently remaining under-developed in classrooms. Due to the pace in which popular musics change and technologies become obsolete, the ability to think, analyse, articulate and evaluate, might prove more enduring skills for students in the long-term. With this in mind, further thought should be given to classroom pedagogies promoting critical reflection and analysis. The current use of spoken *viva voce* as a means to learn and assess musicology skills for Music 1 students in NSW goes some way to provide a platform for this kind of growth. However, spoken *viva voces* are not mandatory but optional electives for students, with no written musicology components assessed despite the fact that written scholarship in popular musicology is valued at the tertiary level.

Findings discussed in Chapter 7 also highlight the potential for transcription as a valuable starting point in helping students move between aural and visual modes of thinking, thus assisting the development of skills in analysis. In the formal study of jazz, another popular music form included much earlier within institutional learning, the practice of notating and memorising recordings has long provided a valued pedagogic tool and means to develop scholarship. As Berliner writes: “the painstaking work of transcription provides interpretive pictures of improviser's thoughts.

Allowing for the imprecision of translating sounds into visual representation, these images lend themselves to more conventional kinds of musical analysis" (1994, p. 11). Yet as Berliner states, notation is imprecise. This research supports his observation, with musical symbols rarely capturing students' facility with the raw materials of sound themselves. Used in tandem with words however, images can provide meaningful support to writing, as evidenced in my own use of transcription to generate findings and discussion throughout this thesis. To enable competence with notation however takes considerable time. Accordingly, attention needs to turn to curriculum and practice at the lower or junior secondary level as the point in which these skills need to be more consistently developed, in order to provide foundation for study at the senior secondary level, and potentially beyond.

Concerning music Concepts, more thought and research is clearly required. Rose and Countryman (2013) purport the framework functions to preserve a 'discourse of dominance' in classrooms, falsely 'academising' music knowledge, instead of celebrating music as a "personal, emotional, physical, unnameable, complex, connected and enormously diverse" medium of expression (p. 47). While findings made here support their claims, equally, there is evidence to suggest that learning can be empowered using the framework, but only when musical knowledge and language come under closer scrutiny in the classroom—a central objective of this research. In order for constructivist syllabus rationales to be realised, *knowledge* in music learning needs not only to be seen, but to be viewed more objectively. Analysis using LCT semantic tools revealed a range of knowledge types in the classroom, showing connections between everyday and more theoretical or powerful forms. LCT may provide the tools researchers, curriculum writers and teachers need, to not only see knowledge more objectively in the classroom, but provide the means to make access to higher levels of study more equitable for all students.

Post-Script from the Field

At the time of writing the students involved in the research project in 2012 have completed high school, with a significant proportion now involved in a range of educational and musical fields. To date, at least six or seven are actively involved professionally or semi-professionally in popular music industries, with a smaller

number completing or soon to complete degrees in popular music performance and sound production. For the teachers involved in the study, shifts occurred gradually over the years following research at AMC, with the re-implementation of the integrated learning unit in 2013 providing an arena in which to build dialogue with students and staff over time. The research findings have also been warmly received at conferences, where debate concerning informal and popular music pedagogies continues to engender meaningful, although heated discussion, internationally. The use of LCT has proved a valuable complement to the presentation of these findings, with the number of scholars now using the framework spanning a broad array of research fields internationally.

My work has now moved to teacher training in classroom music pedagogy. Currently this work is undertaken in two institutions, the first, catering to musicians with a background like my own specialising in WAM, and the other, providing post-graduate study in music education mainly for those having undertaken popular music degrees. From this vantage point I have observed a cycle, with pre-service teachers tending to choose the pedagogies which align best with their existing skills and musical competence across popular and classical learning traditions, rather than risking stepping outside the safety of the 'known'. Those in training able to bridge the gap between different musical traditions in the classroom remain rare, but when present, make the most capable and versatile of teachers. Aligning these observations with the findings from this thesis, it appears the current curriculum structures in NSW and potentially elsewhere work to maintain existing problems in the field of classroom music education, perpetuating patterns in 'play' within. Perhaps it is time for practice to openly acknowledge and embrace musical diversity at all levels of instruction, to build knowledge, and in time, write the terms for a new code capable of educating students to live meaningfully in a rapidly changing world.

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APPENDIX A: 10 WEEK TEACHING PROGRAM

Term 1, 2012

Aim

The aim of this unit of learning is to provide an integrated curricular structure for a large NSW Senior Secondary Music class undertaking the study of Baroque Music. It plans to concurrently satisfy the initial stages of the Music 2 Preliminary Course Mandatory topic; Music from 1600-1900, and the Music 1 Course Topic, Baroque Music concurrently. Equally the content could be utilised to address the Music 1 topics; Music for Small ensembles and Methods of Notating Music. The broader pedagogical aim is to provide a structure that genuinely integrates with rigour both formal and informal modes of musical learning.⁴¹

Preliminary Course Objectives and Outcomes

Syllabus Objectives	Music 1 Outcomes	Music 2 Outcomes
	<i>Through activities in performance, composition, musicology and aural, a student:</i>	<i>Through activities in performance, composition, musicology and aural, a student:</i>
To develop or continue to develop, knowledge and skills about the concepts of music and of music as an art form through performance, composition, musicology and aural activities in a variety of cultural and historical contexts.	P1 performs music that is characteristic of the topics studied. P2 observes, reads, interprets and discusses simple musical scores characteristic of topics studied. P3 improvises and creates melodies, harmonies and rhythmic accompaniments for familiar sound sources reflecting the cultural and historical contexts studied. P4 recognises and identifies the concepts of music and discusses their use in a variety of musical styles.	P1 confidently performs repertoire that reflects the mandatory topic, both as a soloist and as a member of an ensemble. P2 demonstrates an understanding of the concepts of music, by interpreting, analysing, discussing, creating and notating a variety of musical symbols characteristically used in the mandatory topic. P3 composes, improvises and analyses melodies and accompaniments for familiar sound sources in solo and/or small ensembles. P4 creates, improvises and notates music, which is representative of the mandatory topic and demonstrates different social, cultural and historical contexts. P5 analyses and discusses compositional processes with stylistic, historical, cultural and musical considerations.

⁴¹ Green's research (2008), helps clarify the dichotomy between Formal and Informal learning. Firstly defining formal musical learning as classically (notation) based, planned, sequential and teacher-centered, Green's pioneering research, using the patterns of informal music learning of popular music in high school contexts define informal learning as aural based (rather than notation based), solitary or group orientated, experimental, improvisatory and peer-directed. Green, L. (2008). *Music, informal learning and the school: A new classroom pedagogy*. Burlington: Ashgate Press.

To develop and synthesise ideas and skills to evaluate music critically.	P5 comments on and constructively discusses performances and compositions. P6 observes and discusses concepts of music in works representative of the topics studied.	P6 discusses and evaluates music making constructive suggestions about performances and compositions P7 observes and discusses in detail the concepts of music in works representative of the mandatory topic.
To develop an understanding of the impact of technology on music.	P7 Understands the capabilities of performing media, explores and uses current technologies as appropriate to the topics studied P8 Identifies, recognises, experiments with and discusses the use of technology in music	P8 understands the capabilities of performing media, explores and uses current technologies and uses current technologies as studied. P9 identifies, recognises, experiments with, and discusses the use of technology in music.
To develop personal values about music.	P9 Performs as a means of self-expression and communication. P10 Demonstrates a willingness to participate in performance, composition, musicology and aural activities. P11 Demonstrates a willingness to accept and use constructive criticism.	P10 performs as a means of self expression and communication P11 demonstrates a willingness to participate in performance, composition, musicology and aural activities P12 demonstrates a willingness to accept and use constructive criticism.

Specific Learning Objectives

During this unit of learning it is hoped that students will;

- 1) Listen critically to Baroque music performed on original instruments [M1: P6, P7, P8, P10] [M2: P7, P8, P9, P11].
- 2) Develop aural skills through aural transmission of recorded music to live performance [M1: P1, P5, P6, P7, P9, P10] [M2: P1, P2, P5, P6, P8, P10, P11].
- 3) Think critically about arrangement and adaptation of original Baroque repertoire for modern instrumentation including the use of technology where appropriate [M1: P1, P4, P5, P7, P8, P10] [M2: P1, P2, P3, P4, P6, P8, P9, P11].
- 4) Work collectively in groups to develop ensemble playing [M1: P1, P5, P9, P10] [M2: P1, P6, P10, P11].
- 5) Think critically about practices involving the effective aesthetic resolution of versioning and arranging [M1: P4, P5, P10] [M2: P2, P3, P4, P5, P6, P10, P11].
- 6) Learn and apply knowledge of the music concepts to activities in aural, musicology, performance and composition/improvisation [M1: P1, P2, P3, P4, P5, P6, P10] [M2: P1, P2, P3, P5, P6, P7, P10, P11].
- 7) Engage with original scores of works studied and the original musicological context of works [M1: P2, P6, P10] [M2: P2, P5, P7, P11].
- 8) Transcribe group performances to staff notation using Musescore or equivalent program [M1: P2, P7, P8, P10] [M2: P2, P8, P9, P11].
- 9) Improvise/Compose new melodic and rhythmic material over existing chord patterns for familiar sound sources [M1: P3, P5, P9, P10] [M2: P2, P3, P4, P5, P6, P10, P11].
- 10) Show a willingness to engage with meaningful feedback and constructive criticism for self and others [M1: P5, P11] [M2: P6, P12].

Works studied: (Pieces 2-6 will be on the ‘Barock’ Music Project Student CD)

1. J.S. Bach - *Brandenburg Concerto No. 5*, Movt. 1 in D major (1719)
2. J.S. Bach – ‘Toccatà’ from *Toccatà and Fugue in D minor* (after 1700)
3. J.S. Bach – ‘Air’ from *Orchestral Suite No. 3 in D major* (around 1720)
4. J.S. Bach – Little Fugue in G minor (around 1705)
5. J. Pachelbel – ‘Canon’ in D major (pre 1700)
6. H. Purcell – ‘Dido’s Lament’ from Opera *Dido and Aeneas* (1688)
7. G.F. Handel – ‘Hallelujah Chorus’ from Oratorio *The Messiah* (1741)
8. J.S. Bach – ‘Prelude No. 1 in C major’ from *The Well Tempered Clavier* (1722)

Additional Resources

- Jaques Loussier recording of Brandenburg Concerto No. 5 from *The Bach Book* and *Prelude No. 1 in C*
- Original Scores of Brandenburg Concerto No. 5 Movt 1 for whole class
- Original Score and recording of Bach Prelude No. 1 in C
- Sufficient Copies of student CD recordings of ‘Barock’ works.
- Student’s instruments including amplifiers, drum kits and microphones.
- Classroom resources; Practice rooms, white board, pen, sound systems, computers running Musescore.
- Petrucci Music Library at <http://imslp.org/>
- Musescore or equivalent notation software available as free download at <http://musescore.org/>
- Additional extension activities including fugue writing included on school wikisite. Also, ‘Baroque On’ website (ABC) at www.abc.net.au/music/baroque/ is a useful additional resource.

• Sample YouTube videos;
Sky-Toccatà, Jacques Loussier – Air on a G String, Fugue in G minor ‘The Shorter’, Little Fugue in G minor - 2011 CMEA performance, Pachelbel meets U2, Pachelbel Rant (just for laughs), Hiromi - Jazz in Marciac 2010 (fragm. 1) Canon in D (Johann Pachelbel), Johann Pachelbel: Canon in D major (Jacques Loussier), Yngwie Malmsteen Pachelbel's Canon, Dido’s Lament Alison Moyet, "The Swingle Singers" - H. Purcell - Dido's Lament (Aria from "Dido and Aeneas"), Peter King - Dido's Lament, Hallelujah! (from "Händel's Messiah — A Soulful Celebration")

Assessments; (See attached Assessment tasks for details and specific marking guidelines)

Assessment Task 1 - 5% Due Week 5 Term 1

A small ensemble performance of an arranged Baroque piece (one of numbers 2-6 of significant works) [Performance 5%]

Assessment Task 2 - 10% Due Week 7 Term 1

Written transcription (score) of the arrangement performed in week 5.

Students will also present a viva voce analysis, employing the use of the six musical concepts of both the original and the student arranged version of the piece. In the viva voce the student will also need to show an understanding of the original context of the work, including original instrumentation [Aural (transcription) 5%, Musicology (Viva) 5%].

Assessment Task 3 – 5% Due Week 10 Term 1

Group composition/improvisation utilising the harmonic structure of Bach Prelude No. 1 in C. This will include new melodic and rhythmic material and potentially, stylistic adaptation including re-orchestration of the original prelude OR individual fugue composition based on Lady Gaga melodic subject. See Assessment Task 3 - '*Barock*' Music for more specific instructions and marking criteria [Composition 5%].

Scope and Sequence (Term 1 = 10 weeks. 2 timetabled 2 hour lessons per week)

Week 1; Orientation and teacher demonstration of learning in unit, including formal score reading component and concepts analysis.

Weeks 2-5: Group work on task 1 with teacher assistance and mentoring where required.

Week 5: Task 1 Assessments.

Week 6: Group work on transcription and concepts analysis.

Week 7: Task 2 Assessments.

Week 8-9: Formal score reading and harmonic analysis. Groups reformed. Group work on Task 3 with teacher assistance and mentoring where required.

Week 10: Task 3 Assessed and unit conclusion.

Teaching Program

Week	Lesson 1	Lesson 2	Register
1	<p>Orientation Day</p> <ul style="list-style-type: none"> - Unit orientation including Student Survey and PIS statements explained and processed. - Expectations and resources needed for this unit. - Student CD's given out. - Broad historical overview of Baroque Music emphasising key musicological developments and musical features. - Concepts terminology introduced. - Formal concepts based lesson combining score reading of Brandenburg No. 5 compared with Jaques Loussier (Jazz) version of the piece. Students work in groups (each group is allocated a music concept) to make observations from both the score and recordings about the two contrasting versions of the piece. - Ask students to start thinking about which people they would like to work with in groups. 	<ul style="list-style-type: none"> - Teacher ensemble performance (flute, piano and bass), demonstrating the process of learning through aural transmission of the opening Ritornello Theme from the original recording. - Assessment Task 1 given out and discussed. - Students divide into groups of 5-6 students. Each group will need to have a bass instrument, a harmonic instrument, and at least 2 melodic instruments in each group. - Explain behaviour expectations for group work. Allocate individual rooms for groups. Students listen critically to recordings on CD and decide which piece they will learn. Record student groups and performance choices at end of lesson. 	Done
2	<ul style="list-style-type: none"> - Mark Roll. Task orientation (reading from task) - Remind rules including use of phone/Ipod. - Students divide into groups of 5-6 students. As per last lesson. - Allocate individual rooms for groups. Students listen critically to recordings on CD and make final choices. Students begin the process of aural copying and arranging from recordings in groups. 	<ul style="list-style-type: none"> - Remind students about rules of group work at start of lesson and call roll. Students go to groups. - Students begin aural copying of chosen piece to available instrumentation/voices. - Scores handed out this time and used for a reference point as desired. - Conclude lesson with one or two group performances and student feed back. <p><u>Homework:</u> Find as many versions of your chosen Baroque piece on YouTube as you can. <i>Which is the best? Which is the worst? Why?</i> <i>Develop four criteria that you think defines successful adaptation.</i></p>	Done

3	<ul style="list-style-type: none"> - Roll call and lesson orientation. - Collect Homework. - Student's go to groups. - Students' continue aural copying of chosen piece to available instrumentation/voices paying closer attention to arrangement regarding structure and texture. - With teacher assistance, students create a basic graphic score of their work focusing on textural and structural features of the arrangement. 	<ul style="list-style-type: none"> - Roll call and lesson orientation. - Homework Task 2 given out and explained. Student's go to groups. - Students continue aural copying of chosen piece to available instrumentation/voices. Formalise arrangement and rehearse. - Conclude lesson with two group performances and invite student feed back. <u>Homework:</u> Research the original context of your piece including the composer, genre, composition type or processes used. 	Done
4	<ul style="list-style-type: none"> - Roll call and lesson orientation. - Assessment Task 2 given out and discussed. Students will need to decide which analytical concept they individually will address in the viva voce presentations so that all concepts are covered. - Students' rehearse chosen piece to available instrumentation/voices and refine performances. - Students begin to attempt to notate their individual part using manuscript or musescore on laptop. 	<ul style="list-style-type: none"> - Roll call and lesson orientation. Student's go to groups. - Students' rehearse chosen piece to available instrumentation/voices and refine performances. - Conclude lesson two of the group performances and invite student feed back. - Get performing groups to record mock performance for evaluation next week. 	Done, but homework not given out. May need to allow more time for second task as students notational skills are extremely varied and some have not worked with notation software before.
5	<ul style="list-style-type: none"> - Roll call and lesson orientation. - Invitation to all potential Music 2 students to undertake 'Fugue' composition challenge as presented on wiki page. Student's go to groups. - Students' rehearse chosen piece to available instrumentation/voices and refine performances. - Finalise individual part transcriptions of 'Barock' arrangements using Musescore or manuscript. 	<ul style="list-style-type: none"> - Roll call and lesson orientation. - Groups break off for 30mins to warm up. - Groups Assessed (Task 1) including peer and self-assessment. Groups record performances with phone/iPod. <u>Homework:</u> Using Musescore, try to transcribe your individual part of the arrangement. <i>How does it differ from your part on the original score?</i> 	Done
6	<ul style="list-style-type: none"> - In C405 and Computer lab (C4B) start to formalise transcriptions of arrangements in existing groups. Students will be given graph paper to begin with, and given guidance as to how to firstly represent; 1. 	<ul style="list-style-type: none"> - Students finalise viva presentations and transcriptions. 	Done

	<p>Structure (lateral) and 2/3. Texture/Tone colour (vertical) and then increase detail to include 4. Pitch (vertical) and 5. Duration (lateral) lastly including 6. Dynamics and Expression marks.</p> <p>- Continue transcriptions of ‘Barock’ arrangements to notated scores using Musescore as groups are individually capable.</p> <p><u>Homework:</u> Focusing on your assigned music concept, draw up a comparison chart highlighting how this concept is understood in both the original recording and your group’s recording</p>		
7	- Group work continues in C4B/C405 finalising transcriptions and vivas.	- Students present Assessment Task 2 vivas and hand in transcriptions (C401).	Groups re-assessed if required. Workshop outlining differences between Music 1 and 2. Students ask questions and groups organised for next week.
8	<p>- Roll call and lesson orientation.</p> <p>- Assessment Task 3 Handed out and discussed.</p> <p>- Students study Bach Prelude No. 1 in C using the score and recording. Students provided with demonstration as to how to create a harmonic reduction (with labelled Jazz chord symbols and/or figured bass) of opening section of work.</p> <p>- In small groups, (utilising harmonic instruments available) students discover the remainder of the harmonic framework for the prelude.</p>	<p>- Roll call and lesson orientation. Students go to groups.</p> <p>- Students’ continue composition/improvisation exercise.</p> <p>- Conclude lesson with one or two group performances and student feed back.</p>	Done
9	- Roll call and lesson orientation. Students go to groups.	- Remind of rules of group work at start of lesson and call roll. Students go to groups.	Done

	<ul style="list-style-type: none"> - Students continue composition/improvisation exercise. - Conclude lesson with one or two group performances and student feed back. 	<ul style="list-style-type: none"> - Students continue composition/improvisation exercise. - Conclude lesson with one or two group performances and student feed back. 	
10	<ul style="list-style-type: none"> - Remind of rules of group work at start of lesson and call roll. Student's go to groups. - Students' finalise composition/improvisation exercise. - Conclude lesson with one or two group performances and student feed back. 	<ul style="list-style-type: none"> - Composition/Improvisation exercise assessed including self/peer assessment. 	Done. Fugue Compositions only assessed as students undertaking the improvisation task required more time.

Assessment Task 1: 'Barock' Music

Preliminary Course

Music 1: Topic 1 – Baroque Music, and

Music 2: Mandatory Topic Music from 1600-1900 (Unit 1 only)

DUE: Friday March 2nd 2012 (Term 1, Week 5)

Course Components: Performance (5%)	
Total Weighting: 5%	
Music 1 Outcomes Assessed	Music 2 Outcomes Assessed
P1 Performs music that is characteristic of the topics studied. P5 Comments on and constructively discusses performances and compositions. P7 Understands the capabilities of performing media, explores and uses current technologies as appropriate to the topics studied P8 Identifies, recognises, experiments with and discusses the use of technology in music. P9 Performs as a means of self-expression and communication. P10 Demonstrates a willingness to participate in performance, composition, musicology and aural activities. P11 Demonstrates a willingness to accept and use constructive criticism.	P1 Confidently performs repertoire that reflects the mandatory topic, both as a soloist and as a member of an ensemble. P4 Creates, improvises and notates music, which is representative of the mandatory topic and demonstrates different social, cultural and historical contexts. P6 Discusses and evaluates music making constructive suggestions about performances and compositions P8 Understands the capabilities of performing media, explores and uses current technologies and uses current technologies as studied. P9 Identifies, recognises, experiments with, and discusses the use of technology in music. P10 Performs as a means of self expression and communication P11 Demonstrates a willingness to participate in performance, composition, musicology and aural activities P12 Demonstrates a willingness to accept and use constructive criticism.

TASK 1

In groups of either 5 or 6 students, create an *original* arrangement of *ONE* of the following Baroque pieces found on the 'Barock' Music Project Student CD. You will begin by copying the original recording onto your chosen instrument/voice. The arrangement may adhere to traditional Baroque stylistic conventions *OR* may adapt the given musical material to a new style of the performers' choice altering the original instrumentation and or musical material to suit your group. Arrangements however must show a thorough understanding of the original Baroque text. Perform the arrangement to the class.

Works include;

- J.S. Bach – 'Tocatta' from *Tocatta and Fugue in D minor* (after 1700) Track 3
- J.S. Bach – 'Air' from *Orchestral Suite No. 3 in D major* (around 1720) Tracks 4 & 5
- J.S. Bach – Little Fugue in G minor (around 1705) Tracks 6, 7 & 8
- J. Pachelbel – 'Canon' in D major (pre 1700) Track 9
- H. Purcell – 'Dido's Lament' from Opera *Dido and Aeneas* (1688) Track 10
- G.F. Handel – 'Hallelujah Chorus' from Oratorio *The Messiah* (1741) Tracks 11 to 16

For longer works, students may choose to abbreviate the original to a total duration of around 3-5mins.

Resources you will need;

- The school's wiki site will contain all resources as well as posted video footage of weekly classes for student comment.
- 'Barock' Music Project CD
- Original score of chosen piece. Scores available as free download PDF at <http://imslp.org/> or at the school library in hard copy.
- Own Instruments, Laptop (if possible), or iPod, or school computer.
- Additional resources for extension - 'Baroque On' website (ABC) at www.abc.net.au/music/baroque/ (link no longer active)
You may also ask for additional work on Baroque material presented in this unit from teachers at any time.

- Sample YouTube Videos of relevant Baroque arrangements; *See Barock Music Page on Wiki for links*

Sky-Tocatta, Jacques Loussier – Air on a G String, Fugue in G minor 'The Shorter', Little Fugue in G minor - 2011 CMEA performance, Pachelbel meets U2, Pachelbel Rant (just for laughs), Hiromi - Jazz in Marciac 2010 (fragm. 1) Canon in D (Johann Pachelbel), Johann Pachelbel: Canon in D major (Jacques Loussier), Yngwie Malmsteen Pachelbel's Canon, Dido's Lament Alison Moyet, "The Swingle Singers" - H. Purcell - Dido's Lament (Aria from "Dido and Aeneas"), Peter King - Dido's Lament

Marking Criteria Task 1 (Performance): Marks will be awarded on an individual basis incorporating ensemble skills.

5 marks	Performance displays a high degree of technical facility, a perceptive use of stylistic expression and a refined sense of ensemble.
4 marks	Performance displays developed technical facility, consistent use of stylistic expression and a developed sense of ensemble.
3 marks	Performance displays competent technical facility, evidence of stylistic expression and a competent sense of ensemble.
2 marks	Performance displays some basic technical facility, a basic level of stylistic expression and inconsistent sense of ensemble.
1 mark	Performance displays limited technical facility, limited stylistic awareness and ensemble skills.

Assessment Task 2: 'Barock' Music

Preliminary Course

Music 1: Topic 1 – Baroque Music, and

Music 2: Mandatory Topic Music from 1600-1900 (Unit 1 only)

DUE: Wednesday March 14th 2012 (Term 1, Week 7)

Course Components: Aural (5%), Musicology (5%)	
Total Weighting: 10%	
Music 1 Outcomes Assessed	Music 2 Outcomes Assessed
<p>P2 Observes, reads, interprets and discusses simple musical scores characteristic of topics studied.</p> <p>P4 Recognises and identifies the concepts of music and discusses their use in a variety of musical styles.</p> <p>P6 Observes and discusses concepts of music in works representative of the topics studied.</p> <p>P7 Understands the capabilities of performing media, explores and uses current technologies as appropriate to the topics studied</p> <p>P8 Identifies, recognises, experiments with and discusses the use of technology in music.</p> <p>P10 Demonstrates a willingness to participate in performance, composition, musicology and aural activities.</p> <p>P11 Demonstrates a willingness to accept and use constructive criticism.</p>	<p>P2 Demonstrates an understanding of the concepts of music, by interpreting, analysing, discussing, creating and notating a variety of musical symbols characteristically used in the mandatory topic.</p> <p>P4 Creates, improvises and notates music, which is representative of the mandatory topic and demonstrates different social, cultural and historical contexts.</p> <p>P5 Analyses and discusses compositional processes with stylistic, historical, cultural and musical considerations.</p> <p>P7 Observes and discusses in detail the concepts of music in works representative of the mandatory topic.</p> <p>P8 Understands the capabilities of performing media, explores and uses current technologies and uses current technologies as studied.</p> <p>P9 Identifies, recognises, experiments with, and discusses the use of technology in music.</p> <p>P11 Demonstrates a willingness to participate in performance, composition, musicology and aural activities</p> <p>P12 Demonstrates a willingness to accept and use constructive criticism.</p>

TASK 2

In the same groups as Task 1, create a transcription (score) of the arrangement performed in task 1. Then, using this transcription and the original score and recording of the work, **prepare a comparative analysis discussing the original in light of its relationship to the new arrangement.** Focus your discussion on **ONE of the musical concepts** (pitch, duration, texture, tone colour, dynamics and expression, and structure), making sure that a **different musical concept is analysed by each individual group member.** (*For groups larger than 6 members, divide pitch into two areas; melody and harmony*).

You will need to;

1. Read and listen to the original score of the work and listen to your groups' performance recording from Week 5.
Transcribe your individual performed onto the score using either traditional staff notation, or graphic notation. Improvised sections need not be transcribed. Guitarists/Keyboardists may use tab notation or chord symbols. Parts requiring transposition must be transposed.
2. During class time, compile the individual transcribed parts onto a whole score template for your group.
3. Then *compare* the use of the SIX musical concepts (ONE concept per group member) in both the original Baroque version and the groups' adapted performance arrangement. Remember to discuss the music in detail. Where possible back up your observations by referring to the original and student scores. A concepts check-list is available on the wiki site for further assistance, and an example of a comparative analysis is also provided from the lesson completed in week 1.

Marks for transcriptions will be allocated individually, however must be submitted as a complete group score.

Marks for concepts analysis will also be allocated individually.

Resources you will need;

- The school wiki site will contain all resources as well as posted video footage of weekly classes for student comment.
- 'Barock' Music Project CD
- Musescore or equivalent notation software. This program is available as a free download at <http://musescore.org/>
- Original score of chosen piece. Scores available as free download PDF at <http://imslp.org/> or in hard copy from the library.
- iPod recording of group performance
- Concepts Prompters - see wiki page under 'Barock' Music Project

Marking Criteria: Aural Transcription

5 marks	Transcription uses detailed and accurate notation of arrangement showing a thorough understanding of stylistic score conventions.
4 marks	Transcription uses accurate notation of arrangement showing a developed understanding of stylistic score conventions.
3 marks	Transcription uses mostly accurate notation of arrangement showing an understanding of stylistic score conventions.
2 marks	Transcription achieves a basic level of accuracy of arrangement although there are frequent notational inconsistencies.
1 mark	Transcription is incomplete or only shows limited understanding of notation of arrangement.

Marking Criteria: Musicology Analysis

5 marks	Perceptive and detailed analysis showing thorough and highly relevant research, highly effective organisation of material and an advanced understanding of the musical concepts.
4 marks	Detailed analysis showing thorough research, effective organisation of material and a developed understanding of the musical concepts.
3 marks	Competent analysis showing evidence of research, competent organisation of material and an understanding of the musical concepts.
2 marks	Basic analysis showing inadequate research, some organisation and a basic understanding of the musical concepts.
1 mark	Limited or incomplete analysis without evidence of research, inadequate organisation and a limited understanding of the musical concepts.

Assessment Task 3: 'Barock' Music

Preliminary Course

Music 1: Topic 1 – Baroque Music, and

Music 2: Mandatory Topic Music from 1600-1900 (Unit 1 only).

DUE: Composition Monday April 2nd 2012, OR Improvisation Wednesday April 4th 2012 (Term 1, Week 10)

Course Components: Composition/Improvisation (5%)	
Total Weighting: 5%	
Music 1 Outcomes Assessed	Music 2 Outcomes Assessed
<p>P2 Observes, reads, interprets and discusses simple musical scores characteristic of topics studied.</p> <p>P3 Improvises and creates melodies, harmonies and rhythmic accompaniments for familiar sound sources reflecting the cultural and historical contexts studied.</p> <p>P5 Comments on and constructively discusses performances and compositions.</p> <p>P7 Understands the capabilities of performing media, explores and uses current technologies as appropriate to the topics studied</p> <p>P9 Performs as a means of self-expression and communication.</p> <p>P10 Demonstrates a willingness to participate in performance, composition, musicology and aural activities.</p> <p>P11 Demonstrates a willingness to accept and use constructive criticism.</p>	<p>P2 Demonstrates an understanding of the concepts of music, by interpreting, analysing, discussing, creating and notating a variety of musical symbols characteristically used in the mandatory topic.</p> <p>P3 Composes, improvises and analyses melodies and accompaniments for familiar sound sources in solo and/or small ensembles.</p> <p>P4 Creates, improvises and notates music, which is representative of the mandatory topic and demonstrates different social, cultural and historical contexts.</p> <p>P6 Discusses and evaluates music making constructive suggestions about performances and compositions</p> <p>P8 Understands the capabilities of performing media, explores and uses current technologies and uses current technologies as studied.</p> <p>P10 Performs as a means of self expression and communication</p> <p>P11 Demonstrates a willingness to participate in performance, composition, musicology and aural activities</p> <p>P12 Demonstrates a willingness to accept and use constructive criticism.</p>

Choose *ONE* of the following tasks

Improvisation

In groups of 4 or 5 (may be different groups from last task) improvise original rhythmic and melodic material over the given harmonic structure to Bach's Prelude No. 1 in C (1722) from the Well Tempered Clavier (the score is provided). You may not change the chords used, but you may alter the voicing of the chords and also the performing media to fit the specific make up of your group. Vocalists will need to find suitable lyrics, and/or use scat syllables. Your assessment will be based on the effectiveness of the new melodic/rhythmic material generated from Bach's existing chords.

You will need to;

1. Study the score thoroughly, playing through the chords in their existing order and labelling them where possible to create a chord chart for your group.
2. Experiment with new positions (or voicings) for the chords, and/or different time signatures/rhythms and/or styles of playing.
3. Experiment with creating new melodic material over the chords. Try to get everybody in your group to do this.
4. Decide on the various musical roles group members will play (i.e. Solo melodic, Counter melodic, Harmonic, Rhythmic, Bass etc.)
Remember that roles don't have to stay fixed for the whole piece.
5. Decide on an arrangement or structure.
6. Rehearse the finalised piece.
7. Perform it to the class for assessment.

Marks will be allocated on an individual basis, but will need to show stylistic consistency.

You are not required to notate your piece, but you may do so as an aid to performance.

Composition – Due 4pm Monday April 2nd

Using the melodic subject provided below, compose a short three-part Baroque fugue for any chosen combination of voices or instruments. Your finished fugue should be between 20 and 30 bars duration.



Notate your composition using musescore or equivalent program and submit as both a hard and soft copy score.

Resources you will need for improvisation:

- Original score of Bach’s Prelude No. 1 in C for keyboard and recording on ‘*Barock*’ Music CD.
- Chosen instruments.
- Muscores OR Manuscript paper if needed.
- Sample YouTube videos of existing arrangements; Jacques Loussier Trio Prelude No 1 in C major from the Well-tempered Clavier, BMV 846

Resources you will need for composition;

- Muscores or equivalent program.
- Support material provided on ‘Barock’ Music Project Page of wiki. Scroll down to ‘Extension activities’ and follow the link provided entitles “How to write a Fugue”. Additional resources will be provided in class.

Marking Criteria Task 3:**Composition/Improvisation:**

5 marks	Composition/Improvisation is stylistically coherently, showing a thorough understanding of the musical concepts and the relationships between them. Students’ demonstrate high level skills in organizing ideas into musical structures.
4 marks	Composition/Improvisation is stylistically coherently, showing a developed understanding of the musical concepts and the relationships between them. Students’ demonstrate proficient skills in organizing ideas into musical structures.
3 marks	Composition/Improvisation shows an awareness of style, showing a sound understanding of the musical concepts and the relationships between them. Students’ demonstrate competent skills in organizing ideas into musical structures.
2 marks	Composition/Improvisation shows a basic or inconsistent awareness of style, and some understanding of the musical concepts and the relationships between them. Students’ demonstrate basic skills in organizing ideas into musical structures.
1 mark	Composition/Improvisation shows a limited and/or inconsistent awareness of style, and a limited understanding of the musical concepts and the relationships between them. Students’ demonstrate limited skills in organizing ideas into musical structures.

APPENDIX B: Letter of School Consent



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November 30th, 2011

***'Barock'* Music – Classroom Research Project**

Dear Dean and Principal,

I am writing to seek formal permission for Ms Christine Carroll (student researcher) to undertake research with enrolled Year 11 students at the beginning of the 2012 school calendar year. The research undertaken will contribute towards the award of a Doctorate in Music Education (Research), in which the student researcher is currently enrolled at the University of Sydney Conservatorium of Music, under my guidance whilst working for you as a classroom music teacher.

The current research project will holistically evaluate the learning experiences of students with learning orientations in popular music at the senior secondary level. Currently the school offers both of the NSW Board of Studies senior music courses (Music 1 and Music 2) as separate courses for study, with each orientated around quite distinct learning agendas, the former typically offered to the student popular musicians at the school. This study would evaluate these students' experience of the senior secondary classroom for the period of Term 1; 2012, through a unit on Baroque music during students' timetabled music classes. It would utilise multi-modal learning strategies integrating aspects of both formal and informal learning and pedagogy in a class environment promoting student autonomy in performance, aural skills, score reading, improvisation, arrangement, transcription and music technology. It will thus satisfy both Music 1 and 2 course syllabi, whilst allowing the teachers to observe students and thus help them to make decisions as to appropriate course placement at the conclusion of the study.

The number of students involved in each year of the study is estimated at approximately 20-30 participants, with the support of the music staff whom have already expressed an interest in participation. Data collection methods would involve an initial student questionnaire (to assess previous music learning history), and, with participant and parental consent, ethnographic observation involving audio/video footage of the pilot study classes and interview data from students and teachers. The school wiki site would also be used as a way to gather informal student and teacher comment on posted recorded material of class activities. It would be clearly expressed to students that should they wish not to take part in the proposed study, or should they wish to withdraw at any time, that their schooling would not be jeopardised in any way. Students wishing not to take part would be omitted from the data collection process, but would still take part in the unit of study alongside their peers. Teacher participants wishing to take part in the pilot study would also sign participant consent forms.

The results will be made available to both you and the research participants in the form of written summaries. Furthermore, no data from the study will be published or viewed by outside parties without the complete permission of the participants (and corresponding parents/guardians) involved. All individual's identities including the name of your school, will be protected by the use of pseudonyms, and, the participants will also be free to discuss the study with any interested external parties at any time.

It is anticipated that this study will benefit both student and teacher participants by exploring learning possibilities that exist outside of regular practice at the school, and by allowing students to view their music making from dual informal and formal perspectives. As is characteristic of any educational action research study, high levels of feedback from the student and teacher participants will guide and inform the research process.

After you have read this information, the student researcher can discuss it with you further and answer any questions you may have. If you would like to know more at any stage, please feel free to contact her by phone on 0419 591 831 or via e mail at christine@ruach.org.au to ask further questions.

If you have any further complaints or concerns, please feel free to contact myself, the Chief Researcher on the above letterhead, or the Human Ethics Administration at the University of Sydney below.

Regards,
.....Dr Michael Webb
(Chair, Music Education Unit, Sydney Conservatorium of Music, Sydney University)

.....Ms Christine Carroll
(B. Mus. Dip. Ed. Ph.D. Enrolled) - Student Researcher

I hereby give permission for research to be undertaken at AIM SSC in 2012/2013 in the above manner.

Signed..... / /2011 (date)
(Executive Dean)

Signed..... / /2011 (date)
(Principal AIM SSC)

Any person with concerns or complaints about the conduct of a research study can contact The Manager, Human Ethics Administration, University of Sydney on +61 2 8627 8176 (Telephone); +61 2 8627 8177 (Facsimile) or ro.humanethics@sydney.edu.au (Email).

A digital copy of this information sheet has already been sent to you to keep.

APPENDIX C: Participant Information and Consent Form



ABN 15 211 513 464

Sydney Conservatorium of Music

DR MICHAEL WEBB
Senior Lecturer in Music Education

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'BAROCK' MUSIC; Classroom Research Project Student and Parent/Caregiver Participant Information Statement

Dear Year 11 music students, Parents and Caregivers,

Year 11 Music students are invited to participate in the above research project, which will occur during regular timetabled music classes for the duration of Term 1, 2012. This will involve a unit of study on Baroque music, integrating aspects of both formal and informal learning (hence the title '*Barock' Music*') common to both HSC music courses (Music 1 and Music 2). It will allow students to work in groups and will have a strong practical focus, integrating learning in aural, musicology, performance, and composition throughout the unit. Students will be allowed to make some decisions about the music they perform, and the styles in which they work, stemming from initial study in Baroque music.

1. Who is carrying out the study?

The research project will be co-ordinated by Ms Christine Carroll, who has been employed as an HSC music teacher at the school since 2002. The study will form the basis for the degree of Doctorate in Music Education (Research) at The University of Sydney under the supervision of Dr Michael Webb. Christine will be assisted by both of the additional Music staff for all of the timetabled music classes. At the conclusion of the study you will be divided into separate music classes (either Music 1 or 2) under the sole instruction of one of the three teachers.

2. What does the study involve?

The study will be undertaken in normal timetabled music classes. *It will not involve any extra time or effort on your part.* It will involve an initial questionnaire, the use of audio/visual recordings of class activities, student comment in response to posted videos of class material on the school wiki site, and work samples produced by students throughout the course of the unit. You (with your parent's/guardian's permission) may also elect to take part in an additional 20-minute recorded interview with the teacher researcher to discuss your individual participation, but this is completely optional. Students unwilling to participate in the interviews will not be prejudiced against in any way.

3. How much time will the study take?

The whole unit of work will last for the duration of Term 1, 2012 (10 weeks, 4 hours per week of classes).

4. Can I withdraw from the study?

Being in this study is completely voluntary - students are not under any obligation to consent and - if they do consent - they may withdraw at any time without affecting your relationship with The University of Sydney, the teacher researcher and staff at AIM SSC. Students will still participate in the unit of work alongside your peers, but all audio/visual data involving them, along with any written transcripts or copies of work samples used will be omitted from the study and destroyed at the earliest convenience.

Should you/your and your parent(s)/guardian(s) choose to consent to an additional interview, *You may stop the interview at any time if you do not wish to continue, and the audio recording will be erased and the information provided will not be included in the study.*

Completion of the student survey is also *completely voluntary and you are not under any obligation to consent*. Submitting it is an indication of your consent to participate in this portion of the study. You can withdraw any time prior to submitting your completed survey. However, once you have submitted it, your responses cannot be withdrawn. The individual results from the student survey will be kept completely confidential, and will only be discussed with individuals in private should they wish to participate in the additional interview discussed earlier. The anonymous results will be published on the school wiki site.

5. Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants except as required by law if applicable to the study. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

6. Will the study benefit me?

It is intended that the unit of learning will benefit students by allowing them the time to ask questions about the content of both HSC music courses, making the transition to separate classes in Term 2 a smoother process. Class activities will utilise learning strategies integrating aspects of both formal and informal musical learning in an environment promoting student autonomy across a variety of tasks. It will thus satisfy both Music 1 and 2 course syllabi concurrently. However, participation in any research-based activities initiated by the teacher researcher (including audio/visual recording, and any additional interviews) will not directly benefit or advantage student participants in any way.

7. Can I tell other people about the study?

You are free to discuss the study with any interested parties.

8. What if I require further information?

When you have read this information, Christine will discuss it with you further and answer any questions you may have. If students would like to know more at any stage, they may speak with her further at any time during school hours. Should parents/caregivers wish to speak further on the matter, they may contact her by phone on 0419 591 831 or via e mail at: ccar5403@uni.sydney.edu.au

9. What if I have a complaint or concerns?

Should you have a complaint or further concerns you are free to contact the Chief Investigator on the above letterhead. Should you wish to speak on the issue further, you are free to contact the University Ethics Administration below.

Any person with concerns or complaints about the conduct of a research study can contact The Manager, Human Ethics Administration, University of Sydney on +61 2 8627 8176 (Telephone); +61 2 8627 8177 (Facsimile) or ro.humanethics@sydney.edu.au (Email).

This information sheet is for you to keep



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PARTICIPANT CONSENT FORM

I, (Parent/Caregiver Name), give consent for my
child(name of child), to participate in this research project.

TITLE: **'Barock' Music Project**

In giving my consent I acknowledge that:

1. The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.
2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my child's involvement in the project with the researcher/s.
3. I understand that being in this study is completely voluntary – I am not under any obligation to consent.
4. I understand that my involvement is strictly confidential. I understand that any research data gathered from the results of the study may be published however no information about me will be used in any way that is identifiable.
5. *I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s), the University of Sydney or School now or in the future.*
6. If I consent to allow my child to participate in an additional interview, I understand that they may stop the interview at any time if they do not wish to continue, the audio recording will be erased and the information provided will not be included in the study.

7. I consent to my child participating in an additional 20 minute recorded interview with the teacher researcher

YES NO

8. *I consent to:*

- Audio-recording YES NO
- Video-recording YES NO
- Receiving Feedback YES NO

If you answered YES to the "Receiving Feedback" question, please provide your details i.e. mailing address, email address.

Feedback Option

Address: _____

Email: _____

..... (Parent/Caregiver)
Signature

.....
Please PRINT name

...../...../.....
Date

..... (Student) Date of Birth;/...../.....

Signature

.....
Please PRINT name

...../...../.....
Date

APPENDIX D: Student Survey

Date: / /

'BAROCK' MUSIC **Classroom Research Project** **Student Survey**

This survey is being undertaken in order to find out what kind of musical experiences and skills Year 11 students have *before* the project begins. The information you provide will be used to facilitate your learning and guide course placement over the next term. The results from this survey will contribute towards the award of a Doctorate Degree in Music Education (Research) by the student researcher. Your participation is voluntary, and individual responses will be kept strictly confidential.

1. a) Name: B) D.O.B: // 19

c) Gender; Male Female

2. The Senior Music Course I am most interested in studying for my HSC is...(tick one)

a) Music 1

b) Music 2

c) Not sure

3. The reason for my choice is...(describe).....

.....
.....
.....

4. What is your intended musical *Major*? (*You may state more than one*)

(i.e. Contemporary Guitar, Classical piano, Composition etc)

.....
.....
.....

5. (i) The school I completed Year 10 at is?

(ii) This school is best described as: (Tick one)

a) Government Comprehensive

b) Government Selective

c) Catholic

d) Independent

e) Other (please describe)

(iii) I studied elective classroom music at this school in: (Tick one)

a) Year 9 only b) Year 10 only c) Year 9 and 10 d) Not at all

(iv) The main reasons that I have chosen to study HSC Music at the school are....(describe)

.....
.....
.....
.....

6. Have you participated in any of the following ensembles in or outside of school?

Ensemble	Instrument/Voice Type	Number of Years Involved
a) Concert Band		
b) Orchestra		
c) Rock Band		
d) Jazz/Stage Band		
e) Choir/Vocal Ensemble		
f) Other (please specify)		
g) Other (please specify)		

7. List all of the formal instrumental/vocal study you may have participated in prior to AIM.

Instrument/Voice	Number of years studied	Highest AMEB Exam (or equivalent) achieved where relevant.

8. Have you ever studied formal music theory/musicianship? If so, describe below.

.....

.....

.....

.....

9. Which statement best describes your experience of classroom music at your previous school. (1= least descriptive, 5= most descriptive)

	1	2	3	4	5
(a) We studied classical music					
(b) We studied contemporary music (rock/pop)					
(c) We studied Jazz					
(d) We studied music theatre					
(e) We studied a variety of musical styles					
(f) We studied music by reading notation					
(g) We discussed the concepts of music					
(h) We studied music theory					
(i) We were taught how to write music down that was played on the piano or from recordings					
(j) We learnt how to improvise					
(k) We created our own songs or compositions					
(l) We used technology					
(m) We worked in small groups					

10. Which statement best describes you. (1= least descriptive, 5= most descriptive)

<i>As a musician I tend to be;</i>	1	2	3	4	5
(a) most interested in playing contemporary music (rock/pop music etc)					
(b) most interested in playing jazz					
(c) most interested in playing classical music					
(d) versatile in different styles					
(e) a fluent music reader					
(f) able to learn by ear from recordings					
(g) able to transcribe music (write music down)					
(h) able to improvise					
(i) interested in writing my own music or songs					
(j) interested in experimenting with technology					

Thank you for your participation.

The results from this survey will be placed on the school wiki site, page titled 'Barock' Music Project. Individual names of students and schools will be omitted from these results.

APPENDIX E: Semi-Structured Interview Questions

Semi-Structured Interview Topics: Classroom Research

Student Participants

Interview Protocol

Students will be given the opportunity to participate in this additional interview with the teacher researcher outside of timetabled music lessons. The interview will be conducted in a classroom with the door open during break time (i.e. lunch or recess). An audio recording of the interview will be taken and later transcribed by the researcher. Students will be provided with a copy of the protocol and questions prior to the interview.

Students will be reminded that the interview is completely voluntary, and that the information provided by them will be kept strictly confidential and will be used for research purposes only. Students may also stop the interview at any time should they choose to do so. Any information provided by them may also be withdrawn at their request, and thus destroyed at the earliest convenience.

Interview Questions

1. What sort of music do you play outside of school?
2. What got you interested in this music? What is it about it that you like?
3. Describe your thoughts at the beginning of the 'Barock' project?
4. How did the learning style differ from your previous experiences in learning music at school?
5. What did you like most about the unit?
6. What was the most challenging thing about the unit?
7. What do you think you learnt most during the unit? How do you think that this learning took place?
8. If we repeated the unit next year, what would you suggest that we do differently?
9. How do you feel about the style of learning we have been doing since the project? Is it better or worse?
10. Students view recorded video footage of their performance and are asked what they liked most/least about what they did.

Suggested length: 20min

APPENDIX F: Codes Generated through Grounded Theory Analysis

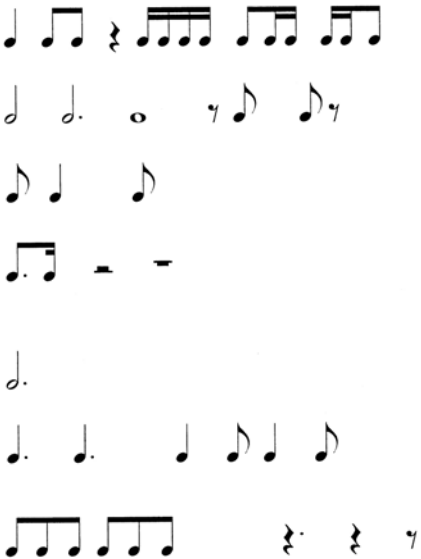

1. Aural Awareness
2. Ensemble Skills
3. Spontaneous creation of new material from emersion/experimentation.
4. Technical limitations of performer
5. Notation – Traditional/Graphic/Tab
6. Conceptual framework/abstract knowledge linked to practical or experiential knowledge (Teacher initiated)
7. Musical Identity
8. Simplification – Melodic/Textural/Structural
9. Versioning/Arranging
10. Teacher Musical Demonstration.
11. Teacher encouragement/validation
12. Teacher direction affects learning process (creativity/confidence/lack of ownership)
13. Classical student mediates from the score or during transcription
14. Fun/Engagement/Ownership
15. Use of technology to assist learning
16. Peer instruction
17. Key melodic ideas form ‘hooks’ into the original text. (Lime green)
18. Language
19. Idiosyncratic learning (Learning relates to specific individuals/experiential contexts)
20. Team Teaching

APPENDIX G: Summary Comparison of Current NSW Stage 6 Music Courses (Board of Studies, 2009a; 2009b)

	Music 1 (2 Units)	Music 2 (2 Units)	Music Extension (1 Unit)
Syllabus Rationale	To provide learning opportunities in a broad musical context and encourage the desire to continue learning in formal and informal music settings after school.	To provide students with the opportunity to build on learning in Music 7-10 and encourage the desire to continue learning in formal and informal music settings after school. Opportunities to extend musical knowledge with a focus on Western Art Music, serving as a pathway to further formal study in tertiary institutions or in other related fields.	To provide challenging and rigorous opportunities for musically and academically talented students to assist them in the realisation of their potential as performers, composers or musicologists.
Structure	Students will study the six concepts of music (pitch, duration, texture, tone colour, dynamics and expression and structure) as they relate to specific learning outcomes in defined contexts.	Students will study the six concepts of music (pitch, duration, texture, tone colour, dynamics and expression and structure) including notation, as they relate to specific learning outcomes in defined contexts.	As an extension of studies in Music 2, students will develop and expand aural awareness and understanding through specialisation in either Performance or Composition or Musicology.
Learning Areas	Students will learn through integrated tasks in performance, composition, musicology and aural.	Students will learn through integrated tasks in performance, composition, musicology and aural.	Each student will follow an individual program of study.
Contexts	Students will study THREE* of the following contexts in both Preliminary and HSC years: An instrument and its repertoire Australian music Baroque music Jazz Medieval music Methods of notating music Music and religion	Students will study TWO Mandatory topics; <ul style="list-style-type: none"> • Music from 1600-1900 Preliminary year, and • Music of the last 25 years (Australian Focus) HSC year 	There are no set learning contexts, rather, topic areas will be negotiated between the teacher and the student as relative to their individual program of study.

	<p>Music and the related arts Music for large ensembles Music for radio, film, television and multimedia Music for small ensembles Music in education Music of a culture (Preliminary course) Music of a culture (HSC course) Music of the 18th century Music of the 19th century Music of the 20th and 21st centuries Popular music Renaissance music Rock music Technology and its influence on music Theatre music</p> <p>* Two of the three HSC topics must not be repeated, one may be studied again in greater depth.</p>	<p>Students will study one of the following additional topics in the Preliminary year:</p> <p>Australian Music Music of a culture Medieval music Renaissance music Music from 1900-1945 Music from 1945 – music 25 years ago.</p> <p>And a different additional topic in the HSC year:</p> <p>Music of a culture (different to prelim) Medieval music Renaissance music Baroque music Classical music Music in the 19th Century Music from 1900-1945 Music from 1945 to music 25 years ago.</p>	
<p>Assessment and Exam Requirements</p>	<p>Students will be assessed equally in all four learning areas in the preliminary year. In the HSC year all students complete a core performance and concepts based listening examination and additionally specialise in THREE composition, musicology and/or performance electives. Students also submit 3-5 tasks for internal school assessment.</p>	<p>Students will be assessed equally in all four learning areas in the preliminary year. In the HSC year all students complete a core composition, performance, and listening/score reading examination (including sight singing and transcription) and additionally specialise in ONE composition, musicology and/or performance elective. Students also submit 3-5 tasks for internal school assessment.</p>	<p>Students are assessed in their chosen elective in Performance, Composition or Musicology. This will comprise the submission of work for external examination and also 2 internal school assessment tasks.</p>

Appendix H: Summary Comparison *Duration*, NSW Stages 4-6 Courses (Board of Studies, 2003, 2009a)

Stage 4: Junior Mandatory Course	Stage 5: Junior Elective Course	Stage 6: Senior Music 1 Course
<p>Repertoire chosen should demonstrate:</p> <ul style="list-style-type: none"> • a steady beat at various tempi • a changing beat at various tempi • duple, triple and quadruple time signatures • metric groupings of two and three notes and rests in simple and compound time. Throughout the mandatory course, students should have experience in using the following notation:  <ul style="list-style-type: none"> • rhythmic devices such as syncopation. 	<p>Repertoire chosen for performing, composing and listening activities should demonstrate:</p> <ul style="list-style-type: none"> • mixed metre • uneven metric groupings of two, three and four in simple and compound time • more complex rhythmic patterns including rhythmic devices such as triplets and duplets and unusual rhythmic groupings. Throughout the elective course students should have experiences that build on the notation used in the mandatory course and include the following notation:  <ul style="list-style-type: none"> • ties • syncopation • anacrusis 	<p>Students should be able to discuss the following aspects of duration as relevant to the music studied:</p> <ul style="list-style-type: none"> • beat: the underlying pulse in music • rhythm: patterns of long and short sounds and silences found in music • tempo: the speed of the beat. Music may be relatively fast or slow and may become faster or slower • metre: the grouping of beats. Beats can be grouped in any combination including 2, 3, 4, 5, 6, 7 and so on. Students should understand and apply the following (where appropriate to the musical context): • regular and irregular metres • metric groupings • tempo • rhythmic devices such as syncopation, augmentation and diminution • methods of notating duration, both traditional and graphic.

APPENDIX I: Student Participant Survey Results

	Student	Group	Gender	Intended Course	Intended Music Major	Prior School	Learning Profile
1	Conrad	Fugue	Male	Music 1	Guitar/Composition	Government	Ear
2	Klein	Fugue	Male	Music 1	Guitar/Composition	Government	Ear
3	Blaire	Fugue	Male	Music 1	Guitar/Drum Kit	Government	Ear
4	Xavier	Fugue	Male	Unsure	Guitar	Catholic	Ear
5	Oliver	Fugue	Male	Music 1	Composition/Drum Kit	Independent	Ear
6	Ned	Fugue	Male	Music 1	Contemporary Guitar/Composition	Independent	Ear
7	Peter	Toccata	Male	Music 2	Classical Piano/Composition	Catholic	Notation
8	Juliet	Toccata	Female	Music 1	Piano/Voice	Government	Ear
9	Mairead	Toccata	Female	Unsure	Voice/Composition	Steiner	Mixed
10	Madeline	Toccata	Female	Music 2	Voice	Independent	Mixed
11	Zali	Toccata	Female	Music 2	Classical Voice	Independent	Ear
12	Josie	Toccata	Female	Music 2	Classical Violin	Catholic	Notation
13	Lucy	Canon	Female	Music 2	Voice/Guitar/Song writing	Government	Mixed
14	Emily	Canon	Female	Music 1	Voice	Independent	Ear
15	Tiffany	Canon	Female	Music 1	Voice	Catholic	Ear
16	Anne	Canon	Female	Music 1	Voice	Government	Ear
17	Monique	Canon	Female	Music 1	Voice	Steiner	Ear
18	Jack	Russian	Male	Music 2	Guitar	Catholic	Mixed
19	Alan	Russian	Male	Music 1	Voice	Independent	Ear
20	Jason	Russian	Male	Music 1	Drum Kit	Independent	Ear
21	Lex	Russian	Male	Music 1	Guitar/Composition	Steiner	Ear
22	Matt	Russian	Male	Unsure	Classical Piano/Composition	Government	Notation
23	Tim	Russian	Male	Music 1	Guitar/Voice	Steiner	Ear
24	Caleb	Air	Male	Music 1	Voice	Government	Ear
25	Brittany	Air	Female	Unsure	Clarinet/Saxophone	Government	Notation
26	Mark	Air	Male	Unsure	Bass Guitar/Composition	Catholic	Mixed
27	John	Air	Male	Music 1	Guitar/Voice/Composition	Independent	Ear
28	Janet	Air	Female	Music 2	Voice	Government	Ear
29	Jim	Air	Male	Music 1	Drum Kit	Government	Ear
30	Cheryl	Air	Female	Music 2	Piano	Catholic	Mixed

Additional Survey Data

Total number of participants: 30 students (18 male, 12 female)

1. Age range: 15 to 17 years (Average age 16 years)

2. Intended HSC Music course:

a) Music 1: 17 students

b) Music 2: 8 students

c) Undecided: 5 students

3. Reasons for course choice include 'a lack of music theory' and 'contemporary focus' for students intending to study Music 1, and the desire for 'academic challenge', 'classical music' study and 'university prerequisite' for the Music 2 course.

4. Intended major: Some students indicated only one major and others more than one. The most numerous responses were for contemporary guitar, voice, piano and composition, however responses also included students intending on majoring in woodwind, classical voice, violin, drums, contemporary bass and music production. Further details on instruments played are included in relation to individuals throughout the ethnography in Chapters 5-9.

5. School backgrounds include the following;

a) Government Comprehensive – 10 students

b) Government Selective – 1 student

c) Catholic – 7 students

d) Independent – 8 students

e) Steiner – 4 students

Prior Elective Music Experience;

a) Studied music both year 9 and 10: 22 students

b) Studied music either year 9 or 10: 5 students.

c) No elective music experience; 3 students

6. Ensemble experience included the following, with some students indicating more than one experience;

a) Concert Band – 5 students

b) Orchestra – 2 students

c) Rock Band – 13 students

d) Jazz or Stage band – 4 students

e) Choir – 9 students

f) No ensemble experience – 7 students

7. Formal instrumental or vocal instruction showed a full range of responses, with some students indicating that they had up to 12 years learning on a specified instrument and others self-taught. Some students indicated a variety of instrumental and vocal tuition, and others only solitary study of a single instrument.

8. Regarding study of music theory 5 students indicated that they had undertaken external theory courses with exams. In addition, 4 students indicated that they had gained experience in music theory during their prior schooling. 18 students indicated that they had limited or no experience in music theory.

9. Previous experience in classroom music was extremely diverse. Results can be summarised as follows: (1= least descriptive, 5= most descriptive)

“We studied.....”

	1	2	3	4	5
a) Classical	7	6	10	2	4
b) Cont. (Rock/pop)	7	5	9	10	3
c) Jazz	7	6	7	7	2
d) Theatre	9	7	6	4	3
e) Various styles	3	5	7	8	7
f) Reading Notation	5	6	4	9	4
g) Concepts of music	1	6	4	8	8
h) Music Theory	5	6	6	6	6
i) Transcription	11	6	5	2	4
j) Improvisation	10	1	6	7	3
k) Composition	2	6	5	8	7
l) Using technology	5	4	6	9	5
m) In small groups	4	0	7	7	10

10. Students’ personal musical interests were also extremely diverse. Results can be summarised as follows: (1= least descriptive, 5= most descriptive)

“As a musician I tend to be interested in.....”

	1	2	3	4	5
a) Cont. (Rock/Pop)	0	4	4	8	12
b) Jazz	7	6	8	6	1
c) Classical	12	5	7	1	3
d) Versatile in different styles	0	6	6	10	6
e) Music Reading	12	4	6	1	5
f) Playing by ear	1	5	9	5	9
g) Transcribing	9	3	7	3	6
h) Improvising	0	2	5	12	9
i) Composing/song writing	1	1	4	5	17
j) Using technology	0	4	6	8	11

APPENDIX J: Audio Excerpts

(See External File Attachments)

Audio Track 1: Fugue group Phase 1 performance

Audio Track 2: Toccata group Phase 1 performance

Audio Track 3: Russian group Phase 1 performance

Audio Track 4: Pachelbel group Phase 1 performance

Audio Track 5: Xavier Fugue composition midi file

Audio Track 6: Blaire Fugue composition midi file

APPENDIX K: Concepts Question Prompts

PITCH: The height and depth of the notes used

1. What scale is the melody using? i.e. major/minor...which one...?
2. Describe the shape and construction of the main melody in as much detail as you can.
3. Are there any other melodic features used in the piece?
4. What key is the music in?
5. Does the music change key? If so, where, and to what key does it change?
6. What kinds of chords are used?
7. Are there any interesting chord patterns used?

DURATION: The organisation of pulse, length and silence

1. Can the pulse or beat be described as strong or weak?
2. How does the composer achieve this?
3. What is the tempo or speed of the pulse? Is it fast, moderate, slow, changing or unchanging?
4. The time signature is?
5. Are there any interesting rhythmic features?
6. Describe the typical kinds of rhythms used giving examples.

TEXTURE: The relationship between different layers of sounds

1. How many layers of sound are there?
2. What is the role of each layer...i.e. melodic? harmonic? bass? rhythmic? etc.
3. Do the layers conform to any of the following texture types:
 - Monophonic - A single melody line
 - Homophonic - A single melody with chords
 - Polyphonic – More than one melody simultaneously
4. Where might examples of these texture types be seen in the piece?
5. How do the layers contribute to the overall density (thickness or thinness)?

TONE COLOUR: The defining quality of sounds

1. Name the instruments used.
2. How are they being played? i.e. bowed, plucked, hit, blown? etc.
3. Describe the individual quality of each of the instruments/voices used.
4. Which instruments blend in, and which others contrast?

DYNAMICS & EXPRESSIVE TECHNIQUES: Variation in style, volume and attack

1. Describe the volume and volume changes.
2. How are these achieved by the composer/performers?
3. What terms are provided on the score to help the performers interpret the expression?
4. How do the performers vary the attack of the notes? (articulation)
5. Are there any extra notes added? (trills/ornaments)
6. What is the overall effect of these choices in terms of style?

STRUCTURE: the form or arrangement of sections

1. Where does this piece sit in relation to the larger structural scheme? i.e. opening movement etc.
2. How is the piece organised into subsections? Describe the sections by labeling them.
3. Can these sections be divided into smaller sections? If so...how?