Developing musical skills within ensemble environments

A qualitative case study of
two community instrumental ensembles in Christchurch

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ABSTRACT

This thesis explores musical skill development in community music ensembles. It reveals how participation in such ensembles can contribute to the gaining or strengthening of musical skills and investigates what strategies are used to develop those skills, as well as how players conceptualise their musical experience.

Through close observation of two local amateur instrumental ensembles, the Christchurch Accordion Orchestra and the Nor'West Brass Band, the above questions were explored within a methodological framework of the qualitative and collective case study. Video observations of the ensemble rehearsals and VSR-prompted semi-structured focus group interviews were employed as data collection methods. The software was used to generate VSR materials, analyse and code data gathered via both methods, and Interpretative Phenomenological Analysis was also adopted as an analytical approach.

The research revealed a large variety of musical skills that were used and can be potentially developed or further improved in the rehearsal setting of community music ensembles. The learning opportunities ranged across technical skills, ensemble skills, music literacy skills, and musical and interpretational development. A broad range of strategies was implemented to support such skill development, including the conductor's verbal, vocal and gestural feedback and some player-initiated strategies. Through frequent use of verbatim quotations, the study also indicated ensemble players' conceptualisations of this ensemble experience, ranging from how they viewed their learning to the social experience itself.

The findings of the thesis contribute to the research field of non-formal music education, specifically, knowledge about the experiences and musical learning gained through participation in community-based music ensembles. By providing further insights into the many educational opportunities offered through such communal music-making activity, a more thorough understanding of this activity is achieved, and the multifaceted nature is revealed. Finally, a series of suggestions are offered for community music practice and future research.

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PART I: BACKGROUND AND THE THEORETICAL PERSPECTIVE

1 INTRODUCTION

My interest in studying the community music ensemble was sparked by my first experience participating in a community-based accordion ensemble. It was a completely different experience from playing with music professionals. Having experienced various types of collaborative music making, I began to wonder what the magic of community music ensembles is that could lead to a sustained commitment, why this shared music-making experience is so appealing, and what participants may be learning from their involvement in these amateur ensembles.

Initially, my motivation was to explore the acquisition of aural skills in community music ensembles, because "listening" is central to a wide range of musical activities and is of particular importance in ensemble performance. Whether a professional symphony orchestra or an amateur brass band, providing synchronised sounds is a basic pursuit, and listening is the key factor in improving synchronisation. Such active and continuous listening behaviour in ensemble performance is entitled "aural communication" in Elaine Goodman's (2002) research. For this reason, my original hypothesis was that there might exist certain direct or indirect aural training in community ensembles that strengthens participants' aural awareness and makes them better listeners and players.

As the research evolved, however, I moved across from my initial thinking about aural skills and gradually started considering musical skills in a more general and practical sense. After the pilot study was completed, it was decided to focus more broadly on a comprehensive range of musical skills that may be gained in community ensembles. Thus, the purpose of the present research is to explore the potential development of musical skill in community ensemble environments, to understand how a variety of musical skills may be acquired, and how ensemble players conceptualise this collaborative music-making experience, with a particular focus on the skill learning aspect. This research is likely to advance our understanding of community music ensembles and contribute to the research field of non-formal music education.

1.1 General Context for the Study

Community music ensembles refer to the organisations that "creat[e] opportunities for music-making in the community" (Johnson, 2012, p. 12). These types of ensembles are essentially distinguishable from the professional ensembles in that the participants of the former are largely volunteer amateur or semi-professional musicians (Coffman, n.d.), who engage in the ensemble "for the sheer delight and satisfaction it affords rather than as a professional career" (Reimer, 2003).

As a small and isolated island nation "with a recent colonial past, different waves of immigration and a robust indigenous Māori history of settlement", New Zealand's community participation in music is often understood and practised through the lenses of diversity and culture, which may be different from that in parts of the northern hemisphere (Grodd & Lines, 2018). As a result of multicultural context and isolated geographical locations, there has been a wide range of community orchestras, bands, and choral groups (choirs) around the country (Bendrups & Hoddinott, 2007; Grodd & Lines, 2018; Johnson, 2012). To a great extent, these musical communities reflect the importance of music in local communities because they enrich individuals' lives, local identity and social connectedness (Bodkin-Allen, 2020).

1.1.1 Accordion Communities in New Zealand and China

The accordion communities in New Zealand have been here for decades. The first documentary evidence of the accordion in New Zealand dates back to 1839 in the journal of Edward Jerningham Wakefield. As one of the earliest English colonists, Edward made an amusing reference to his use of an accordion. The potential of the accordion for accompaniments was perceived by New Zealand's Māori inhabitants by 1901, in which year it was used to accompany Māori songs and dances (Liggett, 1993, pp. 14-15). The first piano accordions were believed to have come into New Zealand soon after World War I (1914-1918) (p. 17); however, up to (and including) World War II (WWII), the accordion was regarded as a novelty in New Zealand. It was only owned and played by several musicians to entertain at various social functions, and there was little organised effort in promoting this delicate instrument (p. 13).

More formal and organised development of the accordion in New Zealand did not occur until 1962, which might be a result of the growing individual development and organisation endeavour between 1945 (the end of WWII) and 1962 (Liggett, 1993, p. 13). Among the many accordion organisations formed in New Zealand from 1962 to 1980, the New Zealand Accordion Association (NZAA) has made one of the most considerable contributions to this instrument (p. 30). Since this association was established, national competitions were arranged, orchestras formed, and a Teacher Certification Board (TCB) was set up to provide uniform standards and grant the NZAA "Teachers Recognition Certificate" (NZAATC) to applicants who met the criteria (p. 49). The establishment of formal teaching qualifications undoubtedly gave parents and students a better idea of whether a teacher is qualified.

In 1972, TCB changed its name to the "Accordion Examination Board of New Zealand" (AEBNZ) (Liggett, 1993, p. 51) and has retained this name to this day. It would not be an overstatement to say that AEBNZ was the first New Zealand organisation to achieve recognition from the Institute of Registered Music Teachers, regardless of the instrument (p. 52). In June 1962, the Canterbury Accordion Association (CAA) was formed to promote the accordion and organise competitions. It would organise weekend music and recreation camps, in which players were coached on many aspects of musicianship. A significant activity of the CAA was the establishment of an orchestra. This orchestra was initially called "the Royale Accordion Orchestra" and later renamed "the Christchurch Accordion Orchestra (CAO). The CAO has operated well for over half a century and has drawn many top players from different parts of the South Island" (pp. 58-59).

By comparison, the development of the accordion in China has followed a very different pathway. It would seem that the diatonic button accordions were first introduced to China in the early twentieth century, and this was followed by the import of piano accordions in the 1930s through Shanghai, where the instrument quickly gained popularity (Kwan, 2004, p. 14). The accordion was first used for entertaining purposes: accompanying Mandarin films and commercial music genres and appearing in Shanghai's various concert and dance halls (Kwan, 2008, p. 81).

Later, the piano accordion became a political tool. In the 1940s, it was used ubiquitously by musicians of "song and dance" troupes in China, which were formed by the Communist Party to entertain workers, peasants, and soldiers because of the slogan "literature and art should

serve the workers, peasants and soldiers" proposed by Mao Zedong in 1942 (Mao, 1953). Due to international influence in the early 1950s, when "many performing arts ensembles from the Soviet Union and some European countries visited China", the government realised that "the performance content and the structure of performing art troupes should be changed and improved" (Kwan, 2008, p. 83).

Following this official decision, the song and dance troupes in China were set up within military branches, similar to those ensembles in the Soviet military. The military accordionists promoted an " accordion culture, " resulting in even greater popularity of playing the accordion amongst the general public and increased performance opportunities (Kwan, 2008, pp. 81-83). In the early 1960s, it was believed that there were over ten million Chinese playing the accordion in various song and dance troupes (Kwan, 2004, p. 65).

In 1963, an accordion conference was held by the Chinese Musician Association. In the same year, "the Accordion Society of China" and the first Accordion Orchestra were founded (in Beijing), with the majority of the orchestra members being military accordionists (Kwan, 2004, p. 65). The same period also witnessed the development of some accordion amateur groups throughout the country, with the ones (e.g. the Shanghai Accordion Orchestra) in Shanghai being the most active (Gao, 2003, p. 62). During the Cultural Revolution (1966-1976), the accordion was also the most frequently used instrument; marching on the street in praise of Chairman Mao was common (Kwan, 2008, p. 87). Since the 1980s–the Cultural Revolution, public interest in learning the accordion has risen to unprecedented heights. Competitions for youth players have gradually been arranged, and different music conservatoires have set up various grade tests since 1989 (Gao, 2003, pp. 73-77).

Despite widespread interest in playing the accordion in China and the appearance of amateur accordion groups in the last century, the recent decades have not seen much development in community accordion ensembles. In fact, the development of community music ensembles in China, in general, seems to have remained at a glacial pace (Feng, 2017; Jin & Ma, 2008). Although there has been an emphasis on community music education in the government's policies, in reality, it seems extremely difficult to put into practice (Feng, 2017).

1.1.2 The Development of Brass Bands in New Zealand

The arrival of one of the Regiment band of British Imperial Forces in 1845 in Auckland can be considered the first step in the development of the brass band in New Zealand (Thomson, 1991, p. 56). As one of the British colonies, New Zealand has been strongly affected by generations of English immigrants who imported and nurtured the brass ensemble (Bythell, 2000). In geographically isolated communities such as New Zealand with "small population" and "long distances" between cities, often the amateur band constitutes the only local instrumental ensemble (Bendrups & Hoddinott, 2007, p. 74).

As soon as the British migrants arrived New Zealand, brass bands were formed throughout the country. In the 1860s, they were established in some "gold mining towns" in the South Island. In the 1870s, many amateur brass bands were sponsored by private industry and therefore named themselves after the "sponsor-company names" (Bendrups & Hoddinott, 2007, p. 76). Despite the rapid development, what consolidated the movement of the brass band in New Zealand was however the introduction of band contests. The first contest was held in 1882 in Christchurch's Hagley Park (p. 76). The establishment of the Brass Bands' Association of New Zealand (NZBBA) in 1931 has actively fostered participation in brass bands throughout the country and managed national band contests. To date, the national and regional contests are still held every year, and there is a grading system for bands to differentiate the levels of expertise of all groups (p. 77).

The amateur brass bands have made valuable contributions in developing and training musicians in New Zealand. As Stanley Newcomb (1980) explained, the basic music training provided by these amateur groups has opened the door for many players to engage in "other fields of music making"; in fact, "some of the foremost brass and percussion players in symphony orchestras received their early training in brass bands" (p. 7). According to a recent investigation into New Zealand Brass bands, about 14% of brass players surveyed had experienced brass tuition before the age of sixteen. These players identified and stressed the significance of brass bands in developing their technical fluency such as "breathing, articulation, embouchure, sound conceptualisation, vibrato, precision in production and ensemble skills" (Bendrups & Hoddinott, 2007, p. 79).

1.2 My Ensemble Experience

As an accordionist and trained music teacher, my musical knowledge and skills were primarily gained through private music lessons and seven years of undergraduate and postgraduate study in a music college, in other words, within the framework of formal music education. I had never thought about the possibilities of learning music in a context outside of the classroom, as I was never closely involved in an amateur ensemble before my arrival in New Zealand.

As a child born in the early 1990s in south-central China, I was lucky to learn a musical instrument from the age of six, which was a dream for my parents and many people of their generation. Since then, playing the accordion has become my top priority in life, even more important than my academic performance. In addition to taking accordion lessons every week, I was asked to practise the accordion for at least two hours on weeknights, and the daily practice time on weekends and school holidays was two or three times greater. This is to say, my childhood and adolescence were mainly occupied with playing the accordion, taking other music courses (e.g. aural training and music theory) and studying in general. During those periods, a few extra-curricular ensemble opportunities arose, although none required my accordion expertise.

When I was in primary school, I was recommended to join the school's "drum and bugle corps" as a snare drummer. I remember that all drummers were female, and the trumpet group was all male. Whenever there was a significant event (e.g. school sports meetings), drummers had to wear military-style uniforms, gloves and shoulder straps (for the drum), marching on the playground while playing our instruments. In middle school, my music teacher referred me to the school's symphony orchestra to see if my musicianship would be of any use. Sadly, I was told that the accordion is never part of the symphony orchestra.

In high school, I was invited to join our school's brass band, again as a percussion player. My instrument was crash cymbals, and I still remember the pain of waiting for dozens of bars until I could finally play one note. When it came to brass band competitions among schools, a full military-style uniform had to be worn with a cap, a cloak and gloves while playing. Unfortunately, I did not have much passion for this role as it was not challenging, and I was constantly worried about hearing loss due to the loud volume of the band. After some time, I left the band.

Spring came at last–being a music college student gave me tremendous freedom to explore the musical world. Although it was not possible to be part of the university symphony orchestra, I was able to do some gigs with my classmates. A keyboard, a violin, and my accordion; a basic ensemble was set up for Astor Piazzolla's tango music. There was also some part-time work available for accordion students. Besides solo performances, I was often asked to accompany the amateur choirs of government agencies or companies. Strangely, the idea of forming or joining an accordion ensemble (with every individual playing the accordion) never crossed my mind at that time, and the concept of community music ensembles was even further away.

Upon arriving in New Zealand, I was introduced to an accordion teacher who invited me to her community choir and a country dance club and brought me to the CAO, a long-established local accordion orchestra. In these ensembles and musical groups, I learned that most participants were doing it out of interest rather than being driven by financial gain or a requirement for a job or education. Additionally, I have realised that the musical competence of these music enthusiasts varies enormously, and most of these people were not necessarily working in the music industry. Some were retirees, entrepreneurs, accountants and farmers. Some young children were brought into these musical settings because of their parents' interest, and young adults wanted to experience a culture from earlier times.

Looking back, it was still an incredible scene when I first saw a group of people (CAO) playing the accordion together, and this was when my community ensemble experience began. Since joining the CAO, I have been going to the same venue weekly to rehearse with other players, preparing for seasonal concerts and other communal events. I have seen people of all ages come to our performances, although the most loyal audiences would seem to be the elderly, predominantly European migrants. Over the years, a sense of community has developed as I have started to believe that I am part of this accordion community. However, my concept of community music ensembles was still somewhat vague. I was not sure what this experience meant to my ensemble peers, whether they would have the same thoughts as me, what drives them to come to rehearsals for years, rain or shine, or whether they see any improvements in their musicianship or if it matters to them.

In searching for answers, I decided to turn my attention to community music ensembles, this particular music-making and learning setting. This was a direct result of exposure to New Zealand's community and amateur music organisations and my ensemble experience with the CAO. It was believed that the popularity of New Zealand's community culture would offer a fruitful area of research, and my participation in the CAO would allow me to examine this ensemble closely. With this research experience, a similar inquiry could also be conducted in other music ensembles within the community to seek common ground, thereby constructing a more holistic picture of this communal musical activity.

1.3 Research Aims and Questions

Given the general context and my first taste of the community accordion ensemble, this research intends to explore amateur instrumental ensembles within New Zealand's local communities. The research topic, by implication, places a sharp focus on the educational aspect of community music ensembles, and the inquiry is undertaken qualitatively in collaboration with two local amateur instrumental ensembles. This research assumes that the opportunity to gain an extensive range of musical skills is provided in the ensemble environment, under the implementation of certain strategies. It also seems reasonable to assume that this type of learning differs from that within formal music education due to the different contexts. Unlike the seemingly clearly-defined role and mandatory duties of students in the classroom, the ensemble players may have different concepts of their skill development and participation in the community ensembles.

Based on the research aim and proposed hypotheses, this study asks the following questions:

- What musical skills are used and can be gained or strengthened within the community ensemble environment?
- What strategies are used to enable players to gain or enhance their musical skills?
- How do players conceptualise their musical experience through their ensemble participation?

The first research question centres on specific skills, seeking to reveal which musical skills may be developed in ensemble rehearsal settings. The second question gives close attention to ways in which those skills may be enhanced, noting any recurring rehearsal techniques and patterns, examining any strategies employed by the conductor and the players, and seeking to

uncover those musical skills which may be developed through each strategy. The last question seeks to understand the ensemble players' conceptualisations of their ensemble participation. These include but are not limited to players' general thoughts about participating in a community music ensemble, and more specifically, the music making and learning, their struggles and needs, purpose and expectations, and the meanings of this communal musical activity.

1.4 The Significance and Scope of the Study

From a theoretical perspective, this study contributes to knowledge about non-formal music education by providing further insights into the educational aspect of community-based music ensembles. These types of ensembles are generally known for enhancing people's "sense of social, emotional, mental, spiritual and psychological wellbeing" (Joseph & Human, 2020), thereby improving their "quality of life" (Coffman, n.d.). Some of the ensembles have a particular emphasis on lifelong learning, offering the participants opportunities to gain new knowledge and skills alongside the music-making experience (Joseph & Human, 2020). However, there has been little evidence so far about what knowledge and skills exactly could be developed in such a music environment, what the learning process is like, whether there are specific patterns of development, and how ensemble participants conceptualise such learning experience, which might be part of their ensemble engagement.

With the accelerated globalisation and the integration of cultures, many amateur musical groups have sprung up in New Zealand's communities in the past century (Bendrups & Hoddinott, 2007; Grodd & Lines, 2018; Johnson, 2012; Liggett, 1993). From a practical point of view, this study may benefit existing and future community music ensembles and policymakers or other interested parties who aim to improve social interaction, integration and connection within communities. By drawing on the findings of this study, conductors might understand what goes through players' minds when they are presented with the conducting behaviours, which is likely to enhance their future conducting, thereby improving players' ensemble experience. Future ensemble founders might also learn from the two instrumental groups in this study, giving a second thought to their purpose, management and leadership before putting their ideas into practice. In light of the potentially enormous positive impacts of community music ensembles on communities, decision-makers may

consider promoting these types of group musical activities to enhance social cohesion and connectedness.

With that being said, this study does not claim to be generalised to other community amateur ensembles in the country or worldwide. This is because each musical group is likely to have its own culture and regulations, the conductor may have a different style and interests, every ensemble individual is distinct, and the instrument's mechanism may vary. However, it is intended that a detailed exploration of the two local amateur ensembles will shed light on the possibilities of developing musical skills in similar music-making contexts and the implications of such skill learning on the ensemble participants.

It is also important to acknowledge my positions as an accomplished accordionist, an insider involved in a community-based ensemble and a researcher who attempts to provide an accurate account of my cases. Although the current study is by no means to pass judgement on the ensemble players' musical capabilities and the quality of conducting, there may be some observations about rehearsal sound effects and discussion of the relative effectiveness of the conductor's doings, which is determined by the nature of the research, thus inevitable.

1.5 Design and Structure of the Thesis

This thesis unfolds in three parts:

Part I constitutes the foundation of the study, with the first chapter presenting the general research context for the study and the following one focusing on the theoretical framework. In Chapter 1, a brief history of the development of community ensembles in New Zealand is provided, the catalysts for conducting this research and my personal ensemble experience are explained, the research purpose and questions are stated, and the research significance and the scope are described. Finally, the outline of the thesis is drawn. Chapter 2 gives a critical overview of the relevant literature in the field, centring primarily on musical skills, community music ensembles, and different learning mechanisms.

Part II also consists of two chapters, in which Chapter 3 concerns methodology and Chapter 4 is about the actual implementation of the research design. More specifically, Chapter 3 justifies the chosen methodology, modes of inquiry, participant selection, the anticipated

procedure of data gathering and analysing, strategies to enhance the credibility and transferability of the research, and ethical considerations. Chapter 4 details the fieldwork–the actual process of data collection, i.e. how data were gathered in each phase, processed, analysed and presented.

Part III is comprised of Chapter 5, Chapter 6 and Chapter 7. Chapter 5 presents the data generated from the fieldwork and provides an analysis of the main findings, including specific musical skills and strategies being identified in the chosen ensembles and a range of ensemble participants' conceptualisations of this communal music-making activity. Chapter 6 considers the findings from Chapter 5 against the literature and discusses the profound and far-reaching implications of the findings. Chapter 7 is the conclusion of this thesis, which summarises the research findings, stresses significant contributions, expresses retrospective thoughts on the research design and offers suggestions for further research.

2 LITERATURE REVIEW

The literature to date on musical skills in community ensemble rehearsals appears to be minimal. Some existing studies that have explored community music ensembles have looked through the lens of social science and linguistics, and little attention has been given to musical skills development in non-formal music education settings. Other research papers have investigated the pedagogies of specific musical skills (e.g. aural skills), but their contexts are limited to formal music education settings (e.g. school music classes and music institutions). This chapter thus presents an overview of existing literature in these two regards, demonstrating how the present research relates to previous inquiries.

This chapter contains nine sections. Chapter 2.1-2.4 introduces the concepts of some essential musical skills, valued within formal music education but also discussed in general musical activities. Chapter 2.5 is a transitional part, discussing in what ways these valuable skills are related to practice, i.e. musical performance, and gradually moving to the topic of ensemble performance. Chapter 2.6-2.9 centres on the nature of community music ensembles, the learning phenomena in ensemble rehearsals and some relevant learning concepts.

2.1 Listening and Hearing

Extensive studies have discussed the differences between "hearing" and "listening". It appears that these two actions are often seen as quite distinct from each other in music. French theorist Roland Barthes (1986) viewed "listening" as a psychological act but "hearing" as a physiological phenomenon (p. 245). He proposed that "listening is an interactive action taken by the listener in order to understand and potentially make meaning out of the sounds heard", while hearing occurs subconsciously (Barthes, 1985, p. 31). George Pratt's team (1998) used a vivid metaphor to explain the differences between the two. In a crowded room, one is "*hearing* all the sounds around [oneself], but *listening* only to the conversation within [one's] own particular group" (p. 9). In this case, one's focus is on one's own conversation and only hearing others subconsciously and out of focus. However, when people in another group mention one's name, one will probably turn one's attention to them and start listening to this second conversation intently.

For David Zerull (2006), listening is far more than receiving sounds by ear, and an active mind should be engaged in the listening experience. Canadian philosopher David Elliott

(1995) held a similar view that the acts of listening are "a covert form of thinking-in-action and knowing-in-action" (p. 80). To those proficient music listeners, active listening-for is often adopted instead of passive hearing because they deliberately intend to achieve something while listening by deploying their powers of consciousness. American music educator Bennett Reimer (2003) also asserted that musicians tend to "listen for a purpose" and are capable of "shaping sounds to embody meanings inhering within them, incorporating other meanings within their shapings" (p. 116). In other words, they need to be able to compose, perform, improvise, or combine all the above.

In reality, however, not everyone is a musician, and people perceive music differently. Hence, theorists grouped people into various classes and created terms for their levels or modes of listening. For example, Barthes (1986) proposed three distinctive levels of listening based on how the sound is produced and affects the listener and named these levels as "alerting, deciphering, and understanding". Building on the same principle as Barthes', Robert Morris (2002) created a theory named "levels of attention", which includes "ignoring music", "intermittent attention", and "complete, undivided attention" (pp. 319-320).

Aaron Copland articulated a similar theory long before these mentioned above. "Three planes of listening" (1963) demonstrates the extent to which listeners can listen and understand music on three different planes. The simplest way of listening to music was named "the sensuous plane". Listeners in this plane can hear the music "brainless[ly]" (p. 18). For example, they may understand that the music is going on, but they are barely thinking about it and merely show a response to it. Some music lovers can perceive the theme of music to a greater or lesser extent with their own meaning and show an emotional response to sounds heard while listening to music. That is what Copland considered the second plane: "the expressive plane" (p. 19).

The third plane is known as "the sheerly musical plane", where most listeners are not sufficiently equipped, with the exception of well-trained musicians. In addition to the meaningful sound and expressive feeling in a piece, these well-developed listeners would be more concerned with the musical elements, such as the melodies, the rhythms, the harmonies, the tone colours and even the musical form, and have the ability to describe the music. In other words, they are likely to judge and enjoy the melody simultaneously (Copland, 1963,

pp. 21-23). All in all, Copland believed that listeners need a framework to help them become conscious and aware listeners.

By assessing numerous empirical and experimental studies over the past decade regarding listening styles and strategies, as well as the influence of enculturation, David Huron (2002) performed a laboratory experiment, defining "listening to music" as "a cognitive and perceptual process". He asserted that the states of listening are "modes of listening" and developed a non-exhaustive list of 21 listening modes, including metaphysical listening, sing-along listening, reminiscent listening, and emotional listening, to name a few. He believed that individuals could use different modes to approach the listening experience and argued that explicit learning is not always a requisite for certain ways of listening (Huron et al., 1997), although conscious intent can be the reason to evoke some of the modes. However, fault listening might be evoked by the listening experience itself without our wilful control. In brief, conscious and unconscious structures form the basis of the perception of music. These structures can be "conscious verbalisable concepts" or "unconscious schemas, scripts, or even auditory reflexes" (Huron, 2002).

Although not every listener listens to music in the same way, in the music education profession, the significance of listening to musical activities is extensively stressed (Davidson & Scripp, 1988; Maconie, 2007; Reimer, 2003). New Zealand musicologist Maconie (2007) explored the hearing process and argued that the hearing process has two stages. In the first stage, we use our sensing devices–the ears to capture the sound, and then our brains interpret the sound we hear, which is the second stage. Maconie believed that in everyday life, our judgments about what sound is "are influenced by personal issues, circumstances, the world we know, and how we organize our life" (p. 19). No matter what the subject's judgment and interpretation of the music is, Maconie asserted that interpreting music is a personal matter and "there is no right or wrong answer"; in his words, "the only way that one could misinterpret music is by not interpreting it at all" (pp. 206-207).

Lyle Davidson and Lawrence Scripp's (1988) research focused on children aged five to seven who were untrained in music notation. Without explicit instructions, their research found that those children were able to devise abstract symbols to represent the rhythmic structure of the music when asked to notate various musical fragments. By age seven, the pitch seemed to become a major component of notational attention. Based on these findings, they

recommended that music teachers should restructure the focus and timing of their music training and also consider pitch development a primary focus (p. 228).

Reimer (2003) believed that listening is a foundational and essential component of all kinds of musical activities such as singing, playing instruments, conducting, improvising and composing; without listening, none of these can be pursued validly (p. 262). He described listening as an act of creation and listeners as those who "bring a musical experience creatively to life within their own experience" (p. 116). Within their technical capabilities, listeners make meaning out of the music by "'put[ting] it together' with mind, body, and feelings" (p. 117).

Reimer (2003) also supported the idea that the development of listening intelligence should be considered a critical obligation of the music education profession when "traditional performance-dominated general music practices" are still in the spotlight in many cultures around the world (p. 252). This is because listening is what will keep students actively engaged with music in later life. He appealed to music practitioners to

> foster that improvement for all students, and to do so largely in the most efficient possible way, which is, for listening as for all other learnings, *directly*. Incorporating performing, composing, and improvising within listening instruction is essential to clarify and experience how those roles require special listening perspectives and to point up particular qualities of music being explored. But listening instruction must always exceed in breadth, complexity, and divergence that which students are capable of performing, improvising, or composing themselves. (p. 225)

2.2 Aural Skills and Awareness

In formal music education, listening skills are usually termed aural skills, developed through aural training, ear training, and musicianship courses (Ilomäki, 2011, p. 12). Do these terms convey the same ideas, and are they overlapping or interrelated? This section presents various definitions given to these terms and indicates other closely related concepts.

According to Don Hedges (1999), non-musicians may " draw a complete blank" when "aural skills" or "ear training" is mentioned. Even for some musicians, these two terms may be referred to simply as "dictation" (p. 27). When it comes to "written theory", however, people seem to struggle less, and some of them can associate the term with "rudiments (key signatures, notation), harmony (voice leading, part writing), counterpoint, arranging,

orchestration, and formal and stylistic analysis" (p. 27). In Hedges' opinion, basic aural skills consist of three aspects: the comprehension of sound elements, the internalisation of sound and the organisation of sound elements for recall (pp. 33-34).

The first component–"the comprehension of sound elements"–was explained as deciphering music aurally (Hedges, 1999). It is analogous to written theories enabling one to analyse and decode music on a piece of paper. This process (or transference) of the written notes into actual sound and the sound into notes was initially described as "developing the 'seeing' ear and the 'hearing' eye" by Bernice White in 1935. Michael Rogers (1984) reviewed White's theory and argued that "developing the understanding ear and hearing mind" might be a more apt description because "ear training" is mind training which develops "internal musical perception–the ability to hear musical relationships accurately and with understanding" (p. 100).

Hedges (1999) favoured Rogers' (1984) definition in terms of the role of the mind, and from there, he recommended that written theory and aural theory might be seen as the "encoding and deciphering of music conceptually" and "encoding and deciphering of music perceptually" respectively to emphasise the mental process (p. 28). Other theorists who also intended to stress the involvement of the mind in "ear training" used terms such as "mental hearing" (Lovelock, 1965, pp. 87-88), "brainwriting" (Wunsch, 1973, p. 55), "tone thinking" (Carolyn A. Alchin, as cited in Hedges, 1999, p. 30), and "the mind's ear" (Bruce Adolphe, as cited in Hedges, 1999, p. 30). Eric Taylor (1955) stressed that realising the significance of musical sounds and comprehending their organisation in patterns through ear training is the key, and all those terms, including "aural ability", "aural training", and "ear tests", are essentially the same just different "metaphorical phrases" (p. 5).

The second component of Hedges' (1999) conceptualisation of aural skills (i.e. the internalisation of sound) is based on other scholars' emphasis on the "reception, internalisation, and comprehension of sounds". Back in the late 19th century, music educators like Sparmann and Shinn had already emphasised the value of ear-training in their publications. Shinn especially, stated that ear-training is absolute "the foundation stone" in music education, and the ear is the special organ that deserves to be trained to "its fullest possible extent in receiving the particular form of sensation" (as cited in Hedges, 1999, pp. 31-32).

Norwegian composer Reitan (2009) deepened this understanding that our ears constantly receive sounds, but it is really about how our brains process this audio information that distinguishes one from another (p. 215). Pratt et al. (1998) interpreted this process as perceiving, and they regarded aural perception as "self-evidently indispensable in musical activity" (p. 1). Additionally, they defined aural work as "aural perception", "aural training", "ear training", and "general musicianship". Other designations have also been used in conveying the emphasis on the sound perception and internalisation, including "aural acuity" (Pembrook, 1984, p. 239); "aural imagery" (Bruce Benward, as cited in Hedges, 1999, p. 32); "inner ear" (Emil Kahn, as cited in Hedges, 1999, p. 32); "inner hearing" (W. R. Spalding, as cited in Hedges, 1999, p. 32); and "audiation", a term coined by renowned scholar Edwin Gordon (1984), meaning comprehending and hearing the sound internally while it is not physically present (Gordon, 2004, p. 389).

The last component of Hedges' (1999) definition of basic aural skills is the organisation of sound elements for recall, in short, abstraction or externalisation (p. 33). This stresses an ability to remember and rehear sounds either in a written form (as in sight singing and dictation) or via oral transmission. In some cases, when an amount of music needs to be recalled, a well-trained ear helps one analyse and organise the sound elements once they are heard. These three components present one of the answers to what "aural skills" are, from which ear training, aural training, aural skills and aural perception and such terms seem no different in essence.

Recent researchers have also explored ways to explain what aural skills and aural perceptions are, many of their definitions appearing to be a paraphrase of old references. For example, Amy Beckman (2011) referred to aural skills as "the hearing eye" and "the seeing ear". The former was explained as the ability to hear music in one's head immediately while reading the notated music, without any hint from the surrounding environment. The latter is reflected in the ability to translate the music into written notation when hearing a piece of music (p. 1). Music theorist Gary Karpinski (2000) appeared to have a different taxonomy by dividing aural skills into two different categories: "listening skills" and "reading and performing skills". New Zealand teacher-researcher Robert Aburn (2015) proposed a broader definition of aural perception as "the ability to identify, interpret, and attach meaning to sounds heard in any range of informal or formal contexts" (p. viii).

As Christopher Fry and Piers Spencer (n.d.) concluded that ear-training (or aural perception) is the very root skill existing in various musical activities within the western classical tradition. It aims to "improve the communication between the ear and the brain, and thus improve the listener's conscious and intellectual grasp of what the ear hears". Its value was described as that "no performer, teacher, or leader of an ensemble could function properly without a high degree of aural perception".

In a more general context, however, there appears to be a broad range of natural ability and disability in the field of aural perception" (Fry & Spencer, n.d.). Some people maintain that they can barely make sense of the music, and all sounds seem "meaningless or chaotic". On the contrary, other people seem to have a great gift for listening, which allows them to "identify any note heard, or sing any note on demand without the need for a pitch reference" (Borwick, n.d.). This natural ability is called absolute pitch or perfect pitch, which seems hereditary and cannot be acquired via training in later life, according to John Borwick (n.d.).

Although people's listening capabilities might differ in nature, the importance of ear training cannot be neglected because a well-trained ear is vital to every musician and a real advantage to even a casual listener (Fry & Spencer, n.d.). In Gromko's experimental study conducted in 1993, she uncovered the difference between expert and novice music listeners' perceptions of classical music composed between 1762 and 1896. The findings demonstrated that novices tend to focus on the general character of the music, such as whether the music is louder or softer, slower or faster, or higher or lower, instead of noting the development of rhythms, melodies and harmonies, compared to their counterparts. Based on this, Joyce Gromko (1993) encouraged music practitioners to consider perceiving musical sound a chief aim of music teaching because "the listener's ability to understand what is being communicated through sound" will determine their aesthetic experience (p. 46).

"Aural awareness" is a concept that appears to be closely related to aural skills. In Pratt et al.'s (1998) book Aural Awareness: Principles and Practice, the value of aural awareness was described as that music exists in every part of our daily lives; we could hear it, but we may not listen to it until we are made aware of music itself (p. 9). In this book, Pratt and his team focused on how to further develop aural training courses to improve "the connections between aural awareness and musical practice", such as in musical performance. In their theory,

advanced musical awareness is “perceiving music, and then being able to analyse and identify the elements within it” (p. 10).

Andrew Brown (2012) appeared to hold a similar view to Pratt et al. (1998). He believed that aural awareness is a capability to “listen carefully and critically to sound” and demonstrated how the sounds are “naturally (acoustics) and technologically (through musical instruments and other tools)” produced with relevant knowledge (p. 2). Finnish scholar Lotta Ilomäki (2011) attempted to explain the difference between aural awareness and aural skills. She referred to “aural skills” as specific cognitive proficiencies which can be developed via “aural-skills courses” (or “aural-skills education”) in higher music education (p. 2). Aural awareness, on the other hand, involves aural skills but emphasises “the hearing, listening or aural imagination of music” (p. 254).

Through analysing Pratt et al.’s (1998) theory, and the descriptions of aural awareness and aural skills proposed by Ilomäki (2011), Norwegian researcher Aslaug Slette (2014) related the phenomenon that she discovered in her research into college music ensembles to aural awareness, rather than aural skills. She argued that the skills required for ensemble players are more than just aural discrimination skills (which are part of aural skills). For instance, they need to be able to find solutions to emerging musical problems and share relevant knowledge within the ensemble. Hence, aural awareness in a music ensemble setting should be seen as a collective phenomenon. Based on the distinctions that Ilomäki (2011, p. 254) and Slette (2014) drew in their studies, it is thought that aural awareness seems to have a broader definition than aural skills and may be a more suitable concept for an extensive range of contexts.

2.3 Aural Skills Acquisition

To some music learners, aural skills may be gained traditionally through “aural-skills courses” or “aural-skills education”. This is a specific subject within formal music education (e.g. music conservatoires and intuitions that offer higher music education) that aims to develop “students’ aural awareness of music and their music literacy: their ability to learn and perceive music in increasingly refined ways and to communicate using music notation and other symbols” (Ilomäki, 2011, p. 1).

Fry and Spencer (n.d.) explained the goal of ear training lessons more detailedly. They stated that activities undertaken in such training often include sight-singing, playing, dictation, movement, and defining and analysing musical extracts or elements. Through such activities, students becomes "systematically trained to identify pitches and rhythms". They would be able "to listen 'horizontally' to follow melody or rhythm, and 'vertically' to separate mentally the various sounds that combine to form a chord or note cluster". Besides, they are taught "the grammar of written music", which allows them to "express these sounds as symbols on paper".

To achieve a more effective training outcome, Beckman (2011) asserted that music practitioners should have a basic understanding of educational principles and learning theories. Thus, her study concluded a wide range of learning theories that might exist in aural skills textbooks and classrooms for aural teachers to consider. These learning theories include:

- **constructivism**: Learning occurs when the curriculum is based on students' prior knowledge, and students are allowed to learn at their own pace.
- **behaviourism**: This theory proposes that repetition of producing certain behaviours leads to mastery.
- **brain-based learning**: This theory encourages active learning and accepts that learning takes place when the brain is functioning in its natural way.
- **control theory of motivation**: This theory asserts that if students are made aware of the intrinsic motivation of the work, their learning effects will be improved.
- **observational learning**: Learning occurs when observing a model, e.g. learning correct behaviours and skills.
- **spiral curriculum**: Learning occurs when revisiting a basic idea over and over with increasing levels of complexity added each time.
- **process-based learning**: This theory emphasises the learning process rather than the final product.
- **heuristic processes**: Learning occurs when students' decision making is based on logical flow charts or progressions.
- **Fleming's learning styles (VARK)**: Learning occurs through one or more of the four modalities (visual, auditory, reading/writing, kinaesthetic).

The long-established aural skills pedagogy has, however, received criticism in recent decades. As a lecturer in the Sibelius Academy, Ilomäki (2011) maintained that the purpose of aural skills education should be more than just looking for audible or visible results of these training activities (meaning a good mark in a listening test). Dale Wheeler (2007) acknowledged the value of "ear training" and "sight reading" to music making and also stressed that these two fundamental skills reach far beyond the graded exams or auditions. For him, the purpose of aural and visual training is to "develop aural imagery, facilitate learning and cultivate a musical sensitivity" (p. 35).

Pratt et al. (1998) also implied criticism against some prestigious aural assessment organisations, such as the Royal Schools of Music (ABRSM) and the national music curriculum of the United States. Although these organisations were believed to have improved their aural examination (or training) programmes to be more comprehensive, some musical elements still have been significantly ignored (pp. 2-3). For instance:

1. the range and tessitura of instruments and voices;
2. the density and the distribution of sounds and the textures within which they are performed;
3. the range of timbral colours, dynamics, articulations and phrasing of which they are capable;
4. where sounds are positioned in space and how they relate to each other structurally;
5. above all, the variations in pace at which all these elements may occur. (p. 3)

Based on this, Pratt et al. (1998) argued that for our real musical needs, some attention should be diverted from, for example, "perceiving and identifying pitches and durations" to these "neglected elements of musical expression" as shown above (p. 3). He proposed a series of tasks focusing on elements such as metre, rhythm and pitch; timbre, texture and density; compass and range; dynamics and articulation; and placing in space, pace and structure, and believed that musical awareness could be gradually developed through these exercises. Examples of these tasks include reading or imaging the implications of notation; notating sound quality accurately, not only "right notes" but also the subtle qualities and nuances of the music; using instruments to improvise and memorise or sing and play by ear (pp. 12-45).

Ilomäki (2011) partially agreed with Pratt et al.'s (1998) principles and practice. To some extent, Pratt's suggestions for "leading students to recognise and refine types of aural

awareness that they already have at passive levels" resonate with Ilomäki's recognition of the need for further development of aural skills courses (p. 199). However, in some respects, Ilomäki held different views. For instance, in Pratt et al.'s (1998) exercises, "verbal description and discussion of music" are often put in the first place as a requirement for conscious analytical observations and listening for certain musical elements, which Ilomäki (2011) argued that one's ability to "perceive and discriminate music" is not relying on the ability to describe it (p. 199). For Ilomäki, a better means to improve students' abilities to think in sound is to "have them make music and hear the result, or to respond to aurally perceived music through musical action–not through words or visual means" (p. 200).

Matthew Royal (1999), in his review paper of Pratt et al.'s (1998) book, appreciated Pratt and his co-workers' "long overdue refocusing" on other musical elements apart from pitch and rhythm, but maintained that pitch and rhythm are, regrettably, the most basic structured components in most "Western music" in terms of music theory and music cognition (p. 129). People who are able to notate most pitch and rhythm of a piece of music tend to use "a far richer technical vocabulary" in the discussion of these two components than "timbre, loudness or spatial location". Compared to other dimensions of sound, pitch and rhythm also require the use of more abundant "cognitive schemas", hence making greater demands on music cognition. For these reasons, learning pitch and rhythm and how to discuss these two parameters naturally should be placed in the key position in aural skills acquisition because it is far easier to discuss the perception or performance of correct pitches and rhythms when people encounter a new musical piece than the richness of timbre, dynamics, or spatial distribution.

In addition to expressing criticism over the current aural skills education, Pratt et al. (1998) and Ilomäki (2011) also claimed that the development of aural skills should step beyond the aural skills classroom and take place through a broader engagement with music, such as instrumental studies or anything besides formal aural skills lessons. As Pratt et al. (1998) recommended, students could do dictations to improve their perception of pitch and duration in music libraries or at home with any personal stereos because "'aural awareness' can be developed all the time, everywhere" (p. 4). For musicians, they can expand their aural awareness by listening intently to the sounds surrounding them in ensembles, such as orchestras, choirs or bands (p. 11). Moreover, if a conductor chooses to adopt unaccompanied sight singing as a way of learning the notes, the choir members will be forced to "image

notes" in a split second, and this is likely to improve their sensitivity and accuracy in pitch and rhythm (pp. 107-108).

By examining how college-level musicians gain various kinds of listening skills as well as reading and performing music in college music programs, Karpinski (2000) also provided explicit teaching and learning instructions and a sequential pedagogy which have been extensively considered an effective methodology for music learners. For example, he suggested involving instrumental performance in all kinds of aural skills activities because many adult learners rarely have systematic and comprehensive music training in their music learning experience. Specific methods like instrumental playbacks, clef reading, transposition and general sight reading may help the learners increase their aural awareness through practising.

Karpinski (2000) also encouraged studios or private instructors to incorporate aural skills such as solmisation, reading with effective eye movements, conducting if possible, and singing before playing (with attention to small details like phrasing, intonation and rhythm accuracy) into musical instrument practice. Such pedagogy was believed to aid musicians in learning to apply aural skills in various settings (e.g. practising, rehearsing, performing, coaching and teaching) to improve aural acuity (pp. 192-193).

To summarise, borrowing a phrase from Hedges (1999), any individual who is able to "receive aural stimuli and act on them" can be trained to a certain degree (p. 29). In William Miles' (2000) study, generalised aural training is seen as "the most significant vehicle for the development of a strong appreciation and understanding of the musical arts" for both music enthusiasts and serious learners (p. 19).

2.4 Music Literacy and Musicianship

The term "literacy" generally refers to reading and writing skills. In the field of music, however, the scope of the term varies from one to another. While researchers like Jin Ha Lee and Stephen Downie (2004) saw music literacy as "reading music scores", William Marvin (2008) described musical literacy as "the ability to translate symbols into sound" (pp. 132-133). Australian researchers Neryl Jeanneret et al. (2001) asserted that the ability to notate music is a part of musical literacy and is crucial in formal music education (p. 35).

Thelma Volger (1973) believed that "tonal and rhythmic literacy" are the essential components of musical achievement. Hence she measured music literacy as "the overall purpose of music education in the schools". In her opinion, it makes a real difference if students can "musically hear and feel what he or she reads and writes in notational forms" (p. 5). This view was supported by Csaba Csikos (2016), who defined music literacy as "culturally determined systems of music knowledge and musical abilities" (p. 3).

When many music educators maintained that musical literacy, including notation skills and reading skills, is fundamental and even central to general education in music, Reimer (2003) argued that this is an old and fallacious notion. For him, musical literacy is far beyond the ability to read and write; instead, it is "the ability to discriminate sounds and make meanings out of them" (p. 261). He also stressed that these "discriminations and meanings do not come from a system of notation, but from the ways heard sounds are perceptually structured intelligently" (p. 262). A similar perspective can be found in Nancy Telfer (as cited in Bartel, 2006), who defined musical literacy as "reading the meaning of music", which is much more than just reading pitches and rhythms.

Gordon (2004) emphasised the involvement of listening in defining "music literacy" and argued that music literacy goes above and beyond the simple skills of reading and writing music notation. In his view, people might not be seen to be literate in music if they cannot listen to music with meaning. Besides, Gordon also regarded creativity and improvisation as part of music literacy (p. 9). Other scholars, such as Jeanneret et al. (2001), described music literacy as the ability that develops music listeners' aural imagination, offering them a "window" to "the unfamiliar" and allowing "objective interpretation" of a musician's compositional work (p. 35). Steven Oare (2016, p. 41) also suggested that one's level of music literacy is related to the quality of aural image one has of the music.

Although music literacy has been a subject of debate among researchers for decades, the value of music literacy is almost universally accepted. However, in reality, music literacy varies from one person to another, and it is difficult to draw a sharp line between being music literate or illiterate. Some musicians do not use music language, notation or music theory but can still make great music. As Melville Smith (1934) believed, all individuals are musical to

some extent. They are able to react musically to "outside stimuli of pitch, rhythm and intensity" to some degree unless their "auditory nerve is completely unreceptive" (p. 16).

On the basis of formal music training, an inconsistency in conceptualising musicianship has also been recognised (Rickard & Chin, 2012). On the one hand, the conception of "musicianship" appears to be commonly accepted as "skill and sensitivity in performing or perception in appreciating music" (Butler, 2009). On the other hand, it is argued that musicianship is related to or consists of aural skills, music literacy, music theory, music memory, musical imagination, and analytical and communication skills of music.

For Hedges (1999), "musicianship" is the synthesis of two independent skills: written skills (the conception of music) and aural skills (the perception of music). As a goal of ear training (or aural training), well-trained musicians would be able to combine these two skills and use them to analyse (encode and decode) music, remember the music in several ways and communicate with others. In an ideal case, musicians may use their well-developed musicianship to understand music as heard and its "interrelationship with music as written" (p. 34).

Elliott (1995) maintained that musicianship is the key to helping music learners achieve constructive knowledge with self-growth and enjoyment in the music-listening context (pp. 123-124). For Elliott, musicianship is a kind of "practical knowledge" and is surrounded and supported by four other forms of musical knowledge, including "formal musical knowledge, informal musical knowledge, impressionistic musical knowledge, and supervisory musical knowledge" (pp. 53-54). Besides, musicianship was seen by Elliott as a "form of working understanding", which is situational and relational (p. 68). For example, in a musical performing context, there are five levels of musicianship, namely novice, advanced beginner, competency, proficiency and expert (pp. 70-71). Often, a performer who makes music well is regarded as having mastered a "multidimensional" skill called musicianship (pp. 53-55).

Brown (2012) also viewed musicianship as a "contextually related personal ability" that one is able to "perceive, understand and create sonic experiences". His definition of this ability is comprehensive, including "awareness of musical features, the facility to articulate and interpret these features and their effects, and a capacity to demonstrate understanding through analysis, imitation and generation of music" (p. 1). Such comprehensive musicianship can be

achieved through five crucial dimensions. They are aural awareness, the phenomenological experience of music, intellectual experiences of music, representation of "how music is notated or recorded in some external form and how these forms enable us to reflect, create and share", and finally, our musical interaction with others (p. 2).

In Smith's (1934) opinion, musicianship is the excellent comprehension of the "aesthetic intention of composers" and the ability to express one's musical thoughts and reactions using "coordinated pitches, rhythms, and intensities" (p. 16). In other words, musicianship represents the conscious ability to utilise musical talent in accepted forms. In this research, he also stressed that solfege is fundamental to musicianship. John Luce (1965) also argued that sight reading is an integral part of excellent musicianship. In real life, musicians may often face the challenges of playing a piece of music at first sight, whether they are choral singers, accompanists, commercial session players, or members of an ensemble (Spencer, n.d.).

According to Spencer (n.d.), proficient sight readers can gain "a general impression of the piece" at first sight, such as the style, the "intervallic relationships", and the "rhythmic shaping of phrases". This is probably because their knowledge of styles, sensitivity to various musical notations, aural perception, and imagination and "mental hearing" (Lovelock, 1965, pp. 87-88) have been gradually developed, in other words, outstanding musicianship. Spencer (n.d.) also appeared to imply that sight reading skills are highly trainable, and the differences in individuals' sight-reading ability can be attributed to the amount of relevant experience with sight-reading tasks and the size of the performing knowledge base.

As the definitions of musicianship appear to be rather contextualised in that there is a broad range of ways that people listen to, engage with and identify music, Nikki Rickard and Tanchyuan Chin (2012) recommended reconceptualising "musicianship" as a more multidimensional concept. In a more general context, for instance, a less engaged receiver of music might not necessarily be able to produce music, but he or she might have certain music listening and evaluation skills, which also represent certain degrees of musicianship (p. 299). From this perspective, improvisation, arranging, composition and ensemble skills may also reflect one's musicianship.

2.5 Musical Skills in Relation to Musical Performance

From a psychological perspective, musical performance was described as a process that demands complicated "cognitive and motor operations" (Norton et al., 2005, p. 125). After watching a marvellous orchestra concert, people may burst into loud cheers to show their appreciation but rarely think about the amount of effort required by each player in order to produce such great sound.

In fact, considerable musical knowledge and skills are involved in any musical performance. For instance, the abilities to read music scores and coordination of both hands appear to be the requisite skills for musicians to "translate music notation (visual-spatial-temporal information) into precisely timed sequential finger movements" (Norton et al., 2005, p. 125). Additionally, skills such as music memory, dynamics and articulation skills, improvisation skills and the knowledge of tonality are required when memorising and recalling musical pieces, interpreting music and being expressive, improvising based on given notes and transposing pieces to new keys (p. 125).

Karpinski (2000) maintained that music-reading and performing are intertwined skills, typically practised together by interpreting code and decoding symbols and signs during aural training courses. Wheeler (2007) held a similar view that the development of music reading and aural perception leads to "greater expressiveness" in playing a piece of music (p. 35). Clifford Madsen and John Geringer (1976) asserted that "aural discrimination ability" seems to be a primary prerequisite for intonational proficiency (p. 13), while Slette (2014) argued that musicians' "inner hearing" can affect the sound being produced by them (pp. 5-7). Smith (1934) also promoted that "the musician must learn to 'hear with the eye and see with the ear'" because the purpose of developing these inner imaginary skills is to perform music in actuality (p.58).

This view was supported by Susan Kim (2008) who found that college students majoring in instrumental music tended to construct "visual and aural images of the music" to increase their productivity and efficiency during practice. John Brick's (1984) investigation into young trombonists also provided further evidence that the trombone players who had received aural training (with a machine called the TAP Pitch Master) appeared to have better pitch accuracy and discrimination in their performance abilities. Karpinski (2000) also acknowledged that instrumentalists could reap added advantages by incorporating the skills

and concepts they learned from aural skills training into their instrument playing (p. 192). Other studies also proposed the tight bond between aural skills and instrumental performance (Brick, 1984; Elliott, 1982; Luce, 1965; McPherson, 1995).

Common to all authors, including Pratt et al. (1998), Theodore Buehrer (2000), and Kate Covington (1992), is the idea that instruments, in turn, can help students with the enhancement of aural awareness. This could be achieved by asking students to play by ear and vary and improvise given musical structures. In Aburn's (2015) research, students who considered themselves proficient piano or keyboard players also reported that playing the keyboard helps them master excellent aural skills.

Conversely, David Butler (1997) argued that the idea that "music performance hinges on expert music listening" is probably overstated. However, he stated that "the probing, focused, and knowledge-based listening" that music educators try to involve in the aural training process is essentially a form of music performance (p. 46). He postulated that "an intrinsic and unbreakable link between music performance skill and music listening skill" might be through physical motions because he has observed pianists' fingers silently playing on the desktop while taking dictation (p. 44). Butler thus stated that the over-learned kinaesthetic memory or motions in instrumental music performance feed back and help inform the music listeners (p. 46).

The correlation between performing skills and aural and listening skills is also acknowledged in the setting of ensemble performance. Glen Gillis (2012) believed that listening is an indispensable part of playing in ensembles. Enhancing ensemble members' knowledge and listening skills can positively affect their musicianship, performance and educational experience (p. 37). David Bowman and Paul Terry (1993) indicated that one should not only try to listen to oneself but also listen to what another part is doing when playing in an ensemble setting (p. 4), because listening empowers students to make successful ensemble collaboration (Johnson, 2011, p. 50). The student participants in Aburn's (2015) research also expressed that "skills in balancing solo and accompaniment lines/background or foreground lines within an ensemble" should be taken into account in aural training and listening activities (p. 102).

Challenging the assumption that "aural awareness is merely an individual phenomenon", Slette's (2014) doctoral thesis argued that aural awareness can manifest itself in a collective learning situation such as the ensemble rehearsal and can be shared and negotiated among ensemble members. By exploring music undergraduate students' interactions during ensemble rehearsals, Slette reported that aural awareness influences the ensemble's performances in different ways, such as how ensemble players read the score and interpret the music.

Although the significance of music listening is widely acknowledged, explicit listening activities may be absent from ensemble rehearsals. At least within formal music education, many music educators have reported a lack of time to teach anything else except "the notes for the concert" (Zerull, 2006, p. 44). Zerull (2006) thus recommended that music instructors better organise and structure listening activities in the ensemble performing classes to foster the improvement of listening skills in students. He exemplified ways to involve listening activities in ensemble classes, such as asking students to recognise specific musical elements aurally, using their musical experience to judge a piece of music and listening carefully to compare musical performances (p. 42).

Stephanie Prichard (2012) surveyed 92 music teachers in Colorado Front Range Schools to explore the status of listening activities in middle and high school instrumental ensemble classes. The survey results showed that teachers largely believe in the value of listening. With detailed planning and attention to the ensemble environment, these music practitioners can propel students to higher levels of musicianship by incorporating listening activities into rehearsals. From the students' perspectives, David Williams (1997) examined wind instrumentalists' music listening processes in musical performance during ensemble rehearsals. He found that ensemble players tended to listen to or think about rehearsal elements, such as "the music that was being played at the time, musical and non-musical matters in general, the playing of others around them, and their own playing" during rehearsal performance.

Glenn Nierman's (1984) research was to explore the effects of different performance participation (e.g. bands, choral groups, and orchestras) on students' ability to detect and describe the changes in musical elements (including pitch, duration, timbre, form, texture, loudness and style) in recorded music. This study showed that orchestral students might

appear to be more perceptive listeners, describing the basic components of music more accurately than their counterparts (choral and band students), and band students also scored much higher on choral music than the students who participate in choirs. Many reasons may explain these differences among band, choral, and orchestral groups, but how to enhance students' perceptive and descriptive skills remained relatively unknown, which could be research fields for future scholars to discover, Nierman believed.

2.6 Community Music Ensembles and Rehearsals

Heiner Gembris and Jane Davidson (2002) claimed that environmental factors influence one's musical development. These external conditions range from the general sociocultural environment (music culture) and school and family education to particular classes and peers. The degrees of these environmental impacts, however, largely depend on the frequency and duration with which one is exposed to musical experiences and activities; for example, how often and how much time is devoted to listening to music, watching music clips or singing in a choir (p. 18). This implies that active and long-term participation in music ensembles may benefit one's musical development.

Elisabeth Cook (n.d.) offered a comprehensive description of the term "ensemble". This French word was first used to denote a situation where everyone plays or sings one piece together. Through centuries of evolution, in modern English, "ensemble" has been loosely applied to any instrumental groups, such as orchestras and bands. In the community, there exists a particular type of instrumental or vocal group involving volunteer amateur or semi-professional musicians who commonly gather at "a locale", share "a unity of purpose", and show "concerted action or ethos". This type of ensemble may be considered the "community music ensemble" (Coffman, n.d.).

By this definition proposed by Don Coffman (n.d.), it appears that the nature of community music is outside of formal music education, but should it be considered within the context of non-formal or informal music education? According to Peter Mak (2006), formal education is associated with "schools and training institutions, from lower primary schools to the upper reaches of university" (p. 2). Hence, school music education and higher music education provided by music conservatoires and institutions fall into this category. Community groups

and other organisations are considered non-formal learning contexts, and informal covers what is left, such as “interaction with friends, family and colleagues” (p. 2).

Influenced by Mak (2006), Ninja Kors (2007) viewed non-formal music education as “a multifaceted landscape of music educational activities outside schools” and described the features of a non-formal educational setting as “a broad variety of organisations, music leaders and participants, contexts and ideas about what constitutes a good music (education) programme and what the aims of music education are” (p. 4). For Kors, attending a music concert and learning from media may be considered informal ways of learning music. Kari Veblen (2007) did not establish explicitly whether community music falls in the non-formal or informal music learning context, but argued that it might be seen as “a wide range of ‘music education’ programs that take place ‘outside’ the boundaries and schedules of ordinary school music programs” (p. 5). Given these perspectives, the community music ensemble may be understood as a non-formal educational environment.

The other question arising from Coffman’s (n.d.) definition of the community music ensemble is how amateur and semi-professional musicians differ from professional musicians. Reimer (2003) provided valuable insights into this aspect. Depending on the degree of musically active involvement, Reimer divided music participants into three levels, the aficionado, amateur, and professional. Among these, the levels of musical involvement of amateurs and professionals are easily distinguishable. Amateur is who “engages in a musical role for the sheer delight and satisfaction it affords rather than as a professional career”. On the contrary, professionals can and may also want to gain delight and satisfaction from music practices, but “attainment and maintenance of a level of competency” are often required. In addition, when payment becomes a basic component, there tend to be many obligations for professional musicians to be fulfilled (pp. 253-254). These are the fundamental two principles which separate amateurs from professionals.

Another concept (or level) introduced by Reimer (2003) is “aficionado”. This term, in his definition, is used to describe people who are well satisfied with “the role of partaker of the musical pleasures offered by amateurs and professionals” (p. 254). More specifically, aficionados are “enthusiasts who eagerly, delightedly, and intelligently seek musical experiences in their lives in one or several or many of the ways their culture makes them available other than by being amateurs or professionals” (p. 254). In other words,

"aficionados" are those who "willingly and heartily" enjoy their musical engagement and have "identifiable characteristics, equally shared by amateurs and professionals but not by doing what they do" (p. 254). Based on Reimer's explanations, it may be assumed that the players in community ensembles are most likely to be amateurs and semi-professionals who intend to gain musical delight from their ensemble participation but whose musical abilities are not as competent as the professionals.

Given the volunteer nature that members of community bands, orchestras or choirs primarily come from the community, these ensembles are believed to be essentially distinguishable from professional ensembles. Additionally, the degrees of openness to newcomers also seem to differentiate one ensemble from another. Some community ensembles welcome anyone interested in communal and collaborative music making, regardless of musical experience and background, while other ensembles set up competitive auditions for member selection (Coffman, n.d.).

Despite the different levels and standards of these ensembles, community music ensembles play an essential role in modern life, serving the community by contributing to "a sense of belonging" and improving "quality of life" (Coffman, n.d.). This is particularly true for the older adults moving from mid-life to retirement; the social interaction, integration and connection provided by such collaborative musical activity greatly enhances their "sense of social, emotional, mental, spiritual and psychological wellbeing" (Joseph & Human, 2020). Indeed, extensive literature has indicated that social experience is a critical part of community ensemble engagement (Bendrups & Hoddinott, 2007; Goodman, 2002; Grodd & Lines, 2018; Joseph & Human, 2020; Kruse, 2007; Palmer, 2008; Southcott, 2014; Southcott & Nethsinghe, 2019; Southcott, 2009).

In addition, communal music making tends to emphasise lifelong learning, and thus many community ensembles offer the participants a range of learning experiences, such as "learning new skills and developing new knowledge" (Joseph & Human, 2020, p. 76). As community musical groups usually rehearse regularly and arrange public performances within the community (Coffman, n.d.), the rehearsal could be seen as the learning environment and the performance as examining the learning outcome. This is because, in rehearsals, ensemble members are likely to receive the conductor's assessment and

requirements of the performance; by reacting to such things, their musical knowledge and skills may be accumulated.

Jonathan Dunsby (n.d.) stated that "music-making" is the most fundamental and universal human activity, and musical performance is seen as the "most elevated" of music-making and the "most widely disseminated kind of public property" in modern society. John Rink (2002) argued that behind a public music performance (a highly social experience) is usually untold hours and years of learning and preparation, which is often known as "practice" (pp. xi-xii). Such practice can be a solitary act when a player practises an instrument by himself or herself or a collective phenomenon in the case of ensemble rehearsals.

Generally speaking, the purpose of practice is for skill acquisition and development. In music, practice is viewed as "repeated performance and systematic exercise", through which musicians learn new repertoire, gain technical proficiency, develop musical interpretation and memorise music in preparing for performance (Barry & Hallam, 2002, p. 151). As the music becomes ingrained, sometimes musicians might "forget" what knowledge and skills they have gained specifically because those are "automatically" recalled in the heat of performance (Rink, 2002, p. xiii).

Rehearsal, as a musical term, is sometimes used synonymously with practice, but it appears to be a more complicated phenomenon than individual practice. This is because rehearsal generally involves a group of people, so a number of aspects such as "rehearsal atmosphere", "rehearsal pacing", "rehearsal structure", "performance error detection", and "the conductor's feedback and demeanour" need to be considered (Price & Byo, 2002). These aspects are influential in ensemble rehearsals and determine to what extent a group practice is effective. In Harry Price and James Byo's view, an effective ensemble rehearsal should include processes of "diagnosis, prescription, presentation, monitoring, and feedback, with brisk-paced and clear directions" (p. 341).

Price and Byo (2002) also drew an analogy between music teaching and ensemble rehearsals. They asserted that rehearsing and conducting are "inextricably linked… everything involved in rehearsing and conducting can be characterised via a teaching paradigm even in a professional ensemble environment" (p. 336). This is similar to Reimer's (2000) idea that

rehearsing and teaching are analogous if "the nature of the rehearsal process with the concert serving to set a context" is considered the teaching focus in the school music environment.

In exploring Price and Byo's (2002) article, the word "attentiveness" frequently appeared. For instance, they argued that the conductor's predominant use of positive feedback in ensemble rehearsals and regular eye contact with the ensemble players are important because they lead to better attentiveness of players. This argument was tested experimentally on a university symphonic band by Price in 1983, in which "the effect of conductor academic task presentation, reinforcement, and student performance on attentiveness, achievement and attitude" were examined (p. 24).

Following Price's experiment in 1983, Janna Brendell (1996) investigated the use of rehearsal time and student attentiveness during initial rehearsal activities. It was found that sight reading may have enhanced high school students' attentiveness during their choral rehearsals because less off-task behaviour was observed. On the contrary, a much higher off-task percentage was seen in those activities that are more repetitive and require less concentration, such as the warm-up. This seemed to suggest that choir members' attentiveness increases when a rehearsal activity is more engaging and requires active participation.

While music educators and researchers differ on what factors may influence ensemble members' attentiveness during rehearsals, some studies appear to stress that ensemble rehearsals, in essence, demand substantial levels of attentiveness. Compared with individual practice, ensemble music making is a collaborative effort and requires more than just concentration on playing the instrument but involves interactions with others. In Slette's (2019) words, "an ensemble must consider each individual group member, while the individual group members must consider the ensemble" (p. 33).

Goodman (2002) also asserted that accomplished ensemble players not only pay attention to the score and their instruments to monitor the sound coming out from their own but also make every endeavour to "attend to the sound emanat[ing] from the rest of the group" (pp. 156-157). This brain engagement is reflected in every single time that players coordinate and communicate aurally and visually with each other (Goodman, 2002) and monitor and react to the conductor's verbal and nonverbal instructions and directions (Price & Byo, 2002). If a

professional ensemble player is often multitasking during ensemble playing and their focus of attention is constantly being switched between different objects, inexperienced instrument learners may find the ensemble rehearsal a rather challenging task, because their whole attention might be focused on the music to keep their place. If they are amateur keyboard players, they might even be tied up with looking back and forth between the keyboard and the score due to lacking a sense of keyboard geography (Udtaisuk, 2005).

2.7 Learning in Ensemble Rehearsal

Several studies suggested that ensemble rehearsal has a music teaching and learning role and defined the conductor's role as a music educator/teacher. Stephen King's (2011) master thesis and his joint-authored paper (Baker & King, 2013) looked into his lived experience as a conductor and music educator in an Australia-based community wind ensemble, and discovered that these two roles are "inextricably inter-linked" in music practice. For him, the nature of his conductor-music educator's work is multifaceted and multi-layered, and this conducting/teaching experience was described as a "cyclic process where one stage informs the next stage", starting from "repertoire selection and preparation", "rehearsal planning", to "rehearsal implementation" and "rehearsal reflection". His findings suggest that teaching is the conductor's fundamental focus in rehearsals. The musical and technical development of the ensemble and its members are achieved provided that ensemble players' "fingers (technique) and musicianship (brain)" are engaged during rehearsals, and the planning and implementation of the rehearsal are meaningful experiences.

The perspective of seeing conductors as educators has long been acknowledged. When teaching an ensemble, as important as musical knowledge is, it is as vital for conductors to possess other qualities. Elizabeth Green (1987), Battisti and Garofalo (1990), Kohut and Grant (1990), and Max Rudolf (1995) maintained that the conductor must be armed with the head knowledge of "music theory, history, instrumentation, composition and aural awareness" and be able to move beyond their taught skills such as beat patterns, gestural responses, cueing, and expressivity. In conjunction with musical knowledge and skills, many other researchers proposed that the knowledge of modes of learning and behaviour management is a "must-have" for conductors as teachers because they need to be able to exploit appropriate teaching strategies and motivational skills (Bell, 2002; Boonshaft, 2006; Feldman & Contzius, 2010; Gillis, 2008; Priest, 2002; Ulrich, 2009).

Dan Halpern also shared his perspectives on the conductor as a music educator on his website (Dan Halpern Music, n.d.). He acknowledged the teacher-student relationship of the conductor and the ensemble players and suggested that this is based on the fact that the conductor tends to "draw on their own backgrounds as performers" and "attempt to recreate elements of their experiences" in the ensemble. In this way, the ensemble may be seen as a music classroom, where players are the students, and the conductor is cast in the educator role. However, Halpern argued that there are subtle differences between these two roles, although in many ways they are intertwined. These differences are, for example, performance is the ultimate outcome where the conductor places the highest value on, whereas the student's growth is the central focus of music teachers. From the interaction perspective, the conductor is in command of a traditional music rehearsal, deciding what is done and how. There is usually "no discussion, no questions, and all activities are geared toward the realization of the conductor's vision". However, a positive learning environment is a complete opposite in many ways.

A recent publication by Mark Wigglesworth (2020) has further uncovered what conductors do and why this role matters. He explored the philosophical underpinnings of conducting by analysing the relations between the conductor and the performers, the conductor and the music, the conductor and the public such as the audience, and the conductor's personal responsibilities and the subtler components of their silent art. In Wigglesworth's words,

> [m]usic is invisible, and, at its best, leadership is too. Conductors give shape to musical performances, as well as to the practical and psychological processes that precede them. Shaping the invisible might appear either vague or transcendental but beneath the surfact a conductor's craft is both specific and deeply human. (p. 11)

The following studies are found to be somewhat parallel to the present project, particularly in the strategies involved in ensemble rehearsals. However, the majority of this literature only examined the conductor's feedback during rehearsals and analysed how it shaped the ensemble participants' performance through the lens of linguistics.

Kathryn Emerson et al. (2019) maintained that the principal role of the conductor in rehearsals is to "create change in an ensemble's musical performance", specifically, "shaping the musical production towards a particular interpretation and/or level of musical quality that

the conductor deems adequate for an upcoming performance" (p. 363). In this "shaping" process, the conductor is likely to provide feedback to the players, and looking into the conductors' post-sung feedback in rehearsals was the intention of their research. Emerson and her co-workers thus filmed a total of 19 hours of choir rehearsals, ranging from small-sized amateur choirs to large professional-level chamber choirs (eight choirs and nine conductors). They employed "conversation analysis" to document and describe the conductors' post-sung feedback (both verbal and non-verbal) on choirs' singing attempts, but this research did not touch on any "during-singing" or "pre-singing" instructions.

"Conversation analysis" is a specific method within communication sciences which focuses on "how utterances (both linguistic and non-verbal forms) within talk can function as particular actions" and how people "draw on certain forms of inference" to understand these utterances (Emerson et al., 2019, p. 363). Such analysis, when applied in the setting of choir rehearsals, may be understood as what the conductors' actions mean and how choir participants interpret the implications of those actions in specialised ways. Emerson et al.'s (2019) research findings reported that assessment and directive are the two most prevalent communicative behaviours used by the conductor when shaping and improving choirs' singing. These two may occur singly or in various combinations, and they both can be used to explicitly and implicitly evaluate the "just-produced singing" of choir members and function to direct how members should sing "in their next sung attempt" or on a future occasion. Other actions, such as joking or overt teaching, also occurred as part of the conductors' post-singing feedback, but far less often.

Similar to Emerson et al.'s (2019) work, Jackson Tolins (2013) and Peter Weeks (1996) also employed conversation analysis as an approach to examining feedback in other music learning settings. Tolins' (2013) research assessed the role of "semantically empty vocalizations" (nonsense syllable vocalisations) in one-to-one instrumental lessons. By filming and analysing some clarinet music lessons, Tolins found that the teacher tended to use these "non-linguistic vocal depictions" such as "urrrllliiaa" to mimic, stress and exaggerate features of the student's "just-produced playing" and to assess and also draw players' attention to those features. In some situations, vocalised directives also served as musical models to demonstrate how a melody or musical phrase should be played.

These findings established that depictive vocalisation has two roles in instrumental class, one quoting the student's previous playing as an assessment, and the other directing the student to make changes to their subsequent playing attempt or future performance. From this, Tolins (2013) emphasised the importance of "vocalized depictions" in music learning settings by proposing that vocalisation can depict music in a way that verbal feedback cannot, because in essence, music itself is a "nonverbal aural experience" (p. 61).

Weeks (1996), on the other hand, explored the conductor's use of what he terms "verbal expressions" and "illustrative expressions" (such as counting, chanting or singing) in rehearsals of a youth orchestra. He observed a number of instances that illustrate expressions acting as "contrast-pairs". These pairs appeared to have a pattern, in his words, "one embodying the faulted performed version of a given musical passage" and "the other exemplifying the conductor's prescribed version" (p. 269). This pattern is essentially in line with the two roles of "vocal depictions" in Tolins' (2013) inquiry, although they named the conductor's vocal feedback differently. Weeks (1996) also acknowledged that verbal and vocal forms of feedback could occur independently and jointly, the latter nearly always being the verbal expression that precedes the illustrative to prospectively instruct orchestra players on how to listen to the subsequent illustrative expression. This is similar to the descriptions of assessments and directives in Emerson et al.'s (2019) study.

Antonia Ivaldi et al. (2021) reviewed 23 publications which employed conversation analysis as a research method for exploring interactions in performing arts lessons and rehearsals. Contexts involved in these 23 journals ranged from one-to-one music and dance teaching to group contexts such as rehearsals, workshops and masterclasses. Based on the findings reported in these journals, Ivaldi et al. summarised nine teaching and learning practices appearing in those learning settings and claimed that these practices are predominantly conductor or teacher-led practices, and students mainly respond with performance (p. 1). For example, one of the teaching practices is the conductor (or teacher) making corrections. When this is implemented, there are usually very few opportunities for students to "respond to, question, or receive greater feedback on their errors" (p. 8). The way for students to show their understanding of the conductor's (or teacher's) directives is to play what the conductor prefers in the next attempt.

There is another teaching practice that Ivaldi et al. (2021) drew from the 23 publications worth mentioning. It is the use of gestures in music learning settings, which was labelled by Ivaldi et al. as "miming and mirroring to provide information and understanding" (p. 8). By analysing the different usages of gestures in eight papers, Ivaldi et al. concluded that one of the primary roles of gestures is to depict and strengthen the information given in the conductor or teacher's verbal feedback or vocalisation, so as to add clarity to the instruction and thus increase students' understanding.

In the field of music education, some studies have also examined the different means of communication that the conductor uses in ensemble rehearsals. Mary Cavitt (2003) found that aural modelling was frequently used along with brief spoken instructions when the conductor attempted to correct errors. The use of modelling, including clapping, singing or playing, was also acknowledged as a vital resource for music training by Robert Duke and Amy Simmons (2006). While some researchers (Biasutti, 2013; Durrant, 1994; Skadsem, 1997) argued whether non-verbal communication (particularly gesture changes) or verbal feedback is more effective in affecting ensemble performance, Jessica Napoles (2014) proposed that what is more important is the consistencies between the conducting gesture and the verbal instruction. In other words, they need to convey the same message to ensemble participants.

Some researchers assessed types of conductors' feedback in rehearsal settings. While the benefits of giving positive feedback during rehearsals were generally acknowledged (Madsen & Yarbrough, 1985; Price, 1983; Thurman, 1977), Jennifer Whitaker (2011) reported that the conductor's negative feedback is also vital because it is necessary for the ensemble's improvement. Michael Bonshor (2017) further demonstrated that criticism should be delivered in "a positive manner and counter-balanced with praise", because this makes it constructive criticism and is welcomed in amateur choirs (p. 147). On the contrary, destructive criticism has an adverse effect on singers' performance and confidence, and in the worst situation, it could provoke singers to leave the choir.

Given the above, it seems reasonable to suggest that the conductor's role is to "convey the composer's intent for the pieces of music the ensemble is learning" (King, 2011, p. 61) and shape the ensemble playing towards certain levels or quality (Emerson et al., 2019). Provided that the conductor-teacher aims to develop their students' (i.e. players') musical and technical skills, a synthesised understanding of the musical and non-musical knowledge will enable

them to achieve effective and efficient rehearsals (King, 2011, p. 61). On the other hand, participation in real-time group music activities such as ensemble playing offers many different ways in which learning may occur, not all of which are led by the conductor.

2.8 Explicit and Implicit Learning

Provided that the community ensemble rehearsal may be seen as a non-formal music education setting, is the learning occurring in such rehearsals explicit or implicit? Before diving deeper into the various definitions of these two terms–"explicit learning" and "implicit learning", consider this answer. For Mak (2006), regardless of formal, informal or non-formal learning contexts, "the kinds of learning... are intentional (purposeful learning) and incidental learning (learning as a by-product of doing). The learning outcomes are explicit (the student can verbalize what he knows) and implicit (the student acts adequately in the situation he is in, without being able to explain why and how)" (p. 2).

A standard theory of explicit learning was identified as conscious learning, according to Donelson Dulany (2014), consisting of 4 points:

> (a) It is intentional learning. (b) Hypotheses are formed and tested on the evidence, all well represented in awareness. (c) What is learned is usually rules, accessible to consciousness for control of action. (d) And it is a process, given the limitations of consciousness, best suited to domains with relatively simple and salient regularities. (pp. 187-188)

Implicit learning, on the other hand, was first used by Arthur Reber (1967) in his published literature as distinguished from explicit learning (Reber, 1993, p. 10). This term was referred to as the unconscious learning process, in which reflective strategies are absent (Reber, 1989, p. 219). Following Reber's original sense of implicit learning, divergent views on the definitions of this term have emerged and many of the details of the process have been discovered; implicit learning has gradually become a controversial phenomenon.

From dozens of better-known definitions of implicit learning, Peter Frensch (1998) selected 11 representative examples to discuss and evaluate. He argued that the main differences or controversies among most of the existing definitions are: a) whether the label "implicit" is only assigned to "learning processes" or to "learning and retrieval processes"; and b) whether the meaning assigned to "implicit" is, "unconscious/unaware" or "nonintentional/automatic" (p. 48).

Of these 11 definitions, five agreed that implicit learning includes two processes: the acquisition of knowledge and the subsequent knowledge retrieval processes (Frensch, 1998, p. 52). For instance, in Reber's later research in 1993, implicit learning was characterised as "a situation-neutral induction process whereby complex information about any stimulus environment may be acquired largely independently of the subjects' awareness of either the process of acquisition or the knowledge base ultimately acquired" (p. 12).

The remaining selected definitions placed a particular emphasis on the "implicit character of the knowledge acquisition process", with some (Buchner & Wippich, 1998; Stadler & Frensch, 1994) being open and making no mention of the access to the acquired knowledge while others (Dulany, 2014; Perruchet & Vinter, 1998) decidedly considering the access to the learned nonimplicit (Frensch, 1998, p. 52). For example, in Michael Stadler and Peter Frensch's (1994) definition, implicit learning was described simply as a learning process which is "unaffected by intention", and it has no bearing on the status of the access to the gained knowledge (p. 423). However, Dulany (2014) appeared to imply that there exists a nonimplicit memory retrieval process in implicit learning. He asserted that implicit learning "should be identified with evocative mental episodes (associative-activational)", which consists of "the establishment and use of evocative relations among nonpropositional but fully conscious contents" such as perceptions, images and thoughts of something (p. 189). In this way, implicit learning is a "specific evocation in consciousness of what was primed in consciousness" rather than unconsciously remembering something which is not consciously remembered (p. 189).

For the second contentious point of whether implicit should be taken as a synonym of "unconscious/unaware" or "nonintentional/automatic", most researchers in the area also stand in different groups. For Dianne Berry and Zoltan Dienes (1993), David Shanks and Mark John (1994), Carol Seger (1998), Reber (1993) and Pawel Lewicki et al. (1987), the word "implicit" was taken to be equivalent to either unconscious or unaware. For instance, Berry and Dienes (1993) argued that "learning itself may be explicit, when deliberate strategies such as generating or testing hypotheses are used. It may also be implicit, as when people learn to exploit the structure of an environment without the use of conscious analytic strategies" (p. 2). Lewicki et al. (1987), as proponents of "unaware" character, claimed that

implicit learning is when subjects are acquiring specific knowledge without "being able to articulate what they had learned" and "being aware that they had learned anything" (p. 523).

On the other hand, some researchers maintained that implicit is synonymous with nonintentional and automatic (Cleeremans & Jiménez, 1996; Perruchet & Vinter, 1998; Stadler & Frensch, 1994). Axel Cleeremans and Luis Jiménez (1996) described implicit learning as a case in which knowledge is "acquired without intention to learn" and "capable of influencing behaviour unconsciously" (as cited in Frensch, 1998, p. 50). Likewise, Pierre Perruchet and Annie Vinter (1998) believed that implicit learning is "an adaptive mode", where subjects' behaviours show sensitivity to "the structural features of an experienced situation, without the adaptation to an intentional exploitation of subjects' explicit knowledge about these features" (p. 496).

Through a comprehensive exploration and analysis of various meanings attached to the term "implicit learning", Frensch (1998) agreed with the meanings that focus only on the learning processes and the nonintentional automatic learning mechanisms. His argument was that these meanings are "scientifically more useful" in that they differentiate "implicit learning" conceptually from other related concepts such as explicit learning, incidental learning, learning without awareness and implicit memory more effectively. In terms of translating meanings of concept into operationalisation, meanings that treat "implicit learning" as a learning phenomenon and interpret "implicit" as nonintentional/automatic also require fewer assumptions to measure, and potentially provide "stronger operational criteria for the evaluation of implicitness" than those emphasising learning-plus-retrieval processes and unconscious/unaware meanings (p. 76). In short, the former view is easier and less ambiguously operationalised in practice.

Based on these reasons, Frensch (1998) conceptualised implicit learning as the "nonintentional, automatic acquisition of knowledge about structural relations between objects or events" (p. 48). This definition, he admitted, is a similar view to that of Perruchet and Jorge Gallego (1997). In my opinion, it also appears to partially borrow the meaning from Axel Buchner and Werner Wippich (1998), who identified implicit learning as "the acquisition of knowledge about the structural properties of the relations between (usually more than two) objects or events" (p. 6).

As some researchers reported that it was incredibly challenging to provide clear empirical demonstrations of the existence of implicit learning and to establish its properties (Cleeremans et al., 1998, p. 407), Frensch (1998) conducted empirical studies to look for evidence to validate his definition, that is, the nonintentionality/automaticity of knowledge acquisition. His findings indicated that "implicit learning is indeed achieved by automatic learning mechanism(s)", but it seems to occur for learning certain functional relations (similar to the preparedness effect observed in animals' learning behaviour) and thus, it is not ubiquitous (p. 96). Despite the empirical support, Frensch (1998) repeatedly stressed that the concept of "implicit learning" is not either black or white because the perceived scientific usefulness, to a certain extent, is contingent upon researchers' personal and subjective backgrounds.

In terms of the distinction between implicit learning and explicit learning, Dienes and Berry (1997) summarised: implicit learning a) shows the limited transfer of knowledge to different domains compared to explicit learning, meaning that implicit knowledge tends to be relatively inflexible, inaccessible, and perceptually bound to the surface characteristics of the material; b) occurs in incidental learning conditions, where subjects only have to respond to particular items, rather than in intentional learning conditions (explicit learning), in which instructions are often given to search for underlying guidelines; c) shows greater robustness in terms of psychological impairment and less dependence on age which means that implicit knowledge tends to be more durable than explicit knowledge (p. 5).

Furthermore, Seger's (1998) research proposed that the implicit learning process is not an individual unit, and there are multiple forms of implicit learning. In this article, three forms/types were introduced in detail, termed "abstract implicit learning", "perceptual implicit learning", and "motor learning" (p. 295). He explained that abstract implicit learning appears when the subject is required to make a judgment about stimuli; a paradigm case of this learning is artificial grammar learning (p. 297). In perceptual implicit learning, as the term connotes, the changes in perceptual processing of stimuli are the focus and subjects' ability to perceive a stimulus and even to identify stimulus identity will be measured (p. 299). The last learning mechanism, motor implicit learning is accessible to and can promote motor responses; this can be measured through serial reaction time tasks in experimental studies (p. 301). The evidence was provided to separate each of these types from one another. Seger also argued that in nature, each type has its own way of processing knowledge.

In the domain of music education, Gustav Kuhn and Dienes (2005) regarded implicit learning as the acquisition of "rules and regularities solely through being exposed to stimuli that follow a particular structure", and there is little or no conscious awareness involved when applying this knowledge (p. 1417). They asserted that implicit learning has a significant role in various aspects of human cognition, not only in language acquisition (which has been the most famous case) but also in the area of musical perception. This statement was supported by a body of evidence that suggests music acquisition and perception are governed by implicit knowledge for both experts and non-musicians (Bigand et al., 1998; Dienes & Longuet-Higgins, 2004; Tillmann et al., 2000).

Italian scholars Mariateresa Storino and Mario Baroni's (2006) research explored the differences between musicians and non-musicians in recognising, analysing and listening to a particular composer's style on the basis of implicit learning. The results showed that participants (even professional musicians) had more or less relied on their intuition in the discrimination process of recognising a style. Additionally, pre-existing musical knowledge and competence appeared to be the cause for some participants' higher correct responses than what they had quickly gained from a pre-test learning session. These underline "the almost implicit nature of the cognitive processes" in recognising stylistic features (p. 674).

Similarly, Barbara Tillmann and Emmanuel Bigand's (2004) research challenged the general social belief that years of explicit training are essential for a diverse range of musical experiences. In their opinion, this general bias is possibly caused by a deep misunderstanding of humankind's cognitive abilities in perceiving music and the lack of knowledge about musical training programmes in music institutions. Their research findings indicated that the knowledge and skills needed to distinguish subtle structural changes in music could be internalised via implicit learning. This internalisation enabled non-expert participants to behave similarly to experts in dealing with minor musical structural changes within short musical excerpts (durations of less than 30 seconds), and the performance of these untrained participants was just as good as that of well-trained musicians (Bigand, 2003; Tillmann & Bigand, 2004). This implied that "musically untrained but experienced people are generally musical", but they are often unaware of it.

Jay Dowling (1999) also argued that the process of people generally engaging in music listening is far more sophisticated than what they are aware of. Listeners do not realise that the cognitive and perceptual processing of music information is often influenced by culture and individual experience that they "implicitly" developed since infancy. Due to this implicit knowledge, they would "automatically" understand the overall meaning of a musical work when listening attentively to it. This appears to suggest that implicit learning exists in our daily life, affecting our musical perception and cognition processes; the implicitly acquired knowledge can also be recalled and applied automatically and unconsciously when stimuli appear.

Another interesting project concerning the influence of music training on brain development was carried out by Andrea Norton et al. (2005). These researchers explored this topic through three aspects: a) whether children who had instrumental training show neural differences compared with those who never had music lessons, b) whether children who had instrument learning experience would innately have better "visual-spatial, verbal, and/or motor skills" compared to their counterparts, and c) based on the findings of the first two aims, whether a correlation exists between music perceptual skills and "any of the cognitive, motoric, or neural outcomes that have been detected to be related to music training" (p. 126).

The result of this experimental study established "no pre-existing neural, cognitive, motor, or musical differences between groups", and no correlations were found between "music perceptual skills and any brain or visual-spatial measures" (Norton et al., 2005, p. 124). However, it was found that perceptual skills in music are somewhat correlated with non-verbal reasoning and phonemic awareness, and this was assumed to be the result of inborn talent or implicit learning during children's early music training affecting the brain and cognitive development.

To date, people often think that blind individuals have greater sensitivity in listening than ordinary people because of the compensatory mechanisms for lack of vision. Claudia Carrara-Augustenborg and Benjamin Schultz (2017) hence compared the ability to implicitly learn metrical and nonmetrical rhythms between blind and sighted adults. In this research, "implicit learning" was construed as "learning occurs unintentionally and without awareness" (p. 907). Findings indicated that the blind were able to learn nonmetrical rhythms more

readily than the sighted group, but it is also true that the blind group lost their auditory advantage when it came to metrical rhythms (p. 915).

Bruce Torff (1995) seemed to hold a similar view to Carrara-Augustenborg and Schultz (2017) regarding the definition of implicit learning. In Torff's doctoral thesis, he viewed implicit learning as the "acquisition and use of knowledge outside of conscious awareness" (p. iii). Examples provided to demonstrate this definition included that we can recognise others' faces readily but cannot explain how we did it, and we are capable of learning to understand and use "grammatic utterances", but hard to say what the rules of grammar are (p. 1). For Torff, implicit learning is a learning mechanism existing in everyday contexts and social interaction (pp. 5-11).

A differing opinion on the two learning systems–explicit and implicit was expressed by Steven Brundage (2014). For him, explicit and implicit learning are both involved in music learning but appear in different stages. The relationship between explicit and implicit skill functioning is a "mental and physiological transformation…between the beginning and proficient stages of skill development" (p. 23). Explicit learning tends to occur at the beginning stage, which is methodical but slow. The explicit learning process is mechanical and deliberate, with learners' conscious awareness. For example, a piano beginner attempts to play scales. At first, he or she follows the teacher's instructions to start "hands-separate playing" within one octave; this process will be repeated many times until the student plays well enough to move to the next stage. After hours and hours of practice and years of training, implicit learning may take place, in which stage this student might be able to sight read a difficult piece and play four octaves in thirds, sixths and tenths in this piece of music without even thinking about how to do it. Such skill acquisition and functioning were considered implicit learning; it happens unconsciously and gradually.

With that being said, the present study agrees with Dulany's (2014) conception of "explicit learning", viewing it as intentional and active learning, for example, when deliberate instructions are given to search for underlying guidelines or when intentional strategies are adopted to generate or test hypotheses (Berry & Dienes, 1993, pp. 2-5). "Implicit learning", on the other hand, is seen as a learning process in which "knowledge about structural relations between objects or events" is acquired automatically and unaffected by intention.

This was inspired by the concepts proposed by Stadler and Frensch (1994) and Frensch (1998).

2.9 Intentional, Unintentional and Non-intentional Learning

After careful consideration of the definitions offered for "explicit learning" and "implicit learning", it appears necessary to clarify the "intentional" feature of explicit learning and, in particular, explore whether implicit learning may be an "unintentional action" or indeed a "non-intentional action".

American philosopher David Chan (1995) asserted that the intentionality of an action is "the agent's mental state in acting", which is often found to be socially linked to a sense of responsibility (pp. 139-140). In this research, Chan identified three types of actions based on what he called "the mental antecedents of action" (p. 148). In his argument, intentional action and unintentional action both involve acting on an actively formed intention, in which intentional action is when one performs an act for a reason, and unintentional action was referred to as those unintended events as a result of performing an intentional action. On the contrary, an action not performed for a reason was believed to be non-intentional, such as mannerisms and habitual action or routine.

In a recently published journal, Brandon Johns (2020) challenged his predecessors in the field. He analysed four of the early arguments for the existence of non-intentional action, including Chan's (1995), and argued that none of these would succeed. In his discussion of Chan's (1995) argument for intentional action, he questioned whether all intentions are actively formed and if we could acquire an intention spontaneously without engaging in practical reasoning. He argued that when we slam on the brakes because a dog shoots out in front of the car, for example, the action of slamming on the brakes is intentional; however, such intention is passively acquired. It is apparent that the agent in this case has no time to deliberate and form an intention. Also, while walking in a market, an intention to touch an item on the shelf may suddenly "pop up". This intention is not the result of deliberation, so the action (touching the item) resulting from this intention is not based on a reason. In addition, Johns (2020) asserted that Chan's (1995) definition of unintentional action is too liberal; simply characterising "unintentionality" as an unintended effect is not sufficient enough, because this meaning does not indicate the agent's mental state in acting.

As a result of assessing other researchers' definitions of these three types of action, Johns (2020) expressed his views on intentional action and unintentional action, which seem to be more precise than Chan's (1995). In Johns' view, intentional action is one "aim[ing] at performing either as an end or a means to an end", while unintentional action is an "accidentally or inadvertently performed" action. Unintentional action occurs not only in the course of or as a result of intentional action but also implies that the agent does not consider performing it (p. 1894).

Finally, Johns (2020) argued that the category of non-intentional action lies between intentional and unintentional actions, and side-effect and lucky actions should fall under this category. These are the two arguments he proposed for the existence of non-intentional actions, which he believed that they are more promising than his predecessors'. Johns supposed that there is a negative effect in performing an intentional action. If the agent is aware of the negative consequence (though it is not the agent's aim or goal) but decides to take the risk and carry out the intentional action, this side-effect action may be considered non-intentional. The lucky actions were seen as the lucky effect of performing an intentional action. This effect may occur when the agent is not skilled enough to make something happen but still makes an attempt and somehow achieves a lucky result. This lucky result is then considered a non-intentional action. Johns' argument for non-intentionality appears to indicate that non-intentional action is a matter of probability and, to some extent, ruled by chance.

Now let us go back to the intentionality issue of explicit and implicit learning. Based on either Chan's (1995) or Johns' (2020) arguments, there should be no doubt that explicit learning is intentional as the agent aims to learn things. However, with implicit learning, for some reason, scholars generally appeared to avoid directly using the terms "non-intentional" or "unintentional" to label it. Instead, they use different wording, such as "without intention to learn"(Cleeremans & Jiménez, 1996), "lack of intentional causes" (Perruchet & Vinter, 1998) and "unaffected by intention" (Stadler & Frensch, 1994), to describe the intentionality of implicit learning. On this, Frensch (1998) is an exception. He defined implicit learning as nonintentional acquisition of knowledge in his paper "one concept, multiple meanings", although this article made no mention of the distinction between nonintentional and

unintentional action, and neither the reason why he chose the word “nonintentional” over “non-intentional”.

Whether Chan’s (1995) or Johns’ (2020), their arguments for the intentionality of one’s actions may be too basic for analysing the complexity of ensemble playing and the skill acquisition in community ensemble rehearsals–these are more than just the intentionality of “an action”. A fundamental question here is the extent to which “learning” is an intended “goal” when an action occurs. First of all, ensemble playing, either as a run-through during rehearsals or a performance in a concert, is a collective and real-time event. This means that what is being played and how it is played are both real-time-based actions. In this process, players usually do not have much time to think about what actions should be taken now and next, nor focus on just one skill at a time.

Second, although certain levels of consciousness are involved in ensemble playing, learning may not necessarily be the conscious focus of any particular individual actions. Instead, the intentionality of performing many specific actions, such as switching attention between the conductor and the music score, might be to avoid coming in at the wrong time and playing a wrong note. In fact, such intentionality may be more common for the players in community music ensembles due to the lack of ensemble experience or professional expertise. For those amateur or semi-professional players, learning might be a general sense that by participating in ensemble rehearsals, a range of knowledge will be gained, and skills will be developed. After all, many studies (Bendrups & Hoddinott, 2007; Grodd & Lines, 2018; Joseph & Human, 2020; Kruse, 2007; Palmer, 2008; Southcott, 2014; Southcott & Nethsinghe, 2019; Southcott, 2009) have established that a more common purpose of engaging in a community music ensemble is for overall well-being, as discussed in Chapter 2.6.

Furthermore, a distinction must be made here between gaining knowledge and learning skills, as they are essentially different. In Robert DeKeyser’s (2020) skill acquisition theory, gaining a skill was described as “development from initial representation of knowledge through initial changes in behavior to eventual fluent, spontaneous, largely effortless, and highly skilled behavior”, and this “set of phenomena” is common to the acquisition of all skills, including learning to ride a bicycle, appreciate music and speak a second language (pp. 94-106). This statement indicates that skill acquisition is a gradual process and is not an action at

which one can succeed with one attempt. Based on this, two common examples are provided below to demonstrate the difference between acquiring skills and knowledge.

In an accordion ensemble, a newly joined player may have gained the knowledge of accordion couplers and intended to follow the coupler marks on the score and change it while playing. While the ensemble was running-through a slow piece of music, he or she managed to switch the coupler from one to another. However, when the music moved into an up-tempo section, this player failed to make more changes. In this example, although the accordion player has acquired the requisite knowledge for applying the skill, it was clear that his skill was not being developed yet or was still under development. The acquisition of language skills is similar in this aspect: One might have studied the Spanish vocabulary but being able to speak Spanish fluently with a good accent (i.e. speaking skill) takes time and practice to develop.

To conclude, ensemble music making is a complex process. The collective, collaborative, and non-formal learning nature of community ensemble rehearsals makes it even more difficult to define the ensemble individuals' intentionality in performing an action. Although some actions in rehearsals seem to be performed for a reason, some may be unintentional or non-intentional. In the present study, however, the goal is not to measure and track ensemble players' mental state in acting, but to closely observe what musical skills may be developed in community music ensembles and gain an insider's view of such group music-making experience.

PART II: RESEARCH METHODOLOGY AND FIELDWORK

3 RESEARCH METHODOLOGY

This chapter details the methodology chosen for this project and the rationale for the methodology. The selection of participants and the methods used to approach participants and collect data are described. The processes and techniques chosen to analyse and interpret the data are explained, and the strategies used to ensure the credibility and transferability of the project are introduced. The anticipated limitations of the methodology are identified. Ethical issues involved in this project and the approaches to minimise potential risks are also defined.

3.1 The Nature of the Research

As demonstrated in the previous chapter, the literature to date has mostly focused on the acquisition and interrelatedness of various musical skills in formal music education contexts, with a particular focus on developing music students' aural skills and musicianship. Although several pieces of research expressed interest in community music ensembles and amateur or adult learning, most were studied through the lens of social science and linguistics, and less attention has been given to the development of musical skills in such non-formal music education settings. This research aims to address this gap, focusing on the receiving end's (i.e. players') ensemble experience and exploring musical skills that may be gained through participating in community music ensembles.

Given the volunteer nature of the community music ensemble and that members are largely amateurs or semi-professional musicians from the community (Coffman, n.d.), their race, gender, age, social background, levels of music education, pre-acquired musical abilities (before they joined the community ensembles) and the intention of participating in a community ensemble may also differ considerably. This means that not every member's ensemble experience is likely to be the same.

In a community instrumental ensemble, an older amateur might have had a limited music education or had played an instrument in the past, enjoying furthering his or her music engagement in retirement. There might be another participant who used to be a music teacher and hence felt committed to improving ensemble peers' general understanding of music as he or she is more trained and experienced. A teenage player in this ensemble might intend to apply the musical skills that he or she has recently gained from school music classes or

private instrumental lessons to the ensemble rehearsal and performance. These different ensemble experiences, in the present research, may have also been reflected in the varying degrees of acquisition of musical skills and various ways that the ensemble members further improve their existing musical skills.

As a group music-making activity, the ensemble rehearsal is collaborative in nature (Coffman, n.d.; Slette, 2014), because it is the mutual engagement of ensemble players and their collective efforts that turn the conductor's interpretations of the rehearsal repertoire into actual sound. In Slette's (2014) research into professional music ensembles, the ensemble rehearsal is also seen as a "collective learning situation"–"a dynamic and cumulative process that results in the production of knowledge" (Garavan & Carbery, 2012). Under such learning environments, learning "emerges because of interactive mechanisms where individual knowledge is shared, disseminated, diffused, and further developed through relational and belonging synergies" (Garavan & Carbery, 2012). From this point of view, the potential learning of musical skills in community ensemble rehearsals may be considered a collective phenomenon in that the interactions among ensemble players might be a source of musical skill acquisition.

Musical skills in the present study refer to a combination of skills that be used in community music ensembles or could be gained and further enhanced through ensemble rehearsals. These skills may be associated with players' aural, visual, perceptual, and kinaesthetic abilities, such as being able to listen to the sounds produced by themselves and other players, read the music and comprehend the notations, play the music with feeling, and watch the conductor from time to time. There might also be some opportunities for players to develop their inner hearing (internalisation and imagining sound), sight reading and musical improvisation skills through their engagement in ensemble rehearsals, and it is one of our research interests to uncover the strategies being employed in such skill learning processes.

Finally, due to the communal nature of the community music ensemble, acquiring musical skills might not have been a primary goal for some members to keep attending the ensemble rehearsals. As mentioned in Chapter 2.6, "a sense of belonging" might be one of the reasons that people stick to a community ensemble and such involvement may improve their "quality of life". Under this mindset, ensemble members may not have even realised the music learning aspect of being in a community ensemble. This suggests a need to gain an

"insider's" view about what is going on in the community ensemble, such as how the "insiders" conceptualise every aspect that has been touched on in their ensemble rehearsals and how they think and feel about their ensemble experience in general (Roulston, 2006, pp. 155-161).

As the nature of this study concerns the acquisition and enhancement of musical skills in the context of community instrumental ensembles and ensemble players' thoughts about their participation and especially the learning experience, three key research questions were designed. As cited in the introduction, they are:

- What musical skills are used and can be gained or strengthened within the community ensemble environment?
- What strategies are used to enable players to gain or enhance their musical skills?
- How do players conceptualise their musical experience through their ensemble participation?

In search of answers to the research questions, this study focused on the community ensemble rehearsals in their natural setting, seeking to investigate the ensemble players and the conductor's behaviours and actions that would manifest during the rehearsals, and the interactions between the conductor and the players as well as among ensemble players. These details were anticipated to provide vital clues about players' skill uses and learning patterns. Next, the investigation was anticipated to approach the ensemble players and, from their perspectives, understand further their ensemble musical experience (e.g. music making and skill learning). The methodology was therefore chosen to suit these purposes.

3.2 Developing a Methodology

3.2.1 Qualitative Research Approach

As this research seeks to build a detailed and holistic picture of the musical skill gaining process in community instrumental ensembles, qualitative research models lent themselves to this inquiry. The qualitative methodology has been commonly used in many academic fields, including education, arts, and social and human sciences (Creswell & Poth, 2018, pp. 8-10). It attempts to obtain an in-depth and holistic picture of what is happening in natural settings or "real-world" activities (Fraenkel et al., 2015, pp. 423-424; Leedy et al., 2019, p. 228) and

allows researchers to develop an insider's understanding of the phenomena or experience from participants in the setting (Roulston, 2006, pp. 155-161).

Paul Leedy et al. (2019) proposed potential advantages of using the qualitative methodology, which may explain why researchers seem to favour this particular methodology when planning certain research. First, Leedy et al. asserted that qualitative methodology allows researchers to explore a little-studied topic or phenomenon (p. 230). Through a wide-ranging review of literature, it was found that the acquisition of musical skills within non-formal music education settings such as community instrumental ensembles, so far, remains a relatively unexplored field.

Leedy et al. (2019) also claimed that qualitative methodologies enable researchers to disclose a complex and possibly multifaceted nature of particular "situations, settings, processes, relationships, systems, or people" (p. 230). Community ensembles differ in many ways, for example, rehearsal frequency and length, nature of performance, amount of overt music education occurring during rehearsals and range of ability amongst ensemble participants. Multifaceted details as such were anticipated to be discussed in this thesis, and the complexity and nature of ensemble players' musical experience would be unveiled.

Finally, the employment of the qualitative methodology assists researchers with identifying "problems, obstacles and enigmas that exist within the phenomenon" (Leedy et al., 2019, p. 230). In this study, the dilemmas amateur players may face in developing their musical skills may include the following. Players have little time to practise the repertoires after rehearsals as they may feel overwhelmed by other commitments; some players may be introverted and feel too shy to ask questions in rehearsals, which might stop them from pursuing a better musical experience. Difficulties as such were anticipated to be uncovered as part of the players' conceptualisations of their ensemble experience, which is credited with the use of the qualitative methodology.

3.2.2 Case Study as a Chosen Qualitative Research Approach

As research purposes and questions vary from case to case, types of qualitative approaches have developed. Qualitative researchers John Creswell and Cheryl Poth (2018) examined diverse classifications of qualitative approaches that surfaced in the past 30 years and

compiled a non-exhaustive list of approaches recommended by authors from different disciplines. They also summarised some qualitative approaches that are extensively used in social, behavioural, and health science fields. These approaches are "narrative research, phenomenological research, grounded theory research, ethnographic research and case research" (pp. 8-10).

Leedy et al. (2019) also named six commonly used qualitative approaches as "qualitative research designs", including case study, narrative inquiry, phenomenological study, ethnography, content analysis and grounded theory study (p. 236). Each research design was outlined regarding the nature, the focus, the methods of data collection and the methods of data analysis. This information allows researchers to consider combining two or more designs into one single study as "much qualitative research is, by its very nature, somewhat flexible and may continue to evolve over the course of a project" (pp. 236-237). For this project, only the case study research model was used in order to capture the richness and diversity of participants.

There has been considerable debate about whether case studies are, in fact, a methodology or a set of research data (Denscombe, 2010; Gerring, 2004; Leedy et al., 2019; Merriam, 1988; Yin, 2018). Creswell and Poth (2018) defined case study research as "a methodology, a type of design in qualitative research, and maybe an object of study as well as a product of the inquiry" (p. 96). To this, Robert Stake (2008) concurred with "the product of the inquiry" but held a dissimilar view that case study research is more about "a choice of what is to be studied" rather than "a methodological choice" (p. 119). He asserted that researchers could choose to use whatever methods to study the case, analytic, holistic, or mixed methods, but the focus is the case.

Stake's (2008) view appeared to be endorsed by Rob VanWynsberghe and Samia Khan (2007), who argued that the case study is not a methodology, a research design, or a method as such because "it does not provide a parsimonious theory of how research should proceed with conceptually coherent methods and accompanying data collection procedures that map onto the theory" (p. 83). Above all, the case study research in this research was viewed as "the mode of inquiry" (Yin, 2018, p. xx), "an object of study" (Creswell, 2013; Creswell & Poth, 2018), "a process of inquiry about the case" (Stake, 2008, p. 121) and a "product of the inquiry" (Creswell, 2013, p. 96; Stake, 2008, p. 121).

3.2.3 Cases in This Study

According to Creswell (2013), one of the prominent contemporary case study researchers, case study research means examining a particular phenomenon or issue within a "bounded system" or multiple bounded systems over a period of time by using different methods. In this statement, the "bounded system" is referred to as a case, and the multiple sources of information gathered, analysed and reported as a result of such investigation are the case description or theme (pp. 96-97).

A more encompassing definition of what can be seen as a case in case study research was put forward by Lauretta Luck et al. (2006). By extracting the definitions from several prominent case study researchers such as Creswell, Ragin, Stake and Yin, Luck et al., proposed that:

> The case is a single specific phenomenon (Creswell, 2003)…. *and* a system (Stake, 2000) that is bounded by time, place (Ragin, 1992), event or activity (Creswell, 1994), and these boundaries can assist in limiting data collection (Yin, 2003). These boundaries are explicitly set via the description of the locale, culture, group process or institution (Stake, 2000). (p. 104)

In the present study, as exploring how amateur players develop their musical skills in community ensemble rehearsals was the goal, a single community ensemble was seen as a case. It was bounded by the particular rehearsal time, fixed venue, and the activity was the rehearsal.

Stake (2008) classified case studies into three categories: "the intrinsic case study", "the single instrumental case study", and "the collective or multiple case study". The main difference between an intrinsic case study and an instrumental case study is the emphasis on the purpose. The intrinsic case study is usually undertaken when one aims to "develop what is perceived to be the case's own issues, contexts, and interpretations" (p. 128). In this scenario, the case itself is of key interest "in all its particularity and ordinariness" (p. 122). By contrast, the goal of conducting an instrumental case study is to "provide insight into an issue or to redraw a generalization" through examining a case; the case will still be entirely scrutinised but serves a supportive role in the research (p. 123). When more than one instrumental case is recruited and studied for exploration into "a phenomenon, population, or general condition", it is regarded as a collective case study or multiple case study (p. 123).

Based on Stake's (2008) categorisation of case studies, the present research may be viewed as a collective case study with two independent instrumental cases. Considering that musical skill acquisition in different instrumental ensembles (playing different instruments) might differ, the qualitative inquiry was undertaken in two community instrumental ensembles so that the phenomena could be investigated in two musically different scenarios. However, it is important to note that the choice of two case studies was not made to compare the two cases but to observe probable musical skill learning in both ensembles and then consider any commonalities–these phenomena could thus be better understood in a more general way.

For qualitative fieldwork, because cases are opportunities for researchers to study the phenomenon, a representative case enables researchers to achieve the greatest understanding of the particular phenomena (Stake, 2008, p. 129). Matthew Miles et al. (2014) and Gery Ryan and Russ Bernard (2000) claimed that nothing is more critical than "making a representative selection of cases". In the present research, the Christchurch Accordion Orchestra (CAO) and the Nor'West Brass Band (NBB) were chosen as the two studied cases. These two local ensembles were the most representative and accessible community ensembles for the accordion and for brass instruments. They both have a diverse age range, are accessible to the wider public, and most importantly, the amateur impetus–they were prepared to participate in an academic research project, as opposed to being requested by the conductor or ensemble manager.

There were other reasons accounting for this case selection. First of all, my focus of interest was on instrumental ensembles, so choirs were not considered. This was partly because mastery of the voice is significantly different from mastery of an instrument, and furthermore, choirs are usually attached to church or schools. Next, the decision to recruit the CAO was part of my initial intention, as I am a player in this ensemble and have become increasingly curious about how the learning was potentially occurring during rehearsals. Finally, considering that accordion ensembles nowadays may be a bit "unusual" in Christchurch, even in New Zealand, recruiting a more typical type of local instrumental ensemble to be the second case seemed beneficial, as the findings generated from both cases might be somewhat different. On that, brass bands are undoubtedly the top choice, as they have a substantial cultural impact in New Zealand and have long been a popular ensemble choice.

As one of the few remaining accordion orchestras in New Zealand, The CAO was formed in Christchurch in 1972 (Music for Accordion, n.d.). Back in the 1970s, there were another four accordion orchestras in Christchurch, but those groups gradually dissolved, and the CAO has become the only surviving accordion ensemble in Christchurch (Music for Accordion, n.d.) to this day. The CAO has been dedicated to encouraging people to join the orchestra through seasonal concerts and jam sessions, through which it maintains the continuance of accordion culture. As described on the website of Community Information Christchurch (n.d.), the CAO is "to promote musical interests generally and in particular, to promote and encourage the playing of accordions".

The NBB is a relatively recent local brass band in Christchurch, and it is part of "Nor'West Brass", an organisation formed in 2014 that has advanced rapidly. To date, Nor'West Brass has developed six brass bands representing six different technical levels, and the NBB is the leading band, representing the highest level of Nor'West Brass. The decision to involve the NBB rather than the other five bands of "Nor'West Brass" was made not only for the relative ease of getting ethical approval but, more importantly, because adults are more likely to provide a mature self-reflection on their ensemble experience compared to young teenagers and children. Also, for adults, participating in academic research is more likely to be an informed decision made carefully rather than something agreed to by a guardian or parent.

Nor'West Brass defines itself as "a community brass band covering northwest Christchurch, with a strong focus on developing young players". On its website, it is clearly stated that:

> Our goals are to provide an environment to encourage excellence in brass playing and to become an integral part of community life. We encompass education for a full age range including young children, entire families, and some of the more mature members of our community. We work closely with schools, teachers and other musical groups in our area and provide a strong focus on tuition and training, as well as helping our players gain a lifelong interest and friendships. We help generate a feeling of being part of the community and provide music and educational services for events around the region. (Nor'West Brass, n.d.)

These "official" statements appear to indicate the communal nature of the two ensembles. After some informal conversations with the ensemble managers, it was also confirmed that the CAO and the NBB are both non-profit organisations with regular rehearsal times, established premises and a relatively fixed membership. Additionally, the ensembles are not

providing any supplementary group music lessons to the players, although some players may seek extra support or training in private by themselves. These facts mean that the same groups of people rehearse regularly at a familiar rehearsal venue, and the rehearsals are the only setting where collaborative learning of musical skills might occur. As the rehearsals are usually weekly, they provide a consistent environment where ensemble participation occurs, which is likely to offer relatively consistent data.

Furthermore, both ensemble managers confirmed that the current participation mode in their ensemble is volunteer-based. Essentially, anyone interested in collaborative music making for both ensembles may join regardless of musical background and experience. For this reason, the composition of the two ensembles covers a wide range of ages, genders, socio-economic backgrounds and indeed, levels of pre-existing musical abilities. For instance, the NBB has a rich diversity of age range comprising a couple of child members, less than ten who are high school students, around ten who are in their 20s and roughly ten who are middle-aged or elderly, according to the NBB manager. Of these people, the ratio of males to females is approximately 6:4. The CAO members are all adults; excluding the researcher, about four members between the age range of 20-50 and ten are older. Of these people, more than 70% are female, and the rest are male.

The socio-economic backgrounds and levels of music education are complex issues. Through years of rehearsing experience with the CAO, it was noticed that some retirees in the CAO are certainly more experienced players who have learned to play various instruments over the years and have considerable practical experience in both performance and theory compared to other accordion novices. Some CAO players may be considered lifelong learners who received comprehensive music education from their schools back in the day and have been taking accordion lessons to support their involvement in CAO rehearsals and performances.

In the NBB, it would also seem that the younger members have been advantaged by their other musical engagements. For example, some teenagers and young children may have been concurrently engaged in formal music education outside the ensemble rehearsals, attending music classes in their schools, and possibly taking some extra music tuition through music centres or private training. They might have been involved in some music training concerning musical terms and music literacy, which is closely related to their general performance over

the rehearsal periods. Such training might have placed them in a different situation from older players in the NBB.

These musical experiences may have determined the ensemble players' pre-acquired musical knowledge before they joined their respective ensembles and may also have an impact on how players learn music. However, the main purposes of this research, again, are to discover the potentiality of acquiring musical skills through community ensemble participation, explore types of musical skills used in ensemble rehearsals and various ways of further developing those musical skills, as well as gain insights into how ensemble players with various musical backgrounds conceptualise their learning and music-making experience. The differences among the ensemble individuals were anticipated to be of great value to this research as they may yield fruitful and more diversified results. Besides, this research was not designed to compare and draw a distinction between players' musical skill acquisitions in different age groups or genders, and this is also decided by the nature of the research and research questions.

When conducting a collective case study, Stake (2008) recommended studying each case as "a concentrated inquiry into a single case" (p. 121). Smeijsters and Aasgaard (2005) were similar, saying that cases need to be researched and presented individually (p. 442). In the present study, the fieldwork was undertaken first with one ensemble and then the next, by which the focus was on each case, one at a time. This practice was advocated by Robert Bogdan and Sari Biklen (2007) for a number of reasons. First, they believe studying multiple cases simultaneously would create confusion for the researchers as there might be too many names to remember, and the data might be too diverse to manage. Then, if fieldwork is carried out separately, the researchers could easily utilise the techniques and experience gained from the first case when studying the second, which was believed to be timesaving (p. 70).

To conclude, in this collective case study research, two ensembles (the CAO and the NBB) were purposively selected as the two individual cases to study the musical skill learning phenomenon. Through the inquiry into these two cases, it was anticipated that diversified data would be generated, as these two ensembles cover mixed genders and a wide range of ages, socioeconomic backgrounds and musical experience and abilities.

3.2.4 IPA as a Chosen Qualitative Analytical Approach

As the phenomenon being investigated in this case study is the community ensemble players' musical skill learning process in the ensemble rehearsals, it is vital to understand players' personal learning experience and how they conceptualise their ensemble experience in general. Interpretative Phenomenological Analysis (IPA) was hence chosen to be the analytical approach to exploring players' conceptualisations.

IPA is a recently developed experiential qualitative approach informed by phenomenological philosophy. Since the first recorded IPA paper in health psychology was produced in 1996 (Smith, 2011, p. 12), this method has gradually spread to other fields such as psychology, health and sciences, and education, including music education (Joseph, 2014, pp. 157-158). Dawn Joseph (2014) provided considerable examples in her research to show that IPA could be successfully implemented in music education research.

IPA is an inductive analysis method by nature "with no pre-existing hypothesis" (Hefferon & Ollis, 2006, p. 144). It is often adopted to explore the research participants' lived experience and understand how they make sense of the experience, an object or event (Joseph, 2014, p. 146; Smith & Osborn, 2015). Joseph (2014) also claimed that "IPA does not seek to find a single answer, explanation or truth but rather provides a space that is focused on the words of the participant, which resonates with story telling" (p. 158).

This approach is rooted in the theory of "phenomenology, hermeneutics and idiography" (Smith, 2011, p. 9). The phenomenological aspect concerns personal experiences and "focuses on the meanings that certain events or experiences hold for the participants" (Southcott, 2009, p. 145). From a hermeneutic perspective, IPA usually involves a two-stage interpretation process, so called "double hermeneutic" (Smith & Osborn, 2015). During this process, the researcher's role is to "understand the participants' subjective experience" and interpret what the experience means for them (Joseph, 2014, p. 150; Smith, 2011, p. 24). As Jonathan Smith (2011) stated, "the researcher is trying to make sense of the participant trying to make sense of what is happening to them" (p. 10). IPA is also idiographic because it emphasises developing understandings of individuals' unique "cognitive, linguistic, affective and physical being" (Smith & Osborn, 2015, p. 26), instead of making generalisations (Joseph, 2014, p. 153).

Reviewing the literature also found that IPA is commonly used for analysing interview data, especially unstructured and semi-structured interviews. When studying a small group of participants, IPA could also be employed to analyse data gathered through focus group interviews (Joseph, 2014, p. 150). Due to the nature of IPA, participants in such interviews are usually selected through purposive sampling. During the interviews, researchers will attempt to help the interviewees feel safe, confident and comfortable in sharing their stories in detail for the in-depth data to be generated (pp. 151-153). When conducting these interviews face-to-face, the researchers also need to be aware of non-verbal expressions such as body language and facial expression because these expressions may provide "subtle nuances in the information being shared", which might have a direct impact on how the data are being interpreted (p. 152). When analysing the interview data, as IPA is not a prescriptive method, researchers could "take advantage of its flexibility" when delving into individuals' perceptions in a music education context (Crawford, 2019, p. 458; Southcott, 2009, p. 144).

Australian scholar Jane Southcott seemed to favour this analytical approach, because it is concerned with "individuals' subjective reports" (Brocki & Wearden, 2006, p. 88) but also acknowledges researchers' interpretative role. To some extent, IPA allows the existence of researchers' beliefs and biases in data analysis, which is the sense-making process (Fade, 2004). With the use of IPA, Southcott has contributed invaluable data in her phenomenological case studies concerning community musical engagement (Southcott, 2014; Southcott & Nethsinghe, 2019; Southcott, 2009). Although the phenomena in these studies were examined mainly through a social lens rather than a musical lens, these studies have offered a useful model for the current research project.

One of Southcott's IPA studies (2009) explored an Australia-based small choir. This vocal ensemble was formed by a group of older adults who have maintained frequent and dynamic performances at local care facilities. In order to understand the purpose and meanings of participation in the choir, Southcott employed a semi-structured focus group interview as the data collection method, and IPA was applied as an analysis approach. Part of the findings indicated the skill used in the choir's performance and how choir members learned to sing. These include the blind choir accompanist playing by ear and being able to transpose songs to suitable keys quickly; and choir members learning new songs through imitation (i.e. listening to other members or listening to the CDs). Over the years, this choir's repertoire has extended

to about 600 songs, some involving solos and duet parts. More surprising is that these songs were almost all sung from memory.

Also worth mentioning is the study conducted recently by Southcott and her colleague (2019) at a senior Russian-speaking community choir in Australia. This research examined the choir members' understanding of the shared music-making experience and how these experiences have impacted their quality of life. One-on-one semi-structured interviews and focus group interviews were both carried out with different choir members, and the interview transcripts were analysed using IPA. The investigation showed that most choir members could not read music; however, they have developed various strategies to maintain their engagement in the choir, and as a result, these amateur singers could sing with up to four simultaneous voices.

As Southcott summarised, "[c]ommunity music endeavours usually involve active music making and acquisition of musical skills and understandings" (Southcott, 2014, p. 45). Therefore, community choir engagement might be seen as "both a social and educational experience" for the elderly participants (Southcott, 2009, p. 153). Southcott's studies not only provide a theoretical basis for the use of IPA in examining the ensemble members' personal lived experiences of community musical groups, but also suggest the possibility of gaining musical skills through choir participation. In the present research, IPA was thus implemented at the data analysis stage to help the researcher make sense of ensemble players' conceptualisations of the ensemble experience and, in particular, the musical experience. Further details of the IPA implementation are discussed in Chapter 3.6.

3.3 Methods for Data Collection

Within the qualitative case study framework, two methods were chosen for data collection: video observation and the VSR-prompted (video stimulated recall) semi-structured focus group interview. According to Fraenkel et al. (2015), observations provide valuable clues to understanding how people act or how things are seen in real-life situations, while interviews give us insight into "people's attitudes, their values, and what they think they do" (p. 443).

In this research, video observations were conducted in both ensembles (the CAO and the NBB) in order to address the first two research questions: what musical skills are used and through what strategies these skills can be developed. By observing players' and the

conductor's behaviours and the interactions between them and among the players in real time, initial understandings of musical skill uses and acquisition in both ensembles were developed. For instance, players' certain body movements while playing a piece of music might reveal their musicianship, and the conductor's use of hand gestures to indicate dynamic changes may be one of the strategies players employed to learn about balance.

These observations of the ensemble rehearsals were nonparticipant observations, during which the researcher took on the "observer-as-participant" role, meaning "not directly involved in the situation" being observed (i.e. not participating in the observed rehearsals), "but rather 'sit[ting] on the sidelines' and watch[ing]" (Fraenkel et al., 2015, p. 444). The ensemble players were also made aware of the researcher's identity and intentions in conducting the observations. This type of observation, according to Fraenkel et al., might make players' behaviours less typical in that the researcher's presence may somewhat distract ensemble players from their normal routine. However, such observation with the researcher being an observer-as-participant is considered the most ethical compared with other unobtrusive types of observations (p. 444).

For both ensembles, the first video observation was a pilot study, which was implemented to examine the research tools and explore any unforeseen issues for better results in the next observations. As Fraenkel et al. (2015) defined, a "pilot study" is "a small-scale trial of the proposed procedures. Its purpose is to detect any problems so that they can be remedied before the study proper is carried out" (p. 626). Leedy et al. (2019) also stated that the pilot study is a "brief exploratory investigation", through which researchers can "try out and refine particular procedures, assessment instruments, or methods of analysis" (p. 119).

For research conducted in educational settings, recording devices are indispensable as many things are occurring rapidly, and important details can be easily missed in observations. Videotaping allows researchers to have "more time in reflecting on classroom events and looking for answers" because they can watch the video footage repeatedly until data are coded in meticulous detail (Fraenkel et al., 2015, p. 448). Hence, in the present study, video recording devices were employed during observations (including the pilot observations) to document each entire rehearsal process. This way, the observational data were more likely to be transcribed in detail, thereby benefiting data analysis. More importantly, these recordings would provide the basis for selecting focus group interviewees (further details in Chapter 3.4)

and the key reference to facilitate the discussions in the focus group interviews (explained in the following paragraphs).

The interview is an effective strategy to assess intangible phenomena such as "concepts, ideas, opinions, feelings, or other non-substance-based entities" (Leedy et al., 2019, p. 96). Focus group interviews, as its name indicates, are group interviews, and "[t]he hallmark of focus groups is their explicit use of group interaction to produce data and insights that would be less accessible without the interaction found in a group" (Morgan, 1997, p. 2). This group interaction might be reflected in the actions of listening to other interviewees, interrupting, and maybe changing opinions during the interviews (Slette, 2014, p. 67).

In this research, focus group interviews were intended to be undertaken to investigate the third research question: how do ensemble players conceptualise their musical experience with the ensembles? To understand different aspects and conceptualisations held by the players about their ensemble musical experience, having this kind of group interaction and discussion appeared to be crucial. Noting a focus group interview is essentially an interview rather than a group discussion focusing on "problem-solving" or "decision-making" (Fraenkel et al., 2015, p. 455). The researcher's role is to guide the interview, keep to the agenda of the questions and "tease out differing opinions about a topic" while preserving a relaxed, friendly, yet also professional atmosphere (p. 455).

The focus group interviews in the present study were intended to be semi-structured. This means that "the interviewer has clearly defined purposes, but seeks to achieve them through some flexibility in wording and in the order of presentation of questions" (Robson, 1993). Compared to a rigidly structured interview, a semi-structured interview allows the interviewer to "have more freedom to modify a line of questioning or to follow up unexpected lines of enquiry" (Rowe, 2009, p. 428). In designing the questions for semi-structured interviews, open-ended questions are believed to encourage interviewees to talk and give them the flexibility to explore answers. Questions such as "what was that like for you?" are simple but effective in getting the interviewees to share their subjective experience (Fraenkel et al., 2015, p. 453).

Although semi-structured, a good interview questioning route keeps the interview flowing and logically proceeding, fosters consistency in an interview process, and thus benefits the

analysis of interview data (Krueger & Casey, 2009, p. 38). According to Richard Krueger and Mary Casey (2009), there are essentially five categories of questions: “opening questions”, “introductory questions”, “transition questions”, “key questions”, and “ending questions”, and each of them has a distinctive function in the flow of a focus group interview. The purposes of having the first three types of questions were to “get everyone to talk early in the group”, “get people to start thinking about their connection with the topic”, and “move the conversation into the key questions”, respectively. “Key questions” were seen as the main body of the interview and the primary source of interview data. “Ending questions”, by definition, were designed to make interviewees “reflect back on all comments shared in the discussion” and think about whether there is anything that they want to add (pp. 38-41).

In addition to having a logical interview questioning route, Fraenkel et al. (2015) recommended starting the focus group interview with a simple self-introduction and explanation of the purpose and rules of interviews, and ending the interview by thanking and debriefing participants (p. 455). Given these recommendations, in the present research, a brief introduction and many open-ended interview questions were designed to keep the focus group interviews productive and moving forward.

The focus group interviews in this research were “VSR-prompted”. This means that short excerpts of video footage from observed rehearsals were used to stimulate discussions with the interviewees. VSR is a research method that involves “video-recording an activity and then replaying the recording to the participants so that they can comment on matters of interest”, which has been increasingly used in education over the past 30 years (Rowe, 2009, p. 427). In Victoria Rowe’s (2009) research into the possible existence of gender interactions in one-to-one instrumental music lessons, VSR was employed in the context of semi-structured interviews. The video recordings of actual instrumental lessons were used “as a stimulus” to help the interviewees “recall and develop their ideas about the lesson” and “as a springboard to further discussion about gender interactions” (p. 426). Rowe’s study provides a model for this research’s proposed focus group work.

When conducting focus group interviews, the size of the groups and the interview time deserve careful consideration. Krueger and Casey (2009) recommended small focus groups with four to six participants, not only because “small groups are easier to recruit and host” but also because they are “more comfortable for participants” to describe their experience and

share insights (p. 67). They also stated that usually, focus group interviews should not go beyond two hours because this length of time is a physical and psychological limit for most people (p. 58). Fraenkel et al. (2015) also proposed that a small group of people (around four to eight) is a suitable range for an interview that lasts one to two hours (pp. 454-455).

In the present research, therefore, a total of eight players per ensemble were selected as interviewees. To give the interviewees enough time to reflect on the video clips and have an in-depth discussion with the researcher, the eight interviewees (of each ensemble) were divided into two smaller groups, each containing four interviewees. Every group was invited to participate in a 60-minute interview, and all these group interviews were video recorded for transcribing and analysing purposes. As Fraenkel et al. (2015) described, nothing is more important than recording interviewees' words exactly, no matter what kind of interview one conducts (p. 455). The reason for choosing video recording over audio was because videotaping can capture the interviewees' non-verbal responses, which may represent certain attitudes towards the issues being discussed during interviews (p. 448).

In the context of the semi-structured interview with VSR being employed as a tool to refresh ensemble players' memories of the observed and recorded rehearsals, it was anticipated that the interviewees would reflect on their behaviours and interactions with other members shown in the videos, clarify the situation and share thoughts about those experiences. As the researcher, my role was to immerse myself in the players' experience, play the videos for the interviewees and facilitate them in interpreting what they had been through.

As a player-centred study–building on the players' perspectives to understand their reasons for joining a community ensemble and to explore how this experience may contribute to their musical life, knowing the conductor's thoughts on the rehearsing content, the skills may be developed, and the strategies are believed to be out of scope. Besides, they may influence how I see things as an observer and even change my position in interpreting the players' experience. After all, this research does not intend to judge the conductors' pedagogies in teaching music to a group of semi-professionals and amateurs nor suggest improvements that conductors can make in conducting and teaching. In fact, this may even go against the nature of community ensembles, where the inclusion and acceptance of players' current abilities is a core component.

Last but not least, the decision to employ video observations and focus group interviews in this research as data gathering methods was not only to address different research questions, but also because these two approaches may provide complementary data. As explained at the beginning of this section, the musical skill uses and potential opportunities for skill development were identified based on the researcher's subjective interpretation of the observational data. When the video footage that contains such information was shown to the interviewees, they may provide different insights. For example, some interviewees may feel that the conductor's expressive body movement increased their interpretations of the music and sensibility to a particular music style, which corroborates the researcher's initial interpretation. However, some may suggest that they could not be bothered to look up and watch the conductor because they were so focused on trying not to make mistakes. From this perspective, the focus group interview was designed to partially overcome some of the limitations of the rehearsal observations in that it may enrich the researcher's understanding of the learning phenomena in community ensemble rehearsals.

On the other hand, the video footage obtained from rehearsal observations may provide key reference and new perspectives for the interviewees to reflect on their behaviour and interactions with others during ensemble rehearsals. As discussed in Chapter 2.6, many researchers (Goodman, 2002; Price & Byo, 2002; Slette, 2019) in the field have demonstrated that ensemble rehearsal is an activity requiring high levels of attentiveness and the ability to multitask. Under such circumstances, many things are happening simultaneously, and players may not realise how they behave at a particular point because they are acting in the moment. For instance, some players may not be aware of their body movements when rehearsing a piece of swing music because they are so immersed in the music, and the movements may be a subconscious or automatic response. These things, however, would be observed by the researcher and captured by the camera as factual evidence. Such evidence, when shown to the interviewees in the focus groups, may influence how interviewees view their engagement in the ensemble rehearsals and thus make the interview data more diversified and comprehensive.

3.4 Recruitment of the Participants

Given that the CAO and the NBB are the two most representative and accessible local amateur ensembles for the accordion and for brass instruments (refer to Chapter 3.2.3), the

researcher informally approached the managers of both ensembles in person to see if they would be interested in participating in this project. After receiving their verbal assent, an information sheet and consent form (see Appendix A) were presented to both ensemble managers, applying for formal permission to implement the whole research programme in the ensembles. For the recruitment of individual participants (i.e. video observation participants and focus group interviewees), "purposive sampling" was the sampling method employed in this research. It refers to the researcher using "personal judgment" (e.g. "previous knowledge of a population and the specific purpose of the research") to select a particular sample that is believed to "yield the best understanding" of the phenomenon being studied (Fraenkel et al., 2015, p. 101).

As the video observation and the focus group interview were conducted for different purposes in this research, the criteria for selecting observation participants and interview participants also differed. As a general principle, children were eliminated from this research because they are a more vulnerable group, and they might be too young to comprehend the research contents and answer the interview questions if they were selected. When applying for ethical approval from the University of Canterbury (UC) for the present research, on the 2018 "Application Form for Ethical Approval of Research Projects", participants "under 14 years of age" were considered children, those between "14-17" were viewed as young people (or teenagers) and "18 years and over" were adults (https://teara.govt.nz/en/childhood/page-1). Under this definition, all CAO members (including the conductor) were seen as adults; approximately two-thirds of NBB members (including the conductor) were adults, the rest being teenage players and child players.

Considering that the purpose of video observations was to explore a variety of skill uses and potential skill learning opportunities in community ensemble rehearsals, the more players participate in the observed rehearsals, the more the observational data are diversified. All members of the CAO and the NBB would be invited to participate in the video observations unless they were children. Based on this criterion, all CAO members and the vast majority of the NBB members were anticipated to participate in the video observations. Before the observations began, all adult members (18 years and above) received an information sheet and consent form as shown in Appendix B, and those aged 14-17 received the teenager version of the information sheet and consent form as shown in Appendix C. This means that all CAO players and the conductor could expect the adult version; for the NBB, the

conductor would be given the adult forms, but the players would receive either the adult or the teenager version, depending on their ages.

The four NBB child members, although excluded from this research, were welcome to join the rehearsal when video observations were being carried out. They would be placed outside the camera's visual zone so their images would not be caught. Their instruments' sounds and the conversations with other ensemble members might have still been captured but were either muted or excluded from the data analysis (more details of risk management in Chapter 3.8). An assent form (shown in Appendix D) was provided to these child players to notify them that the ensemble is participating in the researcher's study, but they would not be directly involved. In addition, parents/caregivers of the NBB members under eighteen also received an information sheet and consent form (see Appendix E). They were informed of the research design (including observations and interviews) and the risks of their children's involvement and participation. They were also informed that they should discuss relevant information with their children before returning the signed consent forms.

When delivering these forms to the ensemble individuals and their guardians, a brief explanation of the research purpose and the participation in the different research phases would be given. All ensemble members would be told that their participation in the observed rehearsals is voluntary, and if they wish to raise any particular concerns or questions about the study, they would be allowed to talk to the researcher individually at any point. Once the consent has been obtained from the ensemble manager, ensemble members and some young members' parents, video observations could commence.

The recruitment criteria of focus group interviewees were also based on purposive sampling, although the recruiting process was slightly more complicated than that of the video observations. The interview recruitment was only intended to start after the video observations had been completed and the observed rehearsals had been fully transcribed. Based on the observational data, players who actively involved themselves in the rehearsal activities, demonstrated uses of musical skills and provided rich sources of musical skill acquisitions would be selected as potential interviewees. For example, those who have tapped their feet while listening to other parts playing, listened to the conductor's singing (vocalised instructions) and tried to imitate to achieve the desired sound effect, or swayed to a piece of music while playing it were considered ideal interviewees.

As mentioned in Chapter 3.3, eight players per ensemble were intended to be recruited in the focus group interviews. Thus, 16 potential interviewees would be selected and individually provided with a sealed envelope containing an information sheet and consent form. This letter thoroughly explained what their participation in the focus group interviews involves. All potential interviewees would be reminded again that their participation in the focus group is voluntary. Considering the NBB has teenage players, and there is a possibility that some of them might have been selected as potential interviewees, two versions of the information sheet and consent form were prepared for this interviewee recruitment: one is for adult interviewees (see Appendix F), and the other one is for teenage interviewees (see Appendix G). All potential CAO interviewees were provided with the adult version. Once the researcher received the confirmation from these potential interviewees, the focus group interviews could begin.

3.5 Proposed Procedure of Data Collection

Data were anticipated to be gathered through two main phases: video observations of ensemble rehearsals and focus group interviews with selected ensemble players. The first phase consists of six video observations: three rehearsals per ensemble were observed and video recorded. With each ensemble, the first observation was a pilot video observation (one with the CAO and the other with the NBB), and another two formal observations followed it. The second phase includes four focus group interviews: two groups of interviewees per ensemble were interviewed while the camera was in place. Each focus group was anticipated to have no more than four interviewees. As video recording was largely involved in both phases, a Panasonic HC-V785 and a camera tripod were selected for this purpose.

After gaining consent from both ensembles, the first phase of data collection was anticipated to begin. This phase was planned to start with the pilot video observations, which were likely to run for two hours as the regular rehearsal of both ensembles is about two hours. Before the rehearsals started, the camera was anticipated to be placed at a spot where observation participants could be seen. Special care would be taken to avoid capturing the images of the children and those who do not want to participate in this project.

During the pilot video observations, the researcher anticipated sitting close to the camera to monitor the camera. Rough notes might have been made, including but not limited to the ensemble setting, reflections on the research methods and recording tools, ethical dilemmas, points of clarification and any conflicts and problems. After the two pilot video observations were completed, the video recordings were anticipated to be watched many times to look for things that could be further adjusted in conducting formal observations. As the purpose of pilot observations is solely to test the research design, any information obtained from this process (e.g. the video recordings of pilot observations) was not considered formal data. Therefore the pilot observations were neither transcribed for analysis nor shown to the participants.

The formal video observations would be conducted after the research tools were assessed and may have been adjusted. As mentioned earlier, the researcher anticipated formally observing and recording each ensemble's rehearsals twice, so four video recordings should be made as the first set of data. Similar steps would be followed in preparing formal video observations, including the camera set-up and making ensemble members aware of the observation process. During the formal observations, the researcher expected to pay attention to how the musical pieces were played and dealt with, through what strategies a music matter seemed to be solved, how players responded to the conductor's various instructions and how they interacted with each other.

Once the four formal observations were completed, the observational data (i.e. video recordings) were anticipated to be fully transcribed but not completely analysed. Based on the information revealed in the transcripts, ensemble players who were notable for their use and possible learning of musical skills were anticipated to be the potential focus group interviewees. After consent was obtained from these selected ensemble individuals that they were willing to be the interview participants, they would be divided into two groups per ensemble and notified of the grouping arrangement.

Based on this arrangement, the interview questions were anticipated to be compiled accordingly because the manifestation and acquisition of musical skills in the observed rehearsals were likely to vary between one player and another. As a result, four lists of interview questions were developed for the four focus group interviews. Subsequently, the video recordings of the formally observed rehearsals were anticipated to be edited

accordingly based on the interview questions. The typical moments of these interviewees using or learning certain musical skills would be extracted from the video recordings and made into several short video clips, which were the VSR materials. These clips would be subsequently presented in focus group interviews to help interviewees recall what happened in those rehearsing moments and provoke discussions, as described in Chapter 3.3. The data gathered from focus group interviews–video recordings of the interviews–constituted the second set of data, which were also anticipated to be thoroughly transcribed and analysed.

3.6 Analytical and Processing Approaches to the Data

Data analysis is an inevitably interpretive process in a qualitative study. It tends to be a "reflexive, reactive interaction between the researcher and the decontextualised data that are already interpretations of a social encounter" instead of "a completely accurate representation" (Cohen et al., 2007, p. 469). As described in Chapter 3.5, data gathered in this research were anticipated to be two sets of video recordings and their transcripts. The first set of recordings was generated from the four formal video observations of the ensemble rehearsals, and the second set was interview recordings from the four focus groups.

As in this research, the first set of data was also designed to be the vital reference for recruiting focus group interviewees and the basis of VSR materials, these data would be transcribed in full, briefly analysed and processed before collecting the second set of data. This process was expected to start with viewing the four video recordings of the observed rehearsals multiple times until every audible word in the recordings and all relevant non-verbal information were transcribed. Then, these four transcripts would be read through, during which the observed playing behaviours and players' reactions towards the conductor's instructions would be highlighted as the reference for identifying potential interviewees; this highlighting process would be completed on "Microsoft Word". Finally, based on the recruitment of interviewees, the four video recordings of the rehearsals would be edited via "Final Cut Pro" in order to produce VSR material. With this UC-supported video-editing software, the potential skill-learning moments would be extracted from the original recordings and made into many short video clips.

Once the second set of data–four video recordings of the focus group interviews–were obtained and transcribed word for word, the final analysis was planned to begin. This

analytical process in qualitative studies is called “coding”, through which “data are fractured, conceptualized and integrated to form theory” (Strauss & Corbin, 1998, p. 3). Miles et al. (2014) also believed coding to be a process in which deep reflection, analysis and interpretation of the data’s meanings are made, and the end product of this coding process consequently is a list of “codes” (p. 72). According to Fraenkel et al. (2015), codes generally are “tags or labels for assigning meaning to chunks of data” (p. 434). For instance, when coding a sentence or paragraph in an interview transcript, the major idea brought out by the sentence or paragraph that is related to “a particular research question, hypothesis, construct, or theme” may be captured and succinctly labelled as a code (Miles et al., 2014, p. 72). As coding continues, other chunks of transcripts may receive the same code or be assigned to a different code.

In the present study, data coding and analysing was anticipated to be carried out with the assistance of specialist software: “NVivo”. On its official website (https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home/), NVivo is defined as an analytic platform that helps qualitative researchers “organise and analyse non-numerical or unstructured data”, thereby uncovering rich insights in the data and producing clearly articulated, defensible findings backed by rigorous evidence. Generally, the coding process starts with importing the transcripts or any source of data into NVivo, and then the researcher will carefully read the text (if it is a transcript or written document) and reflect on its core content or meaning to determine the codes. The identified codes can be created in the coding section within NVivo, and the relevant text in the transcript can be dragged into the codes accordingly to link the codes and the data. By repeating this reading-identifying-creating-categorising process, a list of codes (and maybe subcodes) is compiled, and the last step is to refine them iteratively through further categorisation or thematic analysis (Fraenkel et al., 2015, p. 434).

For the first set of data (video recordings and transcripts of the four formally observed rehearsals) in this research, the researcher intended to inductively examine the transcripts and the video recordings together in close detail to identify codes. These codes were prepared to include the conductor’s actions that provided potential opportunities for players to gain certain musical skills, and players’ actions that were associated with the potential use or acquisition of musical skills. These action-based codes would subsequently be categorised as a number of themes which were likely to be named as specific musical skills and strategies.

A similar coding process was expected to occur for the second data set (video recordings and transcripts of the four focus group interviews). However, before the analysis begins, the transcripts of the focus groups would be sent to all interviewees based on the groups to which they belong to check the accuracy of the transcription, thereby enhancing the credibility of the interview data (see Chapter 3.7.1 for further details about improving the credibility of the study). After the transcripts were assessed and ready to be coded, IPA would be applied in this coding process. While determining codes, the researcher would commit to "exploring, describing, interpreting and situating the means by which the participants make sense of their experiences" (Smith et al., 2009, p. 40). As a result, a list of codes (or emergent themes) that represent the researcher's interpretation of the interviewees' views on different aspects of ensemble rehearsals would be drawn. Next, these codes would be further classified as some overarching themes, based on which the analytical findings would be reported (Southcott & Nethsinghe, 2019, p. 46).

As a piece of qualitative research, data are generally interpreted and reported in the form of descriptions. For example, what the researcher has observed or otherwise discovered; statistics, such as percentages, may be calculated and presented if they can "illuminate specific details about the phenomenon under investigation" (Fraenkel et al., 2015, p. 429). Due to the application of IPA in this research, the interview data were likely to be presented in a narrative structure, with verbatim quotations frequently used to give voice to the participants (Southcott & Nethsinghe, 2019, p. 46). As Southcott and her colleagues (2019) indicated, integrating verbatim quotations in the research helps generate a more coherent and credible analysis and helps the reader understand the emic and etic perspectives of the phenomena (p. 54). In other words, the "emic perspective" (insider's perspective of reality) and the "etic perspective" (external objective perspective on reality) may be brought together to reveal a more multidimensional picture of the phenomena (Fraenkel et al., 2015, p. 508).

3.7 Credibility and Transferability of the Study

Credibility and transferability are the two crucial concepts often discussed in qualitative research (Fraenkel et al., 2015; Leedy et al., 2019; Lincoln & Guba, 1985), referring respectively to whether the results of a study are plausible and believable from participants' perspectives and if the findings can be applied to other settings (Shenton, 2004). Although

these definitions are similar in some ways to the notions of "validity and reliability" and generalisability, most qualitative researchers prefer the former to the latter. For example, validity and reliability are viewed as "inappropriate concepts for evaluating the rigor of qualitative research studies" (Leedy et al., 2019, p. 239).

The reasons for such argument are that the purpose of most qualitative studies is to seek an in-depth understanding of a specific phenomenon in its natural setting, and the conclusions being drawn in qualitative studies are often considered ideas to be shared, discussed and investigated further (Fraenkel et al., 2015, p. 435). In this sense, discussing validity appears to go against the nature of the research. Moreover, as a qualitative case study, the contexts of cases are different in nature (Creswell & Poth, 2018, p. 99), so it is very difficult to demand the findings of a case study to be generalisable and reproducible in a different case (Slette, 2014, p. 83). Despite the nature of qualitative case study, this section nevertheless proposes various techniques that may be used to enhance the credibility and transferability of this study.

3.7.1 Strategies to Enhance the Credibility of the Study

As a fundamental concern in qualitative studies, researchers need to ensure that "their research is trustworthy, that data are collected ethically and accurately, and that findings are credible, plausible, and well-substantiated" (Shenton, 2004). For this, many experienced qualitative researchers (Fraenkel et al., 2015; Leedy et al., 2019; Lincoln & Guba, 1985) have proposed similar methods and strategies, such as reflexivity, analysis of contradictory data, member checking and thick description. These techniques, in effect, have been employed in the present study.

Stake (2008) stated that most case studies are empirical studies of human activity, and thus data collected in case studies are often subjective, such as observers' judgments and interviewees' testimony (p. 134). To make empirical data more objective and less subjective, qualitative researchers need to actively involve themselves in the process of identifying "personal, social, political, or philosophical biases that are likely to affect their ability to collect and interpret data" and "take whatever steps they can do to reduce such influences". Such a "self-reflection" process is known as "reflexivity" (Leedy et al., 2019, p. 240).

In fact, "[a]ll researchers have certain biases" (Fraenkel et al., 2015, p. 456). For example, "observer bias" is something that all researchers must deal with if observations are conducted (p. 446). As Fraenkel et al. asserted that no one can be completely objective in that we are all somewhat influenced by our past experiences. These experiences affect "how we see the world and the people within it", and in an observation context, it is reflected in certain prejudices that we possess about what is being observed (p. 446). In the current study, the potential observer bias was more likely to occur in the observations of CAO rehearsals, and this is because the researcher is a member of the CAO and has been rehearsing with other CAO players for years. This experience, to some degree, might have led to preconceived notions and attitudes towards the observed CAO rehearsals.

To minimise this observer bias as much as possible, the researcher intended to focus on what has been seen in the rehearsals and the matter itself and avoid making judgement during observations. It is also in this regard that video recordings have become so valuable. By watching the video footage over and over again in the analysis stage, the researcher would be able to check the observations against any subjective factors. Besides, conducting focus group interviews after video observations using VSR materials would also make the study more trustworthy, because this allowed the selected players to view their rehearsal moments and express their opinions on the matters shown in the rehearsal video footage (Slette, 2014, p. 83).

It is noteworthy that the observational data and interview data gathered in this research were primarily intended to address different research questions, although they may complement each other in some ways, as discussed in Chapter 3.3. Hence, this was not triangulation, a technique commonly used in qualitative research by comparing data gathered through different methods to enhance the trustworthiness of the research (Fraenkel et al., 2015, p. 515; Leedy et al., 2019, p. 240). This research has no intention to seek for consistencies or inconsistencies among the observational data and interview data but to present different perspectives, such as potentially what skills can be learned in a particular rehearsal setting and the insiders' thoughts about those potentialities. If, however, discrepant voices have appeared during interviews (i.e. players' conceptualisations of the observational data differ entirely from the researcher's interpretations or hypotheses), such contradictory data would be analysed and reported honestly with detailed descriptions. This strategy is what Leedy et al. called the "analysis of contradictory data" (p. 240).

Another two strategies employed in this research were anticipated to be "member checking" and "thick description". Member checking refers to asking participants to review interview transcripts to double-check their accuracy, so that the confirmability of the interview data can be improved (Leedy et al., 2019, p. 241). Thick description, as its name indicates, refers to describing a situation in sufficient detail, with which readers can almost "draw their own conclusions from the data presented" (Leedy et al., 2019, p. 94). This strategy was planned to be applied in reporting analytical findings and describing the actual data collection process, such as "the context in which questions are asked and situations are observed" (Fraenkel et al., 2015, p. 457).

Last but not least, "observer effect" is a potential issue that might also impact the outcomes of a qualitative study (Fraenkel et al., 2015). In observational research, unless the researcher's identity and research intention are concealed, which is suspect on ethical grounds, there is always a problem that "the presense of an observer" can have certain effects on "the behaviours of those individuals being observed" (p. 446). In this study, the presence of the researcher and the camera might somewhat arouse ensemble players' curiosity and self-consciousness, resulting in their lack of attention to the rehearsals (e.g. the conductor and the rehearsed musical pieces) and producing other-than-normal behaviours.

A solution to reduce such an observer's influence in a classroom context, for example, is to inform the teacher in advance and ask to be introduced to the students, and then spend a couple of days in the classroom before the recorded observations begin. By making the students "become accustomed" to the researcher's presence, they are more likely to "go about their usual activities" (Fraenkel et al., 2015, p. 446). As the ensemble rehearsing process is analogous to classroom teaching (Price & Byo, 2002; Reimer, 2000), this approach was expected to be modified and adopted in the present study. After being introduced to the NBB conductor and the players, some informal visits would be randomly paid to the rehearsals with casual observations (without recording gear) before data collection. These visits may help the NBB members get used to the researcher's unexpected presence during rehearsals. The CAO members were likely to be used to the researcher's presence as one of the players, although they might not have been accustomed to having the researcher in the rehearsals as an observer. However, the pilot observation was anticipated to give them an opportunity to adapt to the researchers' role change.

3.7.2 Strategies to Enhance the Transferability of the Study

Transferability is the parallel criterion to generalisability or external validity (Guba & Lincoln, 1989, p. 241). However, for transferability, it is the interested practitioners who "judge the applicability of the researcher's findings and conclusions" and "determine whether the researcher's findings fit his or her situation" rather than the researcher (Fraenkel et al., 2015, p. 435). In other words, the researcher "provides sufficient information about the self (the researcher as instrument) and the research context, processes, participants, and researcher-participant relationships", letting the readers decide what may be transferred and how (Morrow, 2005, p. 252).

For qualitative case studies, certain modifications in different circumstances and under different conditions are almost always necessary (Fraenkel et al., 2015, pp. 435-436) since the contexts of cases differ in essence (Creswell & Poth, 2018, p. 99). Such differences are especially pronounced for research on human behaviour, as the human race is "incredibly diverse in terms of culture, childrearing practices, educational opportunities, personality characteristics and so on" (Leedy et al., 2019, p. 95). For this reason, even if one studies the same phenomena in a community brass band with a similar number of players, the findings could still be different because every ensemble member is likely to differ in several ways, and the group dynamics may vary accordingly. As explained by Stake (2006), "the power of case study is its attention to the local situation, not in how it represents other cases in general" (p. 8). Therefore, the present study has no intention to make broad generalisations, and this is determined by the nature of the research.

Although the goal is not to make claims about a broad population, such as how amateur musicians generally learn musical skills through participating in community ensembles, this research recruited representative samples to study the phenomenon. This is because, for a qualitative study, utilising representative samples is one of the recommended ways to enhance the transferability of the study (Leedy et al., 2019, p. 95). Creswell and Poth (2018) also claimed that representative cases should be recruited for the best generalisations of findings in a qualitative collective case study (p. 99).

From this point of view, this research may have provided a theoretical framework for future studies; the methods utilised in this research, for instance, may be transferred to study other aspects of the accordion or brass community ensembles. Finally, as this research was conducted in community music ensembles in their naturalistic, real-world rehearsal setting, it was expected that the results yielded in this kind of setting may well "have broader applicability" to other real-world contexts (Leedy et al., 2019, p. 95).

3.8 Ethical Consideration and Risk Management

Fraenkel et al. (2015) referred to the term "ethics" as "questions of right and wrong". In academic research, investigators must look closely at whether they are doing ethical research; for example, whether "it is 'right' to conduct a study or carry out certain procedures" (p. 61). Such consideration is particularly vital in certain disciplines when the subjects of the inquiry are "human beings or other creatures with the potential to think, feel, and experience physical or psychological distress" (Leedy et al., 2019, p. 111). As this study focuses on human participants and their experience, behaviours, opinions and feelings, ethical issues have been considered carefully.

A detailed application was submitted during the planning stage to the UC "Educational Research Human Ethics Committee" (ERHEC) for ethical approval. This application considered much potential psychological harm to the participants, and solutions were provided. A series of information sheets and consent forms (Appendix A-G) for informing the participants about the research were also attached for the ERHEC's assessment. In the informed letters, the nature of the research, one's participation, and the potential risks and how they will be minimised were clearly explained. As a result, approval from ERHEC (shown in Appendix H) to conduct this research in the selected ensembles was obtained. The informed letters were also allowed to be used and thus subsequently distributed to the participants.

In those letters, rather than musical skill acquisition in community ensemble rehearsals, "aural skill acquisition" was the term used throughout. This was because the ethics application was completed at a very early stage of the research, during which the research focus was intended to be aural skills rather than musical skills. After obtaining consent from the participants, as the research evolved, "musical skills" was thought to be a more

appropriate term for describing the knowledge and skills used and developed in community music ensembles.

As described in the ethics application, the potential ethical issues in this research fell into two categories: protection from psychological harm and the right to privacy. The psychological harm might have included alterations in relationships among ensemble players, including embarrassment or loss of respect for others, fear of being judged, and loss of confidence and interest in playing with an ensemble. The major concern for the right to privacy was leakage of identity, such as being recognised by readers.

To reduce these potential risks, both ensemble managers, all ensemble members and parents/caregivers of those below 18 years old were informed (through the information sheets) that participation in this research is voluntary. That means every ensemble individual aged fourteen years and above has a right to decide whether they want to be recruited for this research. By doing so, members may have felt less pressured and obliged to take part in this research just because the formalised permission to conduct this project had already been obtained from the ensemble manager. In other words, if one did not want to participate in this research, a breakdown in relationships with the ensemble manager and other ensemble players should not be a worry.

Concerning the rights of children and those who decided not to be involved in this research to attend the rehearsals, it was suggested (in the information sheets) that they could still attend the observed rehearsals. They would be placed outside the camera's visual zone to protect their image from being exposed, where they can still see the conductor and hear the instructions. However, their instruments' sounds and conversations with other ensemble members may have been unavoidably captured by the camera, although such information would be excluded from the data analysis.

As there is a possibility that some players might have felt unwelcome if they failed to be selected as the interviewees, the information sheets explained clearly that the recruitment criteria for focus group interviewees are based on the research needs and not on one's musical talent and competence. Due to the fact that only eight ensemble players would be recruited for the focus groups, those not invited may have worried about the use of rehearsal video clips in the group interviews. They may have feared being judged by the researcher or

other ensemble players because their performance in the observed rehearsals was not good enough. This fear might have resulted in a loss of confidence in continuing to play the instrument or their interest in playing in an ensemble setting because the video clips might have impacted how the ensemble player sees themselves amongst other ensemble players.

The information sheets designed for this study were believed to have allayed the non-interviewees' concerns about using rehearsal video clips; assurances about protecting the non-interviewees' privacy and confidentiality were also given. These sheets stated that the rehearsal video clips (VSR materials) would only show the focus group interviewees; non-interviewees' images would be blurred visually, and their voices would be silenced where possible. This is because, for the non-interviewees' instrument sounds, some could be muffled if they were performing a solo line, but it would be difficult to mute their sounds while other players were playing the same tune at the same time. Nevertheless, in those cases, there would be little possibility of identifying the non-interviewees' lines from the group sounds, especially when their images have already been visually blurred.

Besides, all participants in this research were informed that the content of focus group interviews is confidential, and all focus group interviewees must comply with the non-disclosure rules. These rules included that the interviewees may talk about their personal ensemble experience, but they would be discouraged from discussing any non-interviewees during the interview. Besides, interviewees should not discuss the content of the interviews with other interviewees or anyone else after the interviews. If interviewees were found to violate the rules, they would be given a warning for the first time, and for the second time, their participation in the focus group interviews would be terminated and their interview data removed.

In general, access to the video recordings of observed rehearsals and focus group interviews would be strictly controlled: nobody else can access those videos apart from the supervisory team and the researcher herself. Participants were also assured that no judgement would be made on their performance in the observed rehearsals and focus group interviews, such as whether they played a piece of music well or if their views on certain things were correct. Throughout the data collection process, the participants were expected to be treated "in a courteous and respectful manner", and finally, all the data would be reported in a complete and honest fashion without revealing participants' real identities (Leedy et al., 2019, pp. 111-115). Pseudonyms were planned to be used on all written documents, from data collection to thesis publication.

In addition to protecting participants from psychological harm and protecting their confidentiality, special care was also taken during the research design to make sure the research was conducted ethically. Despite the disadvantage of nonparticipant observations where the researcher is an observer-as-participant, this approach was employed due to ethical concerns, as suggested in Chapter 3.3. Throughout the data collection, the researcher's identity and research interest were clearly introduced, and there were no deceiving or misleading behaviours in the interactions with ensemble members (Fraenkel et al., 2015, p. 436). Besides, all the recordings were made while the participants were aware, and there were not any "hidden recording device or other mechanical apparatus" used at all times (p. 436).

By participating in this research, ensemble members' understanding of their rehearsals might be enriched. The conductor might be able to reconsider the issues and difficulties that players experienced during rehearsals and reassess whether the strategy employed at that time was helpful, thereby achieving more effective rehearsals in the future. Players might realise how much they have gained from their ensemble participation, reflected in the musical skills "automatically" applied while making music with the ensemble. They may also gain a more comprehensive understanding of the conductor in terms of his role and what they could expect from his gestural instructions, for example.

For the interview participants, in particular, the focus groups presented them with an opportunity to review their performance in the recorded rehearsals, explore different aspects of their ensemble experience with the researcher, and reflect on those experiences.

Through a process of identifying potential music and skill learning moments in the recorded rehearsals, discussing strategies used for improving specific musical skills and understanding of music, and reconsidering the meaning of being part of a music ensemble and what this musical experience brought them over the years, these players' future ensemble engagement most likely never be the same again. Such a self-reflective process may also accompany their participation in other music activities.

4 FIELDWORK–GATHERING AND ANALYSING DATA

Based on the methodological framework and the proposed procedure outlined in Chapter 3, this chapter describes the actual fieldwork–how the data were collected, processed, and analysed in practice. The fieldwork was organised in three stages: pilot video observations, formal video observations and focus group interviews. Between the pilot and the formal observation stage, there was a long break, during which time the recording gear was upgraded, and some personnel changes were made within the ensembles. There have also been some complicated procedures between the formal video observations and the focus group interviews, including transcribing observational data and preparing interview questions and VSR materials for the focus groups. After the interviews were completed, there was the process of participants checking interview transcripts before the final analysis began.

4.1 Pilot Video Observations as A Trial

Considering the researcher was a stranger to most NBB members, the NBB manager introduced the researcher to its members long before the pilot video observations took place. Since then, casual and short-duration observations of the NBB rehearsals (no recording component) were made during several informal visits to the site, such as when delivering information sheets and consent forms to the NBB members and collecting the signed forms. This, as discussed in Chapter 3.7.1, was to minimise the "observer effect" and enhance the study's credibility. By the time the pilot observation was about to be conducted, the NBB members have seemingly become more used to the researcher's presence in their rehearsals.

After obtaining the signed consent forms from both ensemble managers, other versions of the information sheets and consent forms (Appendix B-E) mentioned in Chapter 3.4 were distributed to the ensemble members in person accordingly. The information sheet and consent form for parents/caregivers were handed to the NBB's teenage and child players, who were asked to pass the letter on to their parents. When delivering these letters, a self-introduction was given, and the basic idea and procedures of the research and participants' involvement were briefly explained. All ensemble members were advised to read the information sheets thoroughly and told that participating in the observed rehearsals is voluntary. As a result of this recruitment, the CAO conductor and all CAO players except for one agreed to participate in the three video observations, while all NBB members gave their consent to the proposed pilot and two formal observations.

Due to the more significant number of players in the NBB and guardians' involvement in this informed consent process, collecting signed consent forms took longer than that in the CAO. Thus, the first pilot video observation was conducted in the CAO on the 1st of Sep 2019, on which 11 observation participants (ten players and the conductor) turned up because two were in poor health. Before the rehearsal began, the player who did not want to be involved in this research were seated outside the camera zone, and a camera tripod stand was placed behind the conductor's podium, holding a Panasonic HC-V785 camera. This way, only the conductor and observation participants could be seen in the camera. A brief announcement was then made to inform every ensemble individual that the trial video observation was about to begin. Throughout the rehearsal, the researcher sat close to the camera while making notes on a laptop. These notes contained information primarily on a) the ensemble setting, b) existing problems with recording tools, c) ethical dilemmas, and d) musical skills that may be involved and addressed, which were the basis of the following description and reflections on the pilot observation of the CAO.

The CAO's rehearsal venue was in a local Methodist church, and the room was spacious enough to accommodate a small-sized orchestra like the CAO. The rehearsal atmosphere was casual, and the players seemed to be able to ask questions at any time. The rehearsal process was led by the conductor, who decided which musical pieces were rehearsed next, how much time was allocated to rehearsing each piece and who got to play which part. In terms of the research tools, it was realised that one camera was barely enough to film the players, but not the conductor's gestures and expressions. Besides, sometimes the conductor's verbal instructions and some conversations between players could not be clearly heard either on site or from the recorded video. These problems suggested that more cameras or specialised audio recording equipment and microphones would be required in the formal observations for the better quality of observational data.

Although there were no critical ethical issues in this pilot observation, it was noticed that some players appeared to be more serious and cautious than usual, which was probably due to the presence of the camera on site. After the rehearsal, a few people approached the researcher and asked if they did well during the recording. In response, these players were advised to behave as they would in a regular rehearsal because this research was designed to understand their ensemble experience in a natural setting. Furthermore, this pilot experience

offered the researcher a generalised idea of what musical skills may be involved (either used or addressed) in the CAO rehearsals. These skills included sight reading, musicianship, improvisation, playing various rhythmic patterns, and managing dynamic changes and articulations.

The NBB pilot observation was conducted on 12th Sep 2019. Considering it is such a big group with more than 30 players (including children), an attendance sheet and name tags were used to help the researcher match names to faces. On the day, however, only 20 observation participants (19 players and the conductor) and another five child players (excluded from this research) appeared at the rehearsal. All these people were asked to sign the attendance sheet on arrival and wear a name tag on their chest. As with the preparation for the CAO pilot observation, before the NBB rehearsal began, the camera Panasonic HC-V785 was placed to the left of the conductor's podium, followed by the researcher's announcement that the pilot video observation would start.

The only thing in this preparation that did not turn out as planned was the special seating arrangement for child players. In fact, on the day, the five children were seated in their original spots throughout the pilot observation. This was because that was the band's last rehearsal before a national brass band contest, so it was essential for the conductor to see everyone in their original place and hear the overall sound. As an alternative, the conductor suggested placing the camera to the left of the conductor's podium. This way, at least four children could stay outside the camera zone, and for the other child seated right in the middle of the band, the researcher agreed to blur her image in the post-editing. Due to this camera placement, the images of five adult players were not captured because they were seated out of the camera range. Fortunately, this was only a trial observation. The captured image of the child player and the missing faces in the video recording would not be a problem as the information obtained from this rehearsal was never intended to be the data.

As planned, the researcher was seated next to the camera during the rehearsal to monitor the recording while taking notes on a laptop. It was observed that the rehearsal venue was not very spacious for a big group like the NBB; however, the manager said that they would soon be shifting to a much bigger classroom in the same school. Due to the large number of members of the NBB, three cameras would be ideal if the future venue has enough room. In that case, two could be used to film the players, one on the left and one on the right corner,

and the third camera could be placed at the back of the band, facing the conductor. For the same reason stated earlier in the description of the CAO pilot observation, it became clear that a microphone for the conductor would be helpful because it was very difficult to hear the conductor's instructions while the band was playing.

Besides the practical issues mentioned above, there were no unexpected ethical issues observed in the NBB trial observation. Most players appeared to focus on their tasks and ignored the presence of the camera and the researcher. As the manager said, their players are used to being filmed due to various performance opportunities (e.g. concerts and competitions). Throughout the rehearsal, the atmosphere was found to be engaging, and the conductor was in charge the whole time. The musical skills manifested in this rehearsal appeared to centre on the overall sound and the details in the score, primarily involving managing balance between various parts, listening to each other while playing, intonation and tempo accuracy, articulations, phrasing and musicianship. Sight reading skills were not observed in this rehearsal, probably because of the coming national contest; the band had no time to run through new music. This seemed to suggest that musical skills manifested in a rehearsal are, to some extent, dependent on the rehearsal purpose.

The pilot observations of the CAO and the NBB's rehearsal also appeared to expose a limitation of the observational data. During the pilot study, it was realised that the acquisition or enhancement of musical skills could not be precisely measured using observational data. Differences in the sounds may have been heard by comparing what was played initially and what it was like after the conductor made improving suggestions. However, to what extent did those improvements result from strengthened musical skills (e.g. being more focused on listening to other players while playing) or the repetition of rehearsing the exact phrase several times? The dissimilarities between these two are that the latter may allow a player to play a triplet well in this week's rehearsal, but it may still be challenging next week. Hence, the data gathered through formal observations may be more appropriately seen as indicating opportunities for developing certain musical skills rather than the exact acquisitions of the skills in community ensemble rehearsals.

4.2 Formal Video Observations

Formal observations were conducted almost ten months after the pilot observations, partially because of the lockdown due to the Covid-19 outbreak in New Zealand. Based on the technical issues discovered in pilot observations, more recording gear and audio equipment were used in the formal video observations, including three cameras, a specialised audio recording device and a lapel microphone (for the conductor). Although it had been noticed that the conversations between players were sometimes unable to be heard in the trial observations, the idea of having every ensemble player wear a miniature microphone throughout the rehearsals was dropped. In that case, players would feel intimidated even to have a small chat with each other, which is against the aim of gaining a more comprehensive picture of the learning that occurred in community ensemble rehearsal in its natural setting.

There were also some personnel changes within both ensembles, particularly with the NBB. Since the pilot observations, some old members had left, and new players had joined. There were some instrument changes among players (e.g. a cornet player switching to a tuba player) and a role exchange between the conductor and a player. Thus, in the formally observed NBB rehearsals, the conductor was a different person from the one in the pilot observation. The NBB's rehearsal venue had also changed to a more spacious classroom in the same school.

The personnel changes in the CAO were reflected in that one of the old members had resigned, and a young accordion player had joined. Despite these changes, the total number of players remained the same as when the pilot observation was conducted. The consent had been gained from all new members before formal observations took place. It was also worth noting that at this stage of the year, when the formal video observations were going to take place, the CAO had to prepare a concert within three weeks, and the NBB also had a concert coming in eight weeks. This "concert-approaching" context might impact the manifestation of musical skills in the four formally observed rehearsals, as discovered in the pilot study (see Chapter 4.1).

4.2.1 Two Formal Video Observations in the CAO

The CAO's formal observations were conducted in two consecutive rehearsals on the 12th and 19th of July 2020. There were 12 participants (11 players and the conductor) observed in both rehearsals. The recording devices were placed in a triangular manner on site. One

camera (Sony HDR-CX405) was set up behind the ensemble to capture the conductor's body movements and facial expressions, and another two cameras (Panasonic HC-V785 and Canon XA20) were placed to the sides of the venue to capture a view of both the ensemble and the conductor from different angles. The conductor was asked to wear the lap microphone (which was connected to the Canon XA20), and the audio equipment (Zoom H4n portable audio recorder) was held by a tripod stand and placed directly behind the conductor to record the overall sound produced by the orchestra (see Figure 4.1).

For both observations, after the recording equipment had been properly set up, ensemble members were informed that the formal observation was ready to start. The CAO non-participant was encouraged to sit outside the camera zone; however, they decided to stay in the original spot inside the camera zone. This player's image was blurred in all VSR clips, and all information related to them was excluded from the data analysis. At the beginning of the first observed rehearsal, members were informed about the equipment on site and advised to relax and enjoy their rehearsals as usual. This was to relieve the players' tension observed in the CAO pilot observation.

During the observed rehearsals, the researcher concentrated closely on the players, the conductor and their interactions. The players seemed to apply a range of musical skills, although some came easier for some players than others. For example, some players appeared to be more able to watch the conductor from time to time than those appearing to stare at the score throughout playing; some players might have been more fluent in utilising specific accordion techniques, while others appeared to be better at listening to other parts and making suggestions for improvement.

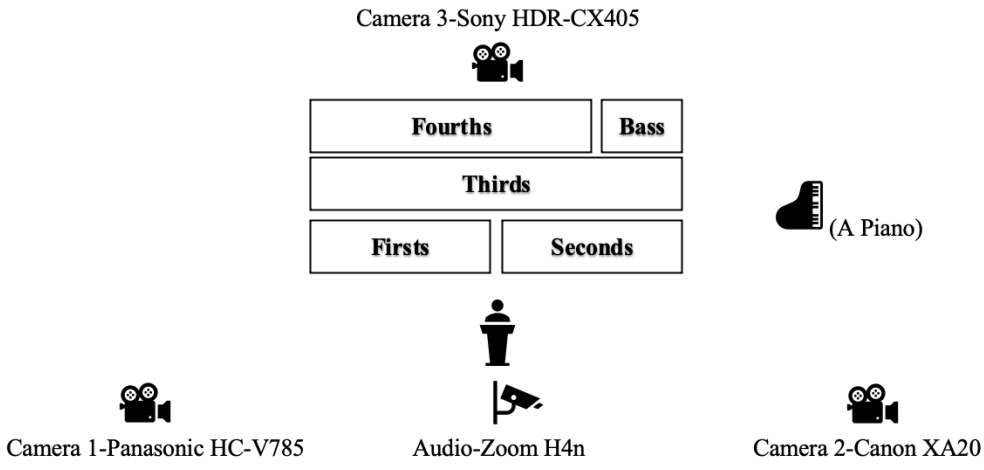
Learning opportunities also appeared to arise from the conductor's communication with players, although some types of communication appeared to be more efficient than others. For instance, the conductor's non-verbal instructions (e.g. hand gestures) were observed to provide players with opportunities to learn to manage dynamic levels; however, this type of instruction appeared to be less effective than the conductor's verbal instructions on dynamics. The effectiveness of these two types of instructions was judged based on whether the dynamics were changed after receiving instruction.

It was also noticed that most players did not have fixed roles or titles in the CAO except for the bass accordion player. This was because the bass accordion is essentially different from normal accordions, which is designed to play the bass part of the music. While the bass accordion took on the accompaniment role for the orchestra, other parts were only required to play with their right hands (on the keyboard). According to players' expertise and competence in accordion playing, the more trained were usually assigned to play the first or second part of the music, and the less technical parts were allocated to the less experienced players.

For the seating arrangement, the most skilled players were seated right in front of the conductor, and the slightly less advanced players were in the second row. The bass accordion and the least trained players were placed at the back. As a general rule, players at the front were often called "First accordions" (Firsts) and "Second accordions" (Seconds) because they were often given the first and the second part of the music. Those in the middle, who often received the third part, may be called "Thirds". "Fourths" usually refers to the players sitting at the back playing normal accordions. This seating arrangement and the positions of the recording devices are presented in Figure 4.1.

Figure 4.1

The CAO Layout



Nevertheless, the allocation of musical parts in the CAO was not always fixed, and sometimes it appeared to be arrangement dependent. For instance, "Firsts" had a chance to play the second part of a piece of music because that part was more technically challenging

for “Seconds” to play. When a musical piece was organised into six parts, “Thirds” and “Fourths” were further subdivided so that every part of the music could be played. For some pieces that involve a piano part and a vocal part, players with those abilities were asked to take on those new roles, and in turn, the conductor made sure that other players covered their accordion parts.

4.2.2 Two Formal Video Observations in the NBB

The NBB formal observations were also conducted in two consecutive rehearsals on the 23rd and 30th of July 2020, in which 18 participants (17 players and the conductor) and 17 participants were observed, respectively. For both observations, the placement of the recording equipment was triangular in shape, as with the CAO’s observations, as shown in Figure 4.2. All ensemble members (including non-participant child players) were asked to sign the attendance sheet as they arrived at the rehearsal venue, and children were placed out of the camera range before the researcher announced that the observation would begin. In the first observation, members were also informed about the on-site recording devices.

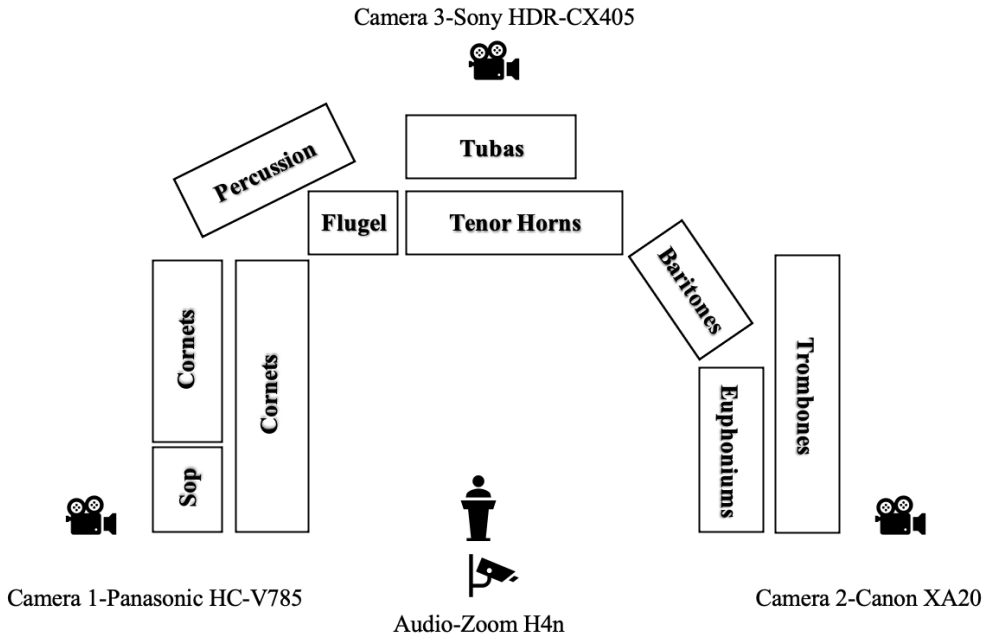
During the NBB observations, it was noticed that many musical skills manifested in the rehearsals were similar to those observed in the CAO, despite playing different instruments. It was also realised that the strategies employed for players’ skill development were mostly the same as those implemented in the CAO, although the frequency of usage may differ. This was probably due to the conductor’s different training focuses and conducting habits. For example, the NBB conductor focused heavily on inhaling before playing and between phrases, which was not very evident in the CAO observations. Besides, the NBB players generally appeared to watch the conductor more often during playing, maybe because much information was conveyed through the conductor’s hand gestures, and this conductor seldom used verbal instructions when the band was playing.

As the NBB positions itself as a British-style brass band, its ensemble structure follows the British tradition, which includes a soprano cornet (Shown as “Sop” in Figure 4.2), cornets, a flugel horn, tenor horns, baritone horns, trombones, euphoniums, tubas and a percussion section (Farr, 2013, p. 16). However, the number of players for each part was not exactly in full accordance with the standard when the formal observations were conducted. For the seating arrangement, players were positioned in semi-circular rows, and the conductor stood

at the centre of the room facing the flugel, tenor horns and tubas, with the cornets on his left-hand side and baritones, euphoniums, trombones on his right. The percussion section was situated at the far left back from the conductor's viewpoint. To give a closer representation of the set-up when the data collections were running in the NBB, Figure 4.2 was drawn to illustrate this ensemble layout (the seating arrangement and the positions of the recording devices).

Figure 4.2

The NBB Layout



4.3 Processing Observational Data and Preparing for Focus Groups

Due to the increase in recording equipment in the four formally observed rehearsals, a total of 12 video recordings and four audio recordings were gathered as observational data (three video recordings and one audio recording were made in each observation). These video recordings were watched many times until important details were transcribed in full.

The transcribing process is not complicated but demanding. Each video and audio recording of the observed rehearsal was played for the first few times, during which capturing every audible word and writing them down was the only goal. Subsequently, every video recording was played again, during which the conductor's hand gestures, body movements and facial expressions were the focus, and such information was added to the transcripts. Then again,

with the same principle, the video recordings were watched only to look at the interactions among players and for other details. As a result, four transcripts were made (one transcript per observation), and on each of them, the names of the repertoire, every audible word being said by the conductor and the players, and observed players' and the conductor's actions (e.g. singing, moving, whispering) were written down. The timings of these conversations and actions were also marked.

Next, the four transcripts from the four observations were briefly analysed to identify potential interviewees. With the use of "Microsoft Word", the researcher was able to highlight players' during-playing actions, their reactions to the conductor's instructions, their interactions with ensemble peers, and any other observed music-related behaviours on the electronic transcripts, which were seen as the evidence of players' use or potential learning of musical skills. Specifically, the highlighted information includes:

- nodding or swaying to the music, counting or tapping feet, and breathing between phrases while playing;
- watching the conductor, answering the conductor's questions, commenting on the overall sound, such as whether the intonation was inaccurate or if the tempo of a particular piece was not up to standard and making suggestions on how to improve those aspects;
- frowning when strange noise occurred, playing in sync with other parts, and helping other peers, such as picking a coupler/register, figuring out how to do the repeats, looking for music scores;
- sight reading, making notes on the score, humming/whistling and practising fingering during rehearsal gaps.

This highlighting process was followed by calculating the number of occurrences of these observed actions on each ensemble player. As a result, eight players from each ensemble with the highest frequency of occurrence were selected as potential focus group interviewees. These selected players were approached again on a rehearsal day and provided with the information sheet and consent form for participating in the focus groups. All these potential interviewees were given the adult form except one of the NBB players who received the teenager form. A short speech was also given on that day to first thank every ensemble member for their participation in the observed rehearsals and reiterate the research purpose

and the procedure for identifying interviewees. Next, the selected players were notified that their interview participation would be voluntary, and those unselected were reminded that the exclusion was unrelated to their musical abilities. Following the speech, there was also a quick discussion about potential interview dates and times.

The result of this interviewee recruitment was that two out of eight CAO players decided not to participate for their age and poor health; the other six CAO players and all eight NBB players agreed to be interviewed. The six CAO players were then split evenly into two groups and named CAO 1, CAO 2, and the eight NBB players were also divided into two groups, NBB 1 and NBB 2. In this case, each CAO focus group contained three CAO players but four NBB players for each NBB focus group. All fourteen interviewees were notified of this arrangement verbally. The next step followed this was designing interview questions.

Based on recommendations from Fraenkel et al. (2015) and Krueger and Casey (2009) on the interview structure and questioning route (see Chapter 3.3), every set of interview questions (for one focus group) consisted of four sections. The first section was intended to be a brief introduction, through which the researcher's name, the purpose and potential benefits of participating in the interview, the protocols regarding privacy and confidentiality of this participation and the recording equipment on site were introduced to the interviewees. The second section covered three questions: one opening, one introductory, and one transition question. By responding to these questions, every interviewee would be encouraged to speak and start to link their ensemble experience to the interview questions. The third section comprised a series of key questions (explained in the following paragraphs), and in the final section, a short oral summary of the interview would be made before asking the ending question (p. 40).

The key (interview) questions were open-ended and designed based on the phenomena observed in the four rehearsals. Some common questions were designed to understand players' conceptualisations of the conductor's behaviours during rehearsals, such as "how is it for you when the conductor uses metaphor in his instructions?" or "what are your thoughts about the conductor's buzzing strategy?". There were also some personalised questions for individual interviewees, allowing them to clarify their intentions behind specific actions. Those questions included "your facial expression changed when a strange noise occurred. Do

you have thoughts about what was going on at that moment?" and "what were you thinking about when you were practising fingering in the air?".

As a result of this brainstorming session, too many key questions were designed for each focus group. However, the interview with each group was proposed to be 60 minutes. This led us to estimate the length of time for each key question and select the most useful ones. Based on rough calculations, the time needed to ask one question (at a normal speaking speed) and watch a video clip was around one to two minutes. If every interviewee was given one minute to think and respond to a question, a total of three to four minutes should be set aside for the discussion of one question, as each CAO focus group has three interviewees and four for each NBB focus group. These suggested that the time required to complete one key question would be approximately five minutes; hence, the total number of key questions asked should be no more than 12 for a one-hour interview. Provided that the time spent in the first, second, and final sections was relatively short, the total interview duration would not exceed the time limit by much.

A tip for selecting questions recommended by Krueger and Casey (2009) is to look at all key questions being designed and decide whether a question is "need-to-know" or "nice-to-know". The difference between these two types of questions is that the former "arise out of a need for information" and the latter "arise from curiosity but are not crucial to the study". When making selections, Krueger and Casey recommended including "need-to-know" questions first (p. 53). With this tip, the priority of every key interview question was reconsidered and compared, and finally, a list of 12 "need-to-know" questions and one to two "nice-to-know" questions were prepared for each focus group. The reason for this arrangement was that if there was extra time at the end of the twelfth question, the "nice-to-know" questions could be answered, making the interview data more diversified and comprehensive. Note here that the key questions for each focus group were slightly different because, as anticipated, the types of musical skills being used during the formally observed rehearsals and the ways of learning musical skills were somewhat different among interviewees. This is normal for VSR interviewing.

After the four lists of interview questions were finalised, the video editing process began. The researcher imported all recordings made during formal observations (the 12 video recordings and four audio recordings) into Final Cut Pro and looked for "the most representative but

short in duration" moments that could be best used as VSR materials for each interview question. Due to the limited interview time, each clip's average length was constrained to roughly one minute. The four observation transcripts were also used in this process. Below, a real example was given to explain how a VSR clip was made.

As mentioned earlier, one of the key interview questions was, "what were you thinking about when you were practising fingering in the air?". This question was designed for a particular CAO interviewee. When preparing a VSR clip for this question, the researcher first searched for this interviewee's name in the two CAO observation transcripts, as this helped to quickly locate every moment when this interviewee practised fingering in the air in the video recordings. Then, all these moments were viewed in Final Cut Pro until the most suitable (e.g. illustrative, clear, short duration) shot was selected. This shot was then cut from the video recordings and made into a new video clip, which became one VSR clip. By repeating these same steps, many VSR clips were made to ensure that every key interview question was accompanied by VSR materials. As planned, in these VSR clips, all observation and interview non-participants' images were blurred, and their voices were inaudible.

During the period of video editing, other preparations for the focus groups were underway. The interview venues for both ensembles' focus groups were confirmed. For the interviewees' convenience, the venue for the two NBB focus groups was arranged to be a classroom right above the NBB's rehearsal venue, and both interviews were scheduled before a rehearsal. The CAO interviews were also scheduled on the rehearsal day, but interviewees were invited to the researcher's home for the interviews as the CAO's rehearsal venue was fully booked for other events. The interview gear was also prepared, including the recording equipment (i.e. the camera Canon XA20 and the Zoom H4n portable audio recorder) and an Apple iMac computer, through which interviewees could watch the VSR clips.

4.4 Focus Group Interviews

With all preparatory work completed, an email with the full interview schedule was sent to every interviewee. In these emails, gratitude was expressed for the interviewees' continued support and commitment to this research. Information including the specific time, location of the interview and the names of all participants in the same focus group were provided. The emails sent to the NBB interviewees also included a school map and directions to the

classroom (the interview venue). The interview questions were not provided to interviewees in advance in order to maintain the confidentiality of the questions and the credibility of the data.

4.4.1 Two Focus Group Interviews with CAO Players

The CAO focus group interviews were conducted on the 6th and 13th of December 2020. On the interview day, the researcher ensured that the dining room was laid out for the interview. The camera Canon XA20 was held by a tripod stand and placed beside the dining table, facing the direction where the interviewees were going to be seated. The iMac computer was placed on the table with all VSR clips on its desktop. The audio equipment Zoom H4n was placed directly in front of the iMac computer to capture the interviewee's voices at a closer range. A chair was placed on the other side of the table for the researcher. This layout is presented in Figure 4.3.

Figure 4.3

The Interview Layout for CAO Focus Groups

When the interviewees arrived, they were advised to use the washroom before the interview started and asked if they needed water or any drinks. Once they were seated around the dining table, an individualised list of interview questions and a pen were provided to every one of them in case they wanted to make any notes. On these "individualised" lists of interview questions, the majority of the questions were the same, with a few personalised questions differing from one another.

The interviews started with a short introduction. As planned, the participants were thanked for attending the interview, and the reasons for conducting it and how it might benefit the interviewees were explained briefly. The interviewees were reminded that their participation is anonymous, and no interview records will be kept with their names on. They were also made aware of the presence of the camera and the audio recording device on the table, which were anticipated to run throughout the interview. After ensuring that the interviewees had no objections or questions, the researcher announced that the interview would begin.

As anticipated, the opening, the introductory, and the transition questions successfully encouraged the interviewees to speak. After a self-introduction, interviewees were gradually led to reflect on the CAO rehearsals. Each key interview question was read out first, and then the related VSR clip(s) were played to the interviewees to help them recall their experience in the formally observed rehearsals. After watching the video clip(s), the interviewees were given enough time to recall and interpret the scenes in the video before answering the questions.

When it came to those common questions that every interviewee in the group all have, such as “how is it for you when the conductor uses metaphor in his instructions?”, frequent interactions among interviewees were observed. As expected, while one interviewee was expressing opinions, others would react to the statements by showing agreement and disagreement and sometimes interrupting each other. Through this interactive sense-making process, a diversity of conceptualisations of the conductor’s metaphorical language was developed, as interviewees may be inspired by the other people’s statements and yield further insights. This, in turn, enabled us to gain a more comprehensive understanding of the conductor’s metaphorical instructions.

At the end of each interview, the researcher quickly summarised the interview content and asked the interviewees if there was anything else that they would like to share about their CAO experience (the ending question). The majority of the interviewees either stressed certain points that had been made earlier in the interview or made a conclusive comment on the CAO experience. The interviews were then wrapped up by thanking the interviewees again for contributing to this research.

In the end, the interview with the first CAO focus group (CAO 1) was completed on time, but the second interview (CAO 2) took almost 90 minutes. All participants in CAO 2 were informed at the 60-minute mark that the interview should now be ended, and they were given two options to leave now or continue with the rest interview questions. All three interviewees decided to stay and proceed. It might be worth noting that the sequence of the key interview questions was slightly adjusted before the second interview for better continuity between questions.

4.4.2 Two Focus Group Interviews with NBB Players

The NBB focus group interviews were conducted on the 15th and 17th of December 2020. On the interview day, the researcher arrived at the school beforehand to set the interview equipment up for the scheduled focus group. The set-up (see Figure 4.4) was rather similar to the CAO's interview layout: the iMac computer and the Zoom H4n were placed on one of the round tables in the classroom, and the camera was placed behind the computer. There were, however, four chairs for the interviewees because each NBB focus group had four participants. When the interviewees began to arrive, all the equipment and materials were in the right place.

Figure 4.4

The Interview Layout for NBB Focus Groups

Before the interview began, the interviewees were also advised to use the washroom. Once they were all seated, the individualised lists of interview questions and pens were distributed to them. The interview procedure was exactly the same as the CAO interviews, starting with the researcher's introduction, the three initial questions, the key questions, and finishing with a brief summary and the ending question. At the end of each NBB interview, most interviewees reemphasised how much they enjoyed their ensemble experience with the NBB, and the interviews were closed by thanking the participants again for their contribution to this research.

As with the two interviews with CAO players, based on the experience with the first NBB focus group, the order of the key interview questions was slightly tweaked for the second NBB interview. Both NBB interviews went longer than anticipated, approximately 105 and 90 minutes, respectively. At the 60-minute mark of each interview, the participants were informed that the time was up and they may leave if they wished; alternatively, they were more than welcome to stay to answer the rest of the questions. All interviewees chose to continue the interview process.

4.5 Processing Interview Data

After four interviews were completed, the interview contents, including interviewees' verbal responses and non-verbal actions (e.g. giving an approving nod), were thoroughly transcribed. Before these four transcripts were emailed to the interviewees for verification, each was turned into several personalised interview transcripts in a typed and double-spaced form accompanied by a thank-you letter for granting the interview. The use of personalised interview transcripts was to protect interviewees' confidentiality. In these transcripts, every interviewee could see the interview questions, but only their responses to the questions were included. Out of the same concern, video footage of the focus groups was not provided along with the transcripts.

In the emails, interviewees were advised to read the transcript carefully to check the accuracy of the transcription. If it was correct, they were asked to sign a statement that "this is a correct record of the interview"; if it was inexact or incorrect in any place, they might wish to correct the script as desired. Their feedback was asked to be provided (by email or by meeting the researcher in person) within two weeks since the script was sent out. The

interviewees were also reminded that they have the right to follow up with the researcher individually if they wish to discuss the script in detail or raise particular concerns and questions about the study. In the last section of the email, the researcher also explained the reasons for employing the "personalised transcript" and showed an understanding of the difficulties that the interviewees might face in verifying the transcript, such as lacking context. For this reason, interviewees were given the option to meet the researcher in person to watch the interview recordings while verifying the transcript.

The majority of the interviewees completed the transcript verification without watching the interview recordings, and some made minor changes to the transcripts. The researcher also met with three interviewees individually as further clarifications were needed regarding their answers to the interview questions. Those meetings were scheduled at the interviewees' convenience, and they were thanked again for the courtesy of giving their time.

4.6 Analysing Observation and Interview Data

The data analysis started with coding observational data. The four observation transcripts were imported into NVivo. On this platform, the transcripts were scrutinised, in which the conductor and the players' actions related to musical skill uses and potential acquisition were marked, and the codes were created accordingly. As anticipated, these codes were action-based such as "the conductor singing desired sounds", "Luna expressly emphasising on the accented notes," and "Lowise making notes on her score when the conductor giving dynamic instructions". In this process, the researcher had to check back to the rehearsal video recordings from time to time to ensure that the descriptions of the actions were precise.

The next step was creating themes and categorising those codes thematically. For instance, the code "the conductor singing desired sounds" was classified as a theme named "the conductor's vocal directions (when not playing)", which was recognised as one of the strategies used in both ensembles. The code "Luna expressly emphasising on the accented notes" was categorised as a theme titled "articulation skills", which was seen as one of the musical skills used or developed in ensemble rehearsals. With the code "Lowise making notes on her score when the conductor giving dynamic instructions", it was put under three themes: "players' note taking", "the conductor's cognitive instructions (when not playing)", and "managing dynamics and balance". The first two themes were identified as strategies,

and the last theme was seen as a musical skill that can be potentially developed in ensemble rehearsals. In NVivo, those initially developed action-based codes are called “child codes”, and the themes are called “top-level codes”. The analytical findings generated from formal observations were reported based on the themes.

The process of coding interview data was similar except for IPA’s involvement. After the verified interview transcripts were imported into NVivo, a sustained engagement with the text began. The researcher read the transcripts multiple times, situating herself in the interviewees’ positions when exploring, describing and interpreting their answers. Through this process, a long list of codes (or emergent themes), which were based on the researcher’s interpretation of the interviewees’ responses, was generated for each ensemble. For example, one of the interviewees described the CAO rehearsals as a time when “you can bounce... if you had a bad day, you can have a giggle with the person next to you”. The researcher interpreted this text as the CAO experience meeting social needs. As a result, an emergent theme (or a code) was created and named “meet social needs”.

Subsequently, further categorisation and thematic analysis were conducted on these emergent themes until they were classified as overarching themes. Using the above example, “meet social needs” was put under an overarching theme entitled “the social experience of ensemble participation”, under which there were other codes such as “fun to jam with other instruments” and “conductor’s considerate communication”. Finally, the interview data were reported based on the overarching themes.

Through the long process of transcribing and analysing data, it was realised that there were some other limitations, particularly with observational data. In addition to the extent to which musical skills might have been gained or enhanced (see Chapter 4.1 for the reflections on the pilot observations), the findings from the observations seemed to indicate an ideal situation. While transcribing rehearsal video recordings, the researcher devoted attention to one aspect at a time until all the conductor’s signals were captured, for instance. In an actual rehearsal situation, however, it would be almost impossible for players to watch the conductor throughout and notice his every gesture, which is determined by the nature of ensemble rehearsals.

In ensemble rehearsal, too many things might happen simultaneously, and players have to constantly switch their attention between the score, the conductor, the sound produced by their own instrument and by others and anything else that has drawn their attention. This claim about attentiveness was not only demonstrated in some literature (Goodman, 2002; Price & Byo, 2002) but also observed in the rehearsals of the CAO and the NBB. Other reflections on the observations and the limitations of observational data are addressed in Chapter 6.4, where the implications of findings are presented.

In reporting the data, pseudonyms were used to protect all participants' privacy, and the information that might reveal participants' real identities was also omitted. The data were reported honestly, although there might be some discrepancies between the researcher's interpretations of the observational data and players' conceptualisations of the VSR video clips. For instance, in a case where the researcher interpreted one player's humming of the rehearsed tune during rehearsal gaps as a manifestation of imagining sound and using internalisation skills, this player suggested another possibility. After watching himself humming at a particular moment (in a VSR clip), this player conceptualised that action as enjoying the music and living in the moment. For discrepancies like this, the researcher's interpreted meaning was presented in the analysis of observational data (Chapter 5.1 and Chapter 5.2), and interviewees' conceptualisations of their actions were described in Chapter 5.3.

One of the ways to consider these contradictory data was that the interviewees were only presented with one of the moments of a specific action occurring due to the limited interview time. However, the researcher looked through every occurrence of the action and noticed patterns in those actions. In fact, most of the players' conceptualisations of their behaviours during observed rehearsals were in accordance with the researcher's interpretations. Additionally, as planned, thick description technique was applied in this research to increase the credibility of the data. Sufficient details were provided in this chapter concerning the data gathering process, and the next chapter when reporting the findings. With such substantial information, readers could form their own judgements about the data.

PART III: DATA INTERPRETATION AND REFLECTION

5 DATA PRESENTATION

This chapter presents and describes the raw data collected from fieldwork. These raw data comprise approximately 8 hours of rehearsal observational data and 5.75 hours of focus group interview data. The observational data shows a wide-ranging of musical skills that manifested themselves in the CAO and the NBB rehearsals, but also many strategies being employed in the two ensembles to support the probable development and enhancement of those musical skills. The skills and strategies are described in Chapter 5.1 and Chapter 5.2, respectively. The interview results are reported in Chapter 5.3, suggesting various conceptualisations the players formed about their ensemble experience.

5.1 Musical Skills

This section addresses the first research question by describing the observation of many musical skills used or developed in the CAO and NBB rehearsals, which, by extension, can potentially be gained or strengthened through those rehearsals. As these observed data provide evidence of a range of skills, they have been organised into a number of skill types determined by what the players' attention is being focused on–either by instruction from the conductor or through other features within the rehearsal setting. Some "unaddressed issues" revealed in the rehearsals have also been outlined in this section. These issues are largely skills that could have been worked on during rehearsals but were not addressed at that time. It is important to note that this is one way of categorising the skills, and a different observer would have divided them up somewhat differently.

5.1.1 The Identified CAO Musical Skills

Through analysing the two formal observations of CAO rehearsals, 14 varieties of musical skills were identified and presented in Table 5.1, together with a category named "unaddressed issues". Short definitions are provided for each identified skill and the unaddressed issues. Instances refer to the number of times a feature related to certain musical skills was observed, or an issue was not addressed. The 14 types of skills are ordered by the number of occurrences in the observed rehearsals.

Table 5.1

Identified CAO Musical Skills

Identified Musical Skills	Definitions	Instances
Playing Rhythm, Meter and Tempo	Playing correct rhythm, meter and tempo.	121
Managing Dynamics & Balance	Changing the sound volume and keeping the dynamic level balanced between parts.	110
Articulation Skills	Articulating musical notes and phrases, such as accent, *legato*, *staccato*, *tenuto*, *fermata* (pause).	53
Musical Sensitivity & Musicianship	Being musical: engaging with music, interpreting music, expressing emotions and stylistic playing, singing with accompaniment, accompanying a singer.	47
Engaging with Peers' Performance	Anticipating and responding to peers' playing/singing with various actions.	47
Repeating Musical Sections	Managing to repeat musical passages as denoted by repeat signs.	24
Watching the Conductor	Keeping an eye on the conductor during playing.	22
Synchronisation & Musical Phrasing	Playing in sync with peers and separating musical phrases properly.	19
Pitch Accuracy & Intonation	Knowing about pitch, key and harmony, pitch recognition and playing in tune.	15
Playing Techniques	Instrumental techniques such as playing *glissando* and doing bellow effects.	9
Musical Improvisation Skills	Improvising bassline to accompany the melody.	4
Internalisation & Imagining Sounds	Hearing musical sounds in the head without the physical presence of an instrument.	3
Sight Reading	Reading and playing music at first sight.	1
Switching Couplers	Selecting and changing couplers.	1
Unaddressed Issues	Issues that were not addressed in the observed rehearsals.	18

Among these identified skills, “playing rhythm, meter and tempo” and “managing dynamics and balance” were the two most frequently used and emphasised skills in CAO rehearsals. These skill areas account for 121 and 110 instances, respectively (identified through a detailed analysis of the transcripts from a total of four hour’s rehearsals). Much attention and rehearsal time is also devoted to “articulation skills”, “musical sensitivity and musicianship”, and “engaging with peers’ performance”; instances relating to the occurrence of these skills are about 50 on average. Of lesser emphasis was the attention paid to “repeating musical sections”, “watching the conductor”, “synchronisation and musical phrasing”, and “pitch accuracy and intonation”, with instances ranging from 15 to 24 each. The least addressed were specific “playing techniques”, “musical improvisation skills”, “internalisation and imagining sounds”, “switching couplers”, and “sight reading”, all of which were rarely manifested in the four hours of formally observed rehearsal.

5.1.2 Analysis of the Identified CAO Musical Skills and Unaddressed Issues

This section provides a comprehensive analysis of the manifestation of each identified musical skill being used, potentially learned and enhanced in the observed CAO rehearsals and the unaddressed rehearsal issues, based on the instances included in the transcripts. Thus, this analysis inevitably touches on strategies involved in ensemble rehearsals for the potential acquisition and enhancement of the identified musical skills, though briefly. In Chapter 5.2, further analysis is carried out on how these strategies may be applied in rehearsal situations to help amateur players gain or develop the identified skills.

Figures and percentages are used to report the number of instances linked to skill use and its potential learning. These numbers indicate to what extent musical skills were used or addressed, how much attention may be allocated to the acquisition or enhancement of certain skills, and the number of strategies that might be involved in the process of skill enhancement. As the data were collected through close observation of only a total of four hour’s rehearsal, and the primary purpose of these two observed CAO rehearsals was preparing for a concert repertoire, this analysis would not emphasise each identified skill’s frequency of occurrence or make generalisations about this frequency. It is the quality of the learnings and actions that are most important to note here, rather than the number of times those things occur.

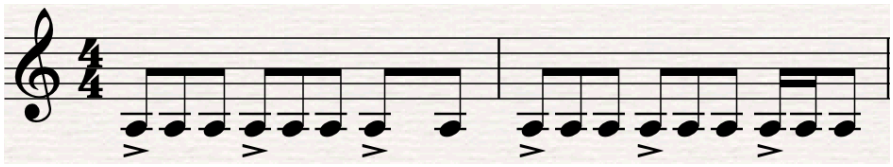
- *Playing Rhythm, Meter and Tempo*

In analysing the 121 instances of attention given to playing rhythm, meter and tempo, it was recognised that the manifestation of these skills constituted as much as 70% of the total instances while the learning process of the skills contributed about 30%. These skills were manifested through players' visible actions, and over half of the players were observed tapping and counting to keep time, although to varying degrees.

While some players only tapped their feet occasionally, some foot tapping appeared to be a habitual action as a few players tapped along all the time. The foot tapping occurred during ensemble playing, players' individual practice (during any long or short rehearsal breaks) and the learning process. In rare cases, foot tapping came with hand tapping. One of the players managed to feet tap four beats in a bar while beating two rhythmic patterns with a hand simultaneously when the orchestra was running through a relatively new tango piece containing two types of tango rhythmic patterns (see Figure 5.1).

Figure 5.1

Segments From Astor Piazzolla's "Yo soy María"



Compared with tapping, counting appeared only at those moments when certain CAO players seemed to struggle with playing certain rhythm, meter and tempo, or when particular playing techniques were involved, which confused their sense of rhythm. These instances appeared to occur not only in ensemble playing but also in players' individual practice. In the observed CAO rehearsals, counting often appeared as verbal counting. A couple of players were literally counting rhythms out loud as numbers, with each number representing one beat. Examples of instances include "Bella was frowning and verbally counting while playing those clusters with dotted notes", "Lily was counting, awaiting to play the *glissando*", and "Tessa was verbally counting while doing individual practice during breaks".

Fewer than 30% of the instances suggested that the accuracy of playing rhythm, meter and tempo may be improved through rehearsals, particularly via the conductor's cognitive instructions, verbal and vocal directions, and motivational comments. There were also times when the conductor deliberately worked with individuals or subgroups to correct rhythm, meter and tempo errors; when a more experienced player was given another part to play along with their peers or took on the conductor's role to give preparatory beats for the orchestra, as a result of the conductor's troubleshooting. These were also considered learning moments of rhythm, meter and tempo skills.

- *Managing Dynamics and Balance*

All managing dynamics and balance instances were related to potential training in these skills. Up to 98% of the 110 instances were about developing this skill set through the conductor's cognitive instructions, motivational comments, verbal, vocal and gestural directions, and troubleshooting. The other 2% revealed that the skills might have also been improved through the conductor working with individuals or subgroups for unsatisfactory volume and balance and players noting down dynamic changes on their music sheets.

Generally, music-literate instrumentalists give attention to dynamic markings written on scores to make dynamic effects. In an ensemble playing situation, it was realised that a few more elements, such as watching the conductor and engaging with peers' performance, may also influence whether players play louder or quieter. This is because the conductor is the person who looks at the full score and manages the balance among various parts. If players keep an eye on the conductor, they are likely to capture the conductor's gestural dynamic directions (using hand gestures and body movements to direct dynamic changes), which might result in more rises and falls in their playing, even if not very musically literate. Likewise, if a player understands the importance of listening to neighbours or whoever plays the same part, volume adjustment will likely be made.

During the observations, however, it was realised that the influence of notation markings and engaging with peers on how dynamics were performed could not be measured. Besides, the instances seemed to suggest that players were not watching the conductor or paying attention to the conductor's singing a great deal while playing. This conclusion is based on the observed phenomenon that there was a minor change in the overall volume when the conductor's gestural directions and vocal directions (singing along and imitating sound) were

given during the performance. By comparison, the conductor's language-related directions, such as cognitive instructions and verbal directions, appeared to work more effectively in this aspect as there were more noticeable and rapid changes in dynamics in players' performance when such directions were provided.

- *Articulation Skills*

An analogy can be drawn between articulation in music and articulation in conversations. Instrumentalists may imagine how they usually express their thoughts and feelings in words when learning to articulate notes in a piece of music. With the indications of various articulation markings, the duration of the notes, the dynamic levels and even the tone colour need to be altered accordingly. Such a fundamental skill seemed to be one of the major focuses in CAO rehearsals. Nearly 85% of the instances were linked to the potential acquisition of articulation skills, and 15% concerned the manifestations of using articulation skills.

The 85% of the instances suggest that articulations were primarily discussed via the conductor's cognitive instructions and stressed through his vocal, gestural, and verbal directions. These kinds of skill enhancement accounted for almost 75% of the total instances. Another 10% indicates the possibilities of honing articulation skills through the conductor's troubleshooting, motivational comments and working with individuals or subgroups. It was observed that most of the articulation issues addressed in the CAO rehearsals dealt with *staccato* and accentuation rather than other effects such as *tenuto* and *legato*.

To a degree, it appeared true that interrupting the performance and drawing players' attention to a particular articulation marking on their score was essential in the CAO, because otherwise the articulation effects were unlikely to happen. Some possible causes for this include articulation markings being overlooked or poorly understood, players' limited instrumental techniques, which constrained their performance of articulations, and very likely, players were overwhelmed as their attention was fully occupied with other things.

The remaining 15% of the instances demonstrates those moments when articulation skills were manifested in the CAO rehearsals. It was observed that almost half of the CAO players showed certain levels of understanding of articulation, and these were conveyed through their

obvious body movements, for example, tapping the keys with force on a single note or giving the bellow a hard push where accentuation was required.

- *Musical Sensitivity and Musicianship*

"Musical sensitivity and musicianship" are regarded as a skill set that refers to any manifestation of being musical and any moments of learning to be musical in the observed ensemble rehearsals. Compared with the comprehensive conception of musicianship, which is often used in formal music education settings, musicianship in this research is relatively narrowly defined. This is mainly to separate musicianship from other identified musical skills in the classification of observational data. Realistically, since this research was conducted in non-formal music learning contexts where many ensemble players being observed are non-professional instrumentalists, the complex definition of musicianship does not conform with the community ensemble setting in nature.

In the observed CAO rehearsals, 47 instances were associated with musical sensitivity and musicianship. Around 16% of the instances were about strengthening such skills through the conductor's gestural and vocal directions, motivational comments, cognitive instructions and working with individuals or subgroups. These instances indicate that the conductor tended to convey his intentions on musical styles and emotional aspects through expressive gestures and vocal imitations. In rare cases, this message was expressed in words.

Despite little guidance, the remaining instances (about 40) suggested players' ability to sing with instrumental accompaniment and accompany one's singing as a group, engagement with music and a reasonable level of competence in interpreting and expressing music. As one of the CAO's repertoire was originally written for singing with its instrumental accompaniment, one of the accordion players was temporarily taking on a singer's role while the whole orchestra was undertaking an accompanying task composed of one piano part and four accordion parts. In practising this piece, players' musicianship seemed to be seriously challenged, because their attention seemed to have been diverted to several aspects, the "singer", the "pianist", the rest of the orchestra and the conductor. Other musicianship was reflected in players' overt expression of emotions, such as moving rhythmically, wagging heads, and nodding along while playing. However, like many other identified musical skills, there was a possibility that some players might have expressed their emotions covertly and hence was unobservable.

- *Engaging With Peers' Performance*

A mass of data appeared to suggest the manifestation of engaging with peers' performance. By analysing the 47 instances in relation to this skill, it was discovered that most of the players paid attention (when resting) to either other ensemble players or perhaps the overall sound produced by the orchestra. This attention was manifested in some players' body movements, such as foot tapping, nodding, wagging, counting, finger practice, watching others and other facial expressions.

Specifically, these instances include several players tapping their feet and practising fingering of their parts while their peers were playing another part. More obviously, some players' facial expressions changed when strange noise occurred or when some parts were out of sync. In one of the tango pieces, as there was a singer and the orchestra was having an accompanying role, most players watched the singer without being told to while waiting to come in. Additionally, the engagement was revealed in the player's comments on the orchestra sound. Several players pointed out issues relating to wrong pitch, unsynchronised rhythms, and unexpected tempo changes. A few players showed competence in identifying misprints, hearing harmonic structures and acknowledging improved sound quality. However, minimal evidence (two out of 47 instances) was found to support the potential enhancement of engaging with peers. Both instances were about learning through the conductor's cognitive instructions, in which players were instructed to listen to a particular harmony and a duet melody.

- *Repeating Musical Sections*

Repeating musical sections seems to be a fundamental skill that any musician must get a good command of, regardless of playing in a group or solo. In fact, in a community ensemble like the CAO, there is still room for training and enhancement. All 24 instances were seen as the potential development of such an elemental skill. This skill was exercised and sharpened primarily through the conductor's cognitive instructions, verbal directions and troubleshooting.

Verbal directions were used in a way that players were occasionally reminded of the repeat signs alongside their playing, although most of the signs are likely to have been written on

their scores. When the conductor was troubleshooting and explaining in what order a piece of music should be repeated, players also took notes, perhaps highlighting the signs to remind themselves where to go back to. Another strategy involved in this skill learning process was players' peer support. A couple of instances demonstrated that some players helped their neighbours figure out the repeat signs and orders, and some appeared delighted to share their place in the music with those confused.

- *Watching the Conductor*

Watching the conductor is central to ensemble playing, as it improves the quality of the performance and the synchronisation in ensemble playing. When players see the conductor's gestural signals, which often represent the written details of the music, they are more likely to be reminded of what needs to be done at that point and make those things happen as a whole. As mentioned earlier in the analysis of "Managing dynamics and balance", dynamic changes were implied in the CAO conductor's gestural directions. If players kept an eye on the conductor, they would have received those messages and applied the desired dynamics in their playing. This demonstrates the significance of watching the conductor and the close links between watching the conductor and other identified musical skills. This interrelatedness of musical skills is discussed in detail in Chapter 6.1.

The 22 instances observed in relation to this important skill indicated that more than half of the players had directed attention to the conductor from time to time, although in varying degrees. Players who are more competent and perhaps have more ensemble experience appeared to keep frequent eye contact with the conductor than those less experienced, who might be "glued" to their music to avoid making mistakes. Alternatively, those seemly disadvantaged players may have been watching the conductor peripherally, which cannot readily be observed.

These instances also suggested that watching the conductor was not emphasised during the CAO rehearsals. A possible cause for this might be the conductor's tendency to prioritise verbal-related strategies such as cognitive instructions to resolve problems rather than non-verbal strategies such as gestural directions. In a situation where gestural directions may be used as a complementary strategy, watching the conductor became less necessary, and therefore it was not stressed in particular.

- *Synchronisation and Musical Phrasing*

Synchronisation and phrasing are of paramount importance in ensemble performance, because the very nature of ensemble playing is "togetherness" (Cook, n.d.). In any form of group playing, togetherness can be difficult to achieve due to the differences in individuals' musical capabilities. More skilled players may be able to quickly pick up a piece of music, while it takes much longer for less-trained players to acquire similar familiarity and fluency. Thus, a conductor's role is to act as a mediator to facilitate the coordination between the more competent and the less experienced, and one of the most common and effective approaches is to encourage every ensemble player to breathe together between phrases. That way players' tempo is bound by each phrase, and they are more likely to play in sync.

In the observed CAO rehearsals, 19 instances were identified as relating to synchronisation and phrasing, of which 12 were considered skill learning and seven appeared to be skill uses. The 12 instances showed that "togetherness" was emphasised multiple times through the conductor's cognitive instructions and vocal directions. Besides, the conductor occasionally worked with specific individuals and parts to ensure that they were playing in sync. In one of the conductor's troubleshooting instances, the music was slightly adapted to reduce the difficulties for some less skilled players, in order for every part to be in sync. On the other hand, players also put effort into synchronisation by noting down the conductor's instructions as future guidance for practising and performing.

The 12 instances might also suggest that synchronisation was not one of the major focuses in the two observed CAO rehearsals. However, this is probably because these observations were conducted when a CAO concert drew near. Most players were reasonably familiar with the repertoire; therefore, most rehearsed pieces sound relatively fluent and synchronised. This was evident in the other seven instances, in which two of the orchestra players were observed taking an obvious breath between musical phrases. Presumably, other orchestra members also showed phrasing by taking a shallow breath, which is hardly noticeable.

- *Pitch Accuracy and Intonation*

Compared to people who play a wind or brass instrument, accordion players may be less likely to think about "being in tune", as all the keys on the piano accordion have fixed pitch, and usually there are no intonation fluctuations. Although intonation is not a concern, pitch

accuracy could still be challenging in accordion playing. This is because one needs to be able to hit the right keys to guarantee the correct pitch, and any mistake with the fingers could result in pitch inaccuracy (Harrington & Kubik, n.d.).

As a motor skill, being able to always hit the right keys requires many years of extensive training, countless repetitions and regular practice (Altenmüller & Gruhn, 2002). In fact, in the observed CAO rehearsals, inaccurate pitch occasionally occurred, and some players had to look at their keyboards from time to time to ensure they were heading to the correct key. These issues might have been caused by unfamiliarity with the music and limited instrumental techniques, which were unaddressed at that time.

Over half the number of the instances (eight out of 15) observed in this aspect suggested a probable expansion of pitch and intonation knowledge. This was done through the conductor's cognitive instructions, vocal directions, and troubleshooting, in which pitch and harmonic structures were briefly discussed. One of these instances indicated that players' pitching skills could have been improved via peer support. The remaining instances presented the manifestation of pitch recognition skills. Players who have longer CAO engagement appeared to be able to identify pitch mistakes of their own and others. This competence was observed through the change in their facial expressions and comments on the "weird notes".

- *Playing Techniques*

Playing techniques have the highest number of instances of the five rarely used or developed skills in the CAO. The nine instances suggested that the conductor had voiced particular concern about playing *glissando* through cognitive instructions, vocal directions, and troubleshooting. Despite the conductor's brass background that he could not provide a step-by-step guide for doing such techniques on the accordion, he described and imitated a preferred *glissando* sound. This strategy was possibly helpful as some players were practising and trying to replicate the desired effect during some rehearsal breaks.

These instances also demonstrated the manifestation of the bellow effects. As a unique feature of the accordion, the bellow techniques require proper training and guidance. During the two observed rehearsals, players were found to practise bellow shake during breaks, and this technique was used in one of their repertoires. However, this technique was not appropriately adopted for some players, possibly due to limited guidance. The other bellow

technique, the bellow drum, also manifested in the rehearsals, and one player applied it in one of the tango pieces.

- *Musical Improvisation Skills, Internalisation and Imagining Sounds*

Musical improvisation can be a daunting task even for professional musicians, as it is a spontaneous and creative activity. In the CAO rehearsals, improvisation skills were observed, although it appeared to be voluntary behaviour. One of the more advanced players was improvising the bassline to go with the melody without being told to. Although this improvisation was relatively simple, it still requires a basic understanding of the relations between chords and keys, which was not discussed in the two observed rehearsals. This was probably because musical improvisation skills are not required to play in the CAO, and players generally follow what is written on their parts and play collaboratively.

The manifestation of internalisation and imagining sounds in the CAO rehearsals appeared to be extremely rare. During the two observations, only one player seemed to be internalising and imagining sounds in some short rehearsal breaks. While staring at the music, this player was tapping feet, doing fingering practice and conducting gestures in the absence of sound. As there was no evidence to support the development of these two skills in the observed rehearsals, they were likely to be gained through other musical activities or maybe long-time musical engagement.

- *Sight Reading, Switching Couplers*

Sight reading and switching couplers were not very evident in the observed rehearsals. Upon reflection, sight reading is more often used in rehearsals when players are given new pieces, and in this case, as the concert date was imminent, no new pieces were encountered. The only instance indicating the use of sight reading skills was a more skilled player being asked to jump onto another part temporarily to play along with some less-trained peers who were struggling with the tricky rhythmic patterns. Besides, no special training was observed to improve players' competence in sight reading.

Changing couplers was only discussed once during the two observations. This was likely because players generally follow the coupler notation in music; thus, it was not considered an issue for the conductor. The only instance suggested that switching couplers may be gained

through the conductor's troubleshooting and players' peer support. This occurred when some players were confused about which couplers to use. Although the conductor made a coupler decision for them, it was still unclear to some players as they could not match the coupler names with the couplers. Some players with more specific knowledge of the accordion helped their peers in this regard, until everyone on site was clear about which coupler should be changed into. This demonstrates that more experienced players' input is part of the way that the less experienced players learn, especially in those instrument-related skill areas where the skilled players may have more thorough knowledge than the conductor.

- *Unaddressed Issues*

As mentioned earlier, "unaddressed issues" is a general term used to capture those moments in rehearsals that reveal the need for further development but which, for a range of reasons, were overlooked or not addressed in particular rehearsals formally observed. In the observed CAO rehearsals, 18 instances are made concerning the unaddressed issues, including pitch, rhythm and tempo, synchronisation and attention management. The majority of the issues appeared to be wrong notes and missing rhythms and effects. Unstable tempo also appeared to be neglected at that time, possibly due to the players' unfamiliarity with the music. The out-of-sync issue seemed to imply players' struggles as it occurred when less competent players could not keep up with the conductor's tempo.

With attention management, it appeared that some players had to look at the keyboard from time to time to guarantee their pitch accuracy. Even the more skilled players had to look at the keyboard when changing couplers. As a result, they ended up losing their place in music sometimes. Thus, how to quickly shift focus between the keyboard and the music seemed to become a challenge, to which there was no advice given.

5.1.3 The Identified NBB Musical Skills

As a result of analysing the two formal observations of NBB rehearsals, 12 categories of identified musical skills and the "unaddressed issues" are presented in Table 5.2. This table has the same structure as Table 5.1 (in Chapter 5.1.1), in which the identified skills are ordered by the number of instances with short definitions given to each musical skill.

However, with most of the NBB skill categories being the same as the CAO's, there are some slight differences between the two ensembles. First, breathing before playing, referred to as constantly taking loud and exaggerated breaths, appeared to be a special feature in the NBB, which was not evident in the CAO observations and therefore is not included in CAO's identified skill sets. Likewise, switching couplers is a unique instrumental skill in accordion playing, so it would not have appeared in NBB rehearsals.

In addition, playing techniques were identified as one of the musical skills in CAO rehearsals but not the NBB, and this was probably because of the different ensemble arrangements in nature. Such arrangements refer to the fact that the CAO has almost all identical instruments allowing more focus on instrumental techniques in rehearsal, whereas the NBB has a wide range of different instruments, so there is a reduced chance that the whole band will focus on one instrument's technical challenges. The final difference is the manifestation of "musical improvisation skills" in CAO rehearsals, which is absent from Table 5.2.

Table 5.2

Identified NBB Musical Skills

Identified Musical Skills	Definitions	Instances
Breathing Before Playing	Following the conductor and taking a breath before starting to play.	136
Playing Rhythm, Meter and Tempo	Playing correct rhythm, meter and tempo.	116
Sight Reading	Reading and playing music at first sight.	91
Synchronisation & Musical Phrasing	Playing in sync with peers and breathing between phrases.	72
Engaging with Peers' Performance	Anticipating and responding to peers' playing/singing with various actions.	71
Managing Dynamics & Balance	Changing the sound volume and keeping the dynamic level balanced between parts.	69
Musical Sensitivity & Musicianship	Being musical: engaging with music, interpreting music, expressing emotions and stylistic playing, singing with accompaniment, accompanying a singer.	60

Pitch Accuracy & Intonation	Knowing about pitch, key and harmony, pitch recognition and playing in tune.	41
Articulation Skills	Articulating musical notes and phrases, such as accent, *legato*, *staccato*, *tenuto*, *fermata* (pause).	38
Watching the Conductor	Keeping an eye on the conductor during playing.	20
Internalisation & Imagining Sounds	Hearing musical sounds in the head without the physical presence of an instrument.	8
Repeating Musical Sections	Managing to repeat musical passages as denoted by repeat signs.	1
Unaddressed Issues	Issues that were not addressed in the observed rehearsals.	9

In these identified skill areas, the three skill sets with the highest number of instances are breathing before playing, playing rhythm, meter and tempo, as well as sight reading, accounting for 136, 116, and 91 instances respectively (identified through detailed analysis of the transcripts from a total of four hour's rehearsals). Skills that were also frequently utilised and emphasised in NBB rehearsals include synchronisation and musical phrasing, engaging with peers' performance, managing dynamics and balance, and musical sensitivity and musicianship, averaging around 68 instances per skill. Some attention was given to pitch accuracy and intonation, articulation skills, and watching the conductor. Instances that were associated with these skills range from 20 to 41. The two skills that were least used and addressed are internalisation and imagining sounds and repeating musical sections.

5.1.4 Analysis of the Identified NBB Musical Skills and Unaddressed Issues

A thorough analysis of each identified NBB musical skill and unaddressed issues is provided in this section. The ways that these skills and issues are analysed and reported are similar to the CAO musical skills analysis (Chapter 5.1.2), although presented in a different order (due to the number of occurrences in the observed rehearsals).

- *Breathing Before Playing*

Generally speaking, breathing is not classified as musical skill. In musical performance, however, even for instruments that are not wind instruments, breathing is an embodied part of phrasing, articulation and musical expression. In particular, for the NBB, breathing appears to

be part of musical phrasing, which occurs before playing begins and sometimes between phrases during playing. In order to differentiate these two types of occurrences, all breathing moments occurring during the performance were considered musical phrasing ("Synchronisation and musical phrasing"), the same as the identified CAO musical skills. "Breathing before playing" is then seen as those breathing moments that occurred right before the performance, as a distinctive feature and a unique phenomenon of NBB rehearsals.

Of the 136 instances, the vast majority (128 instances) were about the potential learning opportunities through the conductor's breathing. In each of these 128 instances, it was observed that the NBB conductor was taking a deep breath before the ensemble playing began. This appears to be his habit which may however influence the players. Three occasions of the 128 instances showed that the conductor had asked players to breathe with him so they would come in together. This indicates how breathing before playing was encouraged in NBB rehearsals and points to the interrelatedness of breathing and synchronisation. It appeared reasonable to believe that the conductor taking a breath is the major source of learning to breathe before playing. The remaining eight instances were about one player who seemed to be particularly "faithfully" following the conductor and breathing before his playing began.

- *Playing Rhythm, Meter and Tempo*

The accuracy of rhythm, meter and tempo was highly valued during the two NBB rehearsals, as there were 116 instances of these skills being highlighted, of which 60% were associated with skill manifestation and 40% appeared to be skill learning through a wide range of strategies. The use of rhythm, meter and tempo skills manifested via players' observable actions and comments. Over 60% of the observed players showed counting and/or tapping behaviour to keep themselves in time with the rest of the band.

Of those who counted, most did it verbally (counting softly), and only in a few cases they counted with fingers. It seemed that counting only occurred when players were on a long rest while other parts were playing. Such counting may have given those having a long rest a clear indication of how many bars of rest are left until their parts come in. Examples for both types of counting include "Hank was counting verbally when others were playing" and "Calvin was counting bar numbers using his fingers because he had a long rest at the beginning of this piece".

In addition, players were often observed tapping their feet, a behaviour that seemed to occur anytime in the rehearsals (either during playing or waiting to come in), depending on individuals' habits. Rather than feet tapping, some players tended to tap on their instruments when waiting to come in. For example, "Charles was tapping the rhythms on his cornet while other parts were playing". A focus on rhythmic skills was also seen from a player's comments on tempo who is recorded as having said, "it's good at that speed. We've never played at that tempo, have we? It's really good… oh yes it's good yeah", after the band managed to play a passionate march with a faster tempo. This instance may suggest that this player could tell the tempo differences, adjust and play at a faster tempo without preparation, and thus was considered a manifestation of applying rhythm, meter and tempo skills.

Learning opportunities in relation to rhythm, meter and tempo were observed in the conductor's gestural and vocal directions, cognitive instructions, troubleshooting, working with individuals or subgroups, motivational comments, and the players' individual practice. During playing, it was observed that the NBB conductor tended to use hand gestures to indicate meter and tempo changes. Additionally, the conductor directed players' attention to their rhythm and tempo errors and offered solutions when troubleshooting rhythm-related issues. Sometimes, the conductor also tried to fix players' rhythmical errors by working with them individually. The conductor's vocal directions were intended to troubleshoot individual issues and specific parts, to help players locate rhythm/meter/tempo errors, and model an accurate version that players might emulate.

In addition, rhythm, meter and tempo were mentioned in the conductor's motivational comments to acknowledge the band's improvement in playing certain rhythm, meter and tempo. The instances also indicated that the sense of rhythm, meter and tempo may be enhanced through players' individual practice. For example, one of the players was practising some tricky rhythmic patterns during a break, trying to match the rhythms sung by the conductor.

- *Sight Reading*

A total of 91 instances were discovered concerning the manifestation of sight reading, which may indicate that sight reading is frequently exercised in NBB rehearsals. Indeed, one sight reading piece was involved in each of the two observed rehearsals. At this rate, and if it is a

regular part of the rehearsals, sight reading skills are likely to become more advanced over time.

During the sight-reading tasks, it was observed that the NBB players and the conductor were still paying meticulous attention to articulations, breathing before playing, engaging with peers' performance, managing dynamics and balance, musical sensitivity and musicianship, playing rhythm, meter and tempo, synchronisation and musical phrasing as well as watching the conductor. Compared to the focus on these musical skills, it was somewhat surprising that pitch accuracy and intonation received far less attention during sight reading, which resulted in some unaddressed intonation issues (refer to unaddressed issues on p.89 for more information).

- *Synchronisation and Musical Phrasing*

The 72 instances clearly indicated how synchronisation and musical phrasing might have been learned and strengthened through NBB rehearsals, because over 97% of the instances were related to this skill development, with fewer than 3% indicating the skill manifestation. Synchronisation and phrasing were repeatedly stressed throughout the two rehearsals via the conductor's cognitive instructions, troubleshooting, working with individuals or subgroups and motivational comments.

To improve the synchronisation between different parts, the conductor instructed players on when and how to breathe before commencing playing. The conductor also proposed collectively subdividing rhythms into sections and focusing on playing parts precisely as written, that way enhancing the precision of playing rhythms and consistency of performance. In some instances, the conductor also guided phrasing, instructing the ensemble to pause collectively at a point before continuing to the following musical phrase. Motivational feedback was given at some point to praise the band's success in achieving a more synchronised sound. Other methods to improve synchronisation included working with sections individually, for example, inviting the percussion to play quaver pulses from the top parts, then asking the bottom parts to respond to the percussion (essentially the top parts' rhythms) and try to fit precisely into those gaps.

Additionally, the conductor's non-verbal feedback helped aurally and visually adjust phrasing and increase synchronisation in the band's playing. Sung vocal directions were frequently

employed to show where adjustments were required and demonstrate the differences in rhythms between various parts. This seemed intended to help players quickly locate out-of-sync moments and figure out a way to fit in with other parts. During playing, the conductor also provided visible phrasing guidance for the players by constantly taking an exaggerated breath and occasionally using hand gestures to indicate a pause. One of the players was observed to follow these signals and show phrasing while playing, which has been considered a manifestation of synchronisation and musical phrasing.

- *Engaging With Peers' Performance*

Of the 71 instances concerning engaging with peers' performance, more than 90% were about skill manifestation, and fewer than 9% were the skill development. Engaging with peers' performance appeared to manifest through the changes in players' facial expressions and body movements. Almost 70% of the observed players showed at least one of the following actions when waiting to come in. While other parts were playing, those players were nodding or swaying rhythmically, shaking legs or tapping with hands, feet or on the instruments, playing quietly in the air, showing phrasing, frowning or looking at other parts.

Among these actions, some were more explicit evidence of actively listening and following peers' performance, such as players frowning and looking at their peers when their playing sounded out of tune and playing quietly as if they simultaneously imagined how their parts fit with others. The reinforcement of engaging with peers' playing was also observed in NBB rehearsals. The conductor regularly emphasised the importance of listening to each other for the band to move together. The conductor's motivational comments included praising players for listening to others to ensure they were in tune and synchronised.

- *Managing Dynamics and Balance*

Much attention and rehearsal time were paid to dynamics and balance during the NBB rehearsal observations. A total of 69 instances relating to the probable learning of these skills were observed. Such learning appeared to occur through a wide range of strategies, including the conductor's gestural directions, cognitive instructions, troubleshooting and adapting music, working with individuals or subgroups, vocal directions, motivational comments, and players' note taking.

Throughout the two rehearsals, it was surprising that the directions relating to dynamics and balance were mostly delivered via the conductor's hand gestures. During playing, precise conducting gestures were given, along with the melody going up and down. On one occasion, while explaining in words, the conductor employed gestures to demonstrate the difference between a *crescendo* in a linear and a non-linear fashion, and players were observed to take notes for later references. Compared to the frequent use of gestural directions, vocal directions were only adopted a couple of times, not to mention verbal directions.

The observational data also suggested the conductor's use of cognitive instructions to address dynamics and balance, in which players were instructed to think about dynamics in advance before playing. Issues such as missing or unsatisfactory dynamic effects, the balance between different parts and the tendency to get quieter when the melody went lower were addressed in the cases where the conductor was troubleshooting, working with individuals or subgroups, or giving motivational comments.

- *Musical Sensitivity and Musicianship*

This complex skill set was visibly manifest through NBB players' actions and comments, in 18 out of 60 instances (30% of this category). Players were nodding, shaking legs or feet, and swaying to the music while playing. These actions may look similar to those that have been considered a manifestation of engaging with peers' performance and playing rhythm, meter and tempo. However, the difference with these actions here is that they occurred when players seemed to be actively engaged with the music and enjoy their own playing. In addition to the actions, some players exchanged their opinions and expressed their preferences for specific musical sections, regarded as players' interpretation of the NBB repertoire. When playing one of the marches, as the music required, most players showed their competence in singing with the accompaniment of the drumbeat and a cornet.

The remaining 70% of the total instances in this category refer to the conductor's actions, through which players' musical sensitivity and musicianship may be developed. The three main action types include the conductor's frequent use of gestures, cognitive instructions and vocal directions. During the four hours of formally observed rehearsals, the NBB conductor expressed his emotion and interpretation of music through his contrasts of gestures and expressive body movements such as leaning forward, bending down and swaying. Such

gestural directions might influence the ensemble practice because players were likely to be motivated by the conductor's strong emotions if they had paid attention to those signals.

Compared to gestural directions, cognitive instructions and vocal directions may be more straightforward and noticeable. For instance, the conductor encouraged players to think about certain details (such as the styles) before they started playing. He also used simple and vivid language that an amateur would understand to explain what styles were desired for different musical pieces and passages, for example, describing one style as "snap, crackle and pop" and another as "wishy washy handwavey". Vocal directions were often used to locate unsatisfactory stylistic moments and offer memorable sound effects for players to hold in mind. On rare occasions, strategies like the conductor's troubleshooting and working with individuals or subgroups were also adopted to fix style-related issues.

- *Pitch Accuracy and Intonation*

The manifestation and enhancement of pitch accuracy and intonation only appeared in the first observed NBB rehearsal, in which the conductor spent a fair amount of time fixing players' inaccurate pitch and intonation issues; this possibly raised players' awareness of playing in tune. In this first observation, a few instances may be seen as manifestations of pitch and intonation skills, in which some players seemed very sensitive to their tuning because a furrowed brow and sad smile were observed when their playing went out of tune. Besides, above 90% of the total instances in this category indicated that players' pitch accuracy and intonation might be improved through the conductor's troubleshooting, working with individuals or subgroups, cognitive instructions, vocal directions, motivational comments, and players' peer support.

An example of the conductor's troubleshooting with individuals or subgroups involved tackling tuning issues as players' pitch slid during dynamic changes. To tackle this, the conductor worked with different parts individually, asking them to blow a note in *pianissimo*, then the same note at "double *forte*", and finally doing a *crescendo* (from *pianissimo* to *fortissimo*) on this note over four beats. This approach appeared very effective as it "forced" players to focus on the pitch while playing.

On other occasions, the conductor also instructed players to buzz and play what is written to sing (for one of the marches with a singing part) to get the pitch. These cognitive instructions

appeared helpful but perhaps not as effective as working with individual parts on a particular note. The conductor's motivational comments also acknowledged players' improved pitch accuracy. In addition to the conductor's actions, players' peer support played a part in pitch accuracy and intonation, with players sometimes quietly discussing a key change or giving advice to others when there were tuning problems.

- *Articulation Skills*

All instances relating to articulation appeared to be the development of the skills. Strategies including gestural directions, vocal directions, cognitive instructions and working with individuals or subgroups were applied in this skill reinforcement. However, of these 38 instances, 34 of them were about learning articulations during playing through the conductor's variable gestures, which seemed to cover accentuation, *staccato, legato, tenuto* and pause. Ideally, players' articulation skills will likely be reinforced over time if they divert attention to the conductor when articulation changes occur.

Sometimes, it appeared more effective when the conductor interrupted playing, directly working with some parts for the missing articulation effects. Likewise, cognitive instructions and vocal directions also seemed to have an immediate effect on drawing players' attention to those articulation markings. Players' abilities to blow accented, *tenuto* and pause notes might have been developed by these means.

- *Watching the Conductor, Internalisation and Imagining Sounds, Repeating Musical Sections*

During the two observed rehearsals, the interrelationship between watching the conductor and producing synchronised sounds was reflected in the conductor's instructions and manifested via the players' practice. Watching the conductor was described as a necessary step for keeping the band in time together. As the conductor stated, players must "watch and change notes at the right time and come in at the right time". However, such verbal feedback might be partially effective, as only about 30% of the players had visibly turned their attention to the conductor's gestures from time to time after such instruction was given.

In addition, some players' actions may be associated with internalisation and imagining sounds. It was observed that five players seemed to be showing certain levels of competence

in internalising and imagining the tune in their heads. In short breaks between changing pieces, some of these players practised fingering while staring at their music, as if imagining how a musical section would sound. Also of these five players, some were humming the tune of the next piece while looking for the score. Likewise, after the conductor interrupted the playing, there were some short gaps where these players were whistling the tune of what they had just played.

Repeating musical sections seemed to be the least of the NBB conductor's concerns during the observed rehearsals. The conductor once verbally reminded players to go to a "coda" while playing, and this was also the only time the verbal direction was adopted throughout the two observations.

- *Unaddressed Issues*

Although most of the identified musical skills appeared to be comprehensively discussed and reinforced, some minor issues were not addressed immediately during the two observed NBB rehearsals for various reasons. A total of nine instances were recognised in relation to players' struggles with pitch and intonation accuracy and meter and tempo. Of these, five were pitch issues, and of those five, three occurred during sight reading exercises. As the NBB has a large number of players whose levels of musical competence may vary, intonation challenges may be inevitable, although some pitching exercises had been undertaken at the beginning of the first observed rehearsal. This may be one of the reasons why a few intonation issues were left unaddressed in the first observation, as plenty of rehearsal time had already been devoted to tuning adjustment and correction. Also, during a sight-reading task, it is somewhat counterproductive to interrupt players to correct their pitch and intonation.

The four unaddressed meter and tempo issues seemed to be an individual problem for one or a few players. This occurred after the conductor had offered solutions to the players, but due to the individual difference, the conductor's solution worked more effectively for some players than others. For example, many players seemed to struggle when coming across a piece with a 12/8 section. After the conductor suggested that everyone conceptualise it as 4/4, it took a little longer for one of the players to play the section correctly. The unstable tempo also appeared to be a personal issue, and the unfamiliarity with the music might be a factor.

5.2 Strategies

This section addresses the second research question by describing many observed strategies adopted in the CAO and NBB rehearsals that appeared to foster the acquisition and further development of the identified musical skills presented in Chapter 5.1. These strategies have been classified into many categories according to who first initiates the action, which in a setting of the ensemble rehearsal can be either the conductor or the players. For strategies associated with the conductor's actions, a distinction has been drawn based on whether the action was performed when the ensemble was playing or not. As with identifying musical skills, this is not the only way of categorising the strategies; a different observer might have classified them differently.

5.2.1 The Identified CAO Strategies

Through analysing the two formal observations of CAO rehearsals, 12 varieties of strategies are presented in Table 5.3, with short definitions provided for each identified strategy. Instances refer to the number of times a strategy is employed and observed. The 12 types of strategies are ordered by the number of occurrences in the observed rehearsals.

Table 5.3

Identified CAO Strategies

Identified Strategies	Definitions	Instances
The Conductor's Vocal Directions (when playing)	The conductor directing players during playing by (for example) singing along and imitating sounds.	145
The Conductor's Cognitive Instructions (when not playing)	The conductor giving feedback, correcting playing errors, introducing concepts and teaching musical knowledge.	95
The Conductor's Gestural Directions (when playing)	The conductor directing players during playing through hand gestures and body movements.	66
The Conductor's Vocal Directions (when not playing)	The conductor directing players by (for example) singing and imitating sounds.	66
The Conductor's Other Troubleshooting and Adapting Music	The conductor identifying problems and offering suggestions, e.g. providing creative solutions for complicated issues such as adapting music.	60

The Conductor's Motivational Comments	The conductor motivating players by giving affirmative comments, such as the use of metaphors and jokes.	51
The Conductor's Verbal Directions (when playing)	The conductor directing players during playing with the use of words.	46
Players' Individual Practice	Individual players making use of any gaps to practise.	21
The Conductor Working with Individuals or Subgroups	The conductor working with individual players or small groups of players for a particular issue.	20
Players' Peer Support	Players helping each other.	12
Players' Note Taking	Players making notes on their scores.	7
The Conductor's Gestural Directions (when not playing)	The conductor directing players by hand gestures and body movement.	3

Among these 12 strategies, as the names indicate, nine of them are initiated by the conductor, with only three initiated by the players. Within the nine conductor-led strategies, depending on when the conductor's actions were taken, some are presented separately, according to whether they occur at a point in the rehearsal where the players are playing, or a point when they are paused (vocal directions, gestural directions, and verbal instructions). The other strategies are not separated in this way because they were often adopted when players were not playing.

It is important to note the difference between verbal directions and cognitive instructions. Essentially, they are both a means of verbal communication initiated by the conductor. Verbal directions refer to those brief and indicative orders or reminders (usually a few words) given while the ensemble is playing. On the contrary, cognitive instructions appeared as more comprehensive feedback that involved not only error corrections with guidance or suggestions provided but also knowledge and concept teaching, which essentially helped players understand particular subjects and expand their musical knowledge base. These instructions were usually provided when the ensemble was not playing as either post-playing feedback or pre-playing review. Due to the complexity of "instruction", all vocal and gestural

related feedback, whether during playing, post-playing or pre-playing, was regarded as directions rather than instructions.

A closer examination of the CAO rehearsals reveals that the conductor's vocal directions were the most frequently employed strategy. There were 145 instances noted throughout the two rehearsals in which a musical skill may be learned or strengthened while playing by engaging with the conductor's singing, imitating and counting. This largest category of learning opportunities was followed by the conductor's cognitive instructions, a strategy adopted 95 times in total throughout the two rehearsals.

The conductor's vocal directions, troubleshooting and adapting music, and motivational comments are the strategies that were also used fairly frequently when the playing was discontinued. A similar frequency was seen in the conductor's gestural and verbal directions during playing. The number of occurrences of these five strategies ranges from 46 to 66. However, in the CAO rehearsals, the chances for the conductor working with individual players and parts for some particular issues were not many, accounting for only 20 instances. This figure is very close to that of players' individual practice, which was, however, the most frequently applied player-initiated strategy out of the three. Another two player-initiated strategies and the conductor's gestural directions (when not playing) were the least evident in the two observations.

5.2.2 Analysis of the Identified CAO Strategies

Based on the instances observed in the CAO rehearsals, this section provides a comprehensive analysis of what musical skills may be learned and enhanced through implementing these identified strategies. The 12 strategies were put into four larger groups (three strategies per group) in this analysis to better understand the relationship and differences between these strategies. The first group includes three types of conductor's directions employed during playing. The second group, on the contrary, consists of the conductor's cognitive instructions and two types of directions adopted when the playing was paused. The third group contains the rest of the conductor-led strategies: the conductor's other troubleshooting and adapting music, working with individuals or subgroups and motivational comments. The last group considers the three player-initiated strategies: players' individual practice, peer support and note taking.

- *The Conductor's Directions (When Playing)*

During the two formal observations of CAO rehearsals, while the orchestra was playing, the conductor tended to give vocal, gestural and verbal directions alongside the orchestra's playing. Among these three, the conductor seemed to have a strong preference for vocal directions (145 instances). Eighty-Seven out of 145 instances showed that vocal directions were often given after the conductor explained his desired sound in words and demanded another playing attempt. Once players started to redo a musical phrase, the conductor sang along, which seemed to be a way to reinforce his preferred sound. In so doing, players might have been reminded of what they were expected to achieve, so they might have felt more confident adjusting their playing to match the desired sound.

Things being reinforced this way include dynamics and balance, articulation skills, rhythm, meter and tempo, musical sensitivity and musicianship, playing techniques (i.e. *glissando*), and synchronisation and phrasing, which suggest a possible skill improvement in these aspects. It was observed that the conductor often took account of dynamic rises and falls, accented and *staccato* notes in his singing along. When an unexpected slowing down was heard, or some player struggled to play syncopated rhythms, the conductor directed players by counting beats, singing melodies at the desired tempo and imitating the rhythms.

There were also a few opportunities for players to gain musical sensitivity and musicianship when the conductor sang a polka cheerfully. In rare cases, the conductor imitated a *glissando* and sang along a duet passage to reinforce the points of playing a *glissando* properly and taking special care to move together. Remarkably, this type of vocal direction (for reinforcement purposes) often appeared to be combined with during-playing gestural or verbal directions, or both. Such combined uses of the directions will be explained in detail on pp.134-135.

Fifty-Seven out of 145 instances were, however, regarded as the conductor's habitual singing or "enjoying the moment", because this type of singing along occurred randomly and did not appear to be indicative. They were often observed when a piece of music was played for the first time the night or when the conductor became excited about the orchestra's playing. In either case, such singing along might have motivated players' enthusiasm and stimulated their inspiration for a musical piece, enabling them to be actively engaged and play more

expressively. Ultimately, players' musical sensitivity and musicianship might also be improved through the conductor's frequent use of vocal directions during playing.

Finally, one instance in these 145 pointed out that the vocal directions may be used during playing as a tool to measure pitch. In this instance, the conductor suggested changing a written note G to G#. In order to test his hypothesis, the orchestra was asked to play the note as G# while the conductor sang the original note G to compare. As a result of this measuring process, the conductor and some orchestra members decided that the written note G was correct because it sounded better than G#. Despite functioning as a pitch measuring tool for the conductor, using such vocal directions might have enhanced the players' pitch sensitivity and accuracy.

Under the same group–the conductor's directions during ensemble playing, gestural directions appeared to be the second most used strategy, with 66 instances observed throughout the two rehearsals. As a form of visual communication, gestural directions may assist the possible acquisition of managing dynamics and balance, articulation skills and musical sensitivity and musicianship. While the CAO was playing, it was observed that the conductor demonstrated dynamic changes such as *crescendo*, *decrescendo* and *subito forte* by lifting his left hand up with the palm facing upward or turning it down with the palm facing the players. Sometimes, gestures such as flicking, pressing and thrusting were employed to signal *staccato* and accentuation effects. Occasionally, the conductor bent his knees with his upper body slightly leaning forward and swaying so as to visually communicate the music's mood and emotion to the orchestra players. These musical skills may have been gradually developed if these gestural signals were noted.

In addition to vocal and gestural directions, verbal directions were adopted from time to time while the orchestra was playing to help players manage dynamics and balance, repeat musical sections, perform articulations and maintain a steady beat ("Playing rhythm, meter and tempo"). Although it is generally unusual in concert performances, verbal communication appeared acceptable in the CAO's rehearsal performance. This is likely because rehearsal performance is considered an informal and essential run-through as part of the rehearsal procedure.

While the orchestra was playing, it was observed that the conductor tended to draw players' attention to dynamics by shouting dynamic terms including "*crescendo*" and "double *forte*", or in plain English, "start coming up now/right up all the way" and "accompaniment down/bring it down". Sometimes, even though the dynamic issues had already been discussed when the ensemble playing was paused, the conductor still attempted to reinforce his points during the ensemble's next immediate playing attempt. In those cases, the conductor tended to use slightly vaguer words to indicate dynamic changes, such as "make it happen", "and again", "here we go", and even "shush" (meaning volume down).

It was also surprising that verbal directions were sometimes used to reinforce or remind players about repeats alongside their playing. This was often communicated through plain English such as "straight ahead", "no repeat this time", and "and go back to the sign". There were also a few occasions where reminders and reinforcement were provided on articulation effects and tempo. Such directions include "accents", "and bah" (imitating the accented note), "here we come/here again", and "rush" and "keep going/don't slow down" for tempo corrections.

In analysing these three types of directions (vocal, gestural and verbal) provided while players were playing, it is recognised that the conductor used a combination of directions to demonstrate or reinforce his musical intentions in many cases. For example, when directing a particular musical style, the conductor's enthusiastic singing along was accompanied by expressive body movement (gestural directions). When some players could not catch up with the overall tempo, a verbal direction such as "keep up playing" was given, followed by the conductor's singing at the desired tempo. In some cases, the conductor verbally reminded players about the dynamic changes, such as "*crescendo*", which was immediately followed by lifting his arm and singing in increased volume as a demonstration of the *crescendo*. One example of the combined uses of during-playing vocal, gestural and verbal directions can be seen in Extract 5.1, which is an excerpt from the CAO transcripts.

Extract 5.1

A Combination of Vocal, Verbal and Gestural Directions

The conductor (during-playing)
[00:04:12] Crescendo
[00:04:12] Bum bum bum… *(singing the phrase with crescendo while raising up his left arm)*
[00:04:15] And down again *(lowering his left arm)*, and…
[00:04:20] Up we come again
[00:04:21] Bum bum bum… *(singing the phrase with crescendo while raising up his left arm again)*

- *The Conductor's Instructions and Directions (When Not Playing)*

Bearing in mind the difference between instructions and directions, this part of the analysis focuses on the conductor's cognitive instructions, vocal directions and gestural direction, and musical skills that may have been gained under each of them. Among these three strategies employed when the CAO playing was discontinued, cognitive instructions seemed to be the conductor's most preferred means of communication (95 instances), often provided as post-playing feedback. It is important to note that cognitive instructions were often used alone or combined with vocal directions; they were rarely adopted with gestural directions. The combined uses of these strategies are analysed later on pp.138-139.

The implementation of cognitive instructions might have allowed players to upgrade their musical skills, such as managing dynamics and balance, playing articulations, rhythm, meter and tempo. Additionally, players may have better understood the importance of synchronisation and phrasing in ensemble performance, been more aware of listening and engaging with peers' performance, and learned about the repeat sign ("Repeating musical section"), playing techniques, keys ("Pitch accuracy and intonation"), musical sensitivity and musicianship.

Of these 95 instances, almost half were about tackling dynamic and balance issues. The conductor had to interrupt the playing and adjust the degrees of loudness and softness to keep the volume more balanced between various parts. For example, when a louder volume was desired, the conductor tended to say, "bring those bars out as much as you can… give it heaps…don't die when we get there, keep it up and really make that a bird… that accent was 100%, better than what it was, but we want it now 100% more". When the orchestra playing was losing balance, the conductor paused the playing and advised the first accordions to "keep it down a wee bit if you'd like, just say you sitting on top doesn't have to be too loud",

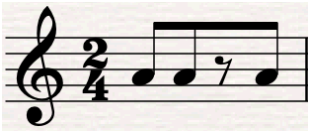
and meanwhile instructed the fourth accordions to stand out by saying “4th rise to glory again, you could stand up and play that big *crescendo* if you want to… Now it’s your chance to shine”.

In rehearsing a tango piece which has a singer part, the conductor also pointed out that “we’ve got to be quieter because we’ve got a singer”. This may help players understand why keeping balance matters in ensemble playing. Sometimes, cognitive instructions were also adopted to help the orchestra recall previously addressed dynamic issues before they began to play. For instance, the conductor once said, “you remember what we did last week? Nice *mezzo forte* start with a *crescendo*, up to at least bar 40, if not more. A couple of bars there and then we drop back down to where we started”.

Nearly a quarter of the instances were discussions about articulation effects. The conductor repeatedly stressed that *staccato* and accents should not be ignored, and note duration needs to be played fully and well-articulated. For example, “still a lot of *staccato*s in there we missing. Those notes all got dots under them so they must be *staccato*. Sort them out because we got between them”. In a slightly more complicated situation where an accented note is also on *staccato*, guidance such as “pumping that note out and getting your finger off very quick” was provided. Additionally, in one of the repertoires, the conductor suggested that every player whose part has a rhythmic pattern of “three quavers in the quaver rest” (see Figure 5.2) “chop the second quaver off and make sure there is a rest in there”, so that the length of every quaver note and the quaver rest could be the same, thus sounding more detached and clear.

Figure 5.2

Three Quavers in the Quaver Rest



Issues associated with rhythm, meter and tempo were also cognitively instructed a dozen times. When realising some players falling behind the overall tempo, the conductor paused the ensemble playing and pointed out that “for some reasons at our first part seems to drag,

just pull the tempo up a wee bit and keep moving". In another instance, a vivid metaphor was used to describe the situation where some orchestra players went beyond the conductor's tempo: "you guys in the middle are actually pushing us along. I don't know if you can feel it or not… just giving us a little shove with the old boot, keep moving, moving, you know". Likewise, the conductor used another apt metaphor to explain what rhythms mean to music performance. He said, "always remember to keep the rhythm. What did some guy say recently: rhythm is like the pulse in our blood supply, isn't it? If we haven't got the rhythm, we might as well be… got no blood supply pumping us, are we? Gotta have that rhythm, that's the pulse in our music, the blood supply keeps us going".

Several instances suggested that cognitive instructions were also applied in addressing synchronisation and phrasing issues and repeating musical sections. The conductor had called a halt a few times due to the apparent crossover in the orchestra's playing. In those instances, he stressed that all parts must be played together. For example, when encountering a cluster of dotted *staccato* notes, he said, if "most people doing it (*staccato*) and one person doesn't do it, oops, it sticks out". In another instance, the conductor introduced a concept that special care needs to be taken to be together when playing *pianissimo* because that was often when players "were out of time with each other". Occasionally, when some players appeared to be confused with repeat signs, the conductor clarified, "you know, we started at 42, you got a 57 and there's a repeat. Then you repeat back and go on the second-time bar and carry on to Figure 6".

On rare occasions, cognitive instructions might have helped develop players' playing techniques, pitch and intonation and engaging with peers' performance. A couple of times, the conductor attempted to correct some players' errors in playing a *glissando* by saying, "the gliss (*glissando*) goes up… we must cut it off, don't hang onto it… otherwise it muffles out the next note from the bass in". Despite the conductor's brass background that he cannot provide hands-on guidance on accordion *glissando* playing techniques, he pointed players to the ideal sound of the *glissando*. Players' knowledge and skills of pitch and intonation might also be expanded when the conductor explained that "that's a change of key into five flats" and "that bit should be well harmonised. The 1sts start off with a middle C, the 2nds start off with a G and the 3rds start off with an E… we've got a nice three-part harmonic module in there". Finally, the instances also suggested that the conductor had encouraged players to engage with peers' playing by saying that "everybody should be able to hear that nice little

duet melody from 2nds and 3rds as we're going through there" and asking the players, "did you all hear that three-part harmony C-E-G in there?".

The conductor's vocal directions (when not playing) were also very evident in the two CAO rehearsals, with a total of 66 instances observed. This strategy was also used mainly after the playing attempts and occasionally before playing. In two-thirds of the instances, vocal directions were employed to demonstrate the sounds produced by the players and/or the conductor's preferred sounds. In the remaining instances, vocal directions were adopted to help players quickly locate errors or where adjustments were required. It was also recognised that vocal directions were rarely used by themselves. Instead, they were often used in conjunction with cognitive instructions and other conductor-led strategies (e.g. the conductor's other troubleshooting and adapting music and the conductor working with individuals or subgroups) to further clarify the conductor's intentions.

The instances indicated that vocal directions were mostly used to demonstrate articulations, rhythm, meter and tempo, dynamics, *glissando* ("Playing techniques") and musical styles ("Musical sensitivity and musicianship"). For example, the conductor was observed to sing a desired version of the accented notes and the version produced by the players to show where the differences were. In his words, "it's accented, okay? Bum bum bum (the conductor imitating the detached accents at loud volume) … bah bah bah (the conductor imitating the sound played by the orchestra) no good". In the case of "three quavers in the quaver rest", as shown in Figure 5.2, the conductor also employed vocal directions right after his cognitive instructions to clarify when the second quaver note should be "chopped off" and how long the quaver rest should be.

When learning to play a tango piece by Astor Piazzolla ("Yo soy María"), many CAO players seemed to struggle particularly with Piazzolla's syncopated tango rhythms, because they are strikingly different from the more "square" rhythms of their standard repertoire. Vocal directions were thus used several times to demonstrate how those tango rhythmic patterns sounded like if they were played accurately. Examples of those rhythms include three downbeats in a 4/4 time shown in Figure 5.1, and the syncopated rhythms shown below in Figure 5.3 and Figure 5.4. In the conductor's words, his singing will help players hear the rhythms and remember, and they "should go home and have that in [their] head when [they] go to bed". On another occasion where players slowed down as soon as they started playing a

piece of music, the conductor also attempted to direct the players to the correct tempo through singing after pausing their playing.

Figure 5.3

Segments From Astor Piazzolla's "Yo soy María"

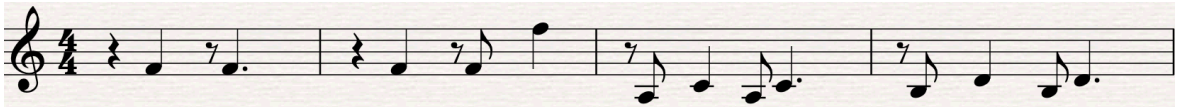
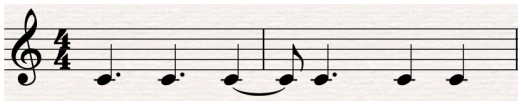


Figure 5.4

Segments From Astor Piazzolla's "Yo soy María"



To tackle the unsatisfactory dynamics, the conductor sang melodies at a range of volumes to indicate different levels of dynamics (*piano* or *forte*) and dynamic changes such as *crescendo*. There were also opportunities for players to enhance their instrumental playing techniques by listening to the conductor's vocal imitation of *glissando* and then mimicking the effect on their accordions. As the conductor demonstrated: "we can't go Bah~dum~ (the *glissando* effect the orchestra produced), we got dame no! Bah~dum, stop (the ideal *glissando* effect). You must stop there like this". Finally, in nearly one-third of the 66 instances, vocal directions were employed to draw players' attention to the key changes, unsatisfactory dynamics, and where the out-of-sync moments occurred.

Although adopted frequently during playing, Gestural directions were rarely employed when the orchestra was not playing, with only three instances observed. These instances showed that gestural directions (when not playing) were never used singly; instead, they were applied in conjunction with cognitive instructions or/and vocal directions as post-playing feedback. In one of the cases, hand gestures occurred almost simultaneously with a cognitive instruction to demonstrate the conductor's expected volume of *forte*. Similarly, in another case, the conductor raised his left hand gradually to demonstrate a desired *crescendo* while singing the melody in *crescendo*.

The third instance is unique and noteworthy because it seemed to be the only occasion where gestural directions, cognitive instructions and vocal directions were all being employed in order to address a style issue (see Extract 5.2). After the playing was interrupted, the conductor provided his assessment of the just-played section and requested players to redo the section in a "nice and light and bright" style. This instruction was immediately followed by the conductor's singing in such style, with his body moving rhythmically to demonstrate those "little lifts".

Extract 5.2

A Combination of Cognitive Instructions, Vocal and Gestural Directions

The conductor (post-playing)
[00:34:37] Right good work in there, 2nds and 3rds. You just about got it nailed, but don't be make it too laborious. Keep it nice and light and bright. Don't lengthen anything out. Just pop on the old train there and get into it.
[00:34:51] Bah bah bah… *(singing the phrase with desired style while his body moving rhythmically)*
[00:34:56] Oh look at that, keep it nice and bright. Little lifts in there. Just give me the 2nds and 3rds at Letter C.

- *The Conductor's Other Troubleshooting and Adapting Music, Working with Individuals or Subgroups, and Motivational Comments*

In addition to the six conductor's directions and instructions, another three conductor-led strategies appeared in the CAO rehearsals. A total of 59 instances were considered the conductor troubleshooting and adapting music. As its name implies, this strategy was used to identify and solve problems. Issues being identified and addressed were associated with rhythms, meter and tempo, dynamics and balance, repeating musical sections, synchronisation and phrasing, pitch accuracy, playing techniques, articulations and switching couplers. Therefore, it might be plausible to suppose that these skill areas might have been somewhat gained or further enhanced.

Two of the instances were great examples of the conductor identifying problems. Both instances had the same process of pinpointing the source of the problem, although the first was related to repeating musical sections, and the second was about inadequate articulation effects. In the first instance, the conductor paused the players' playing because he realised that "somebody got in the wrong place" after the repeat. After having a short conversation with the players, the conductor identified the problems: one player did not do the repeat, and the other player went back to repeat but was reading the wrong line. The conductor thus

suggested the players redo the repeat; he said, “we better do that again”. In the second case, likewise, the conductor asked players how many of them were playing the second accordion part for one of the pieces, because he could barely hear the accented notes from this part. After figuring out that four players were on the Second, the conductor said, “we should be able to get a lot more than that”, to encourage them to put more accents in the next playing attempt.

After problems were identified, the conductor sometimes provided suggestions and creative solutions. In one of the instances where some players still appeared to have trouble playing the *glissando* properly after two playing attempts, the conductor suggested them to “run through two or three times at home” and make sure “don’t let it run on no matter what else happens”, instead of dwelling on this issue for long. Sometimes, the conductor adapted the music to suit players’ abilities or their instrument’s capability. For example, when realising a vital part was struggling to do the repeat, the conductor decided to play that section only once without repeating it and added a *ritardando* in the problematic measure to slow down the tempo. Likewise, when some players were struggling with playing a chord D-A-F#, the conductor decided to lighten their burden by suggesting them to “just play the D, forget the A and the F sharp…[they will be] covered by other fellows. You can even forget the note before D if you’d like, but it’s most important we come in there unstuck”. One of the instances was about the conductor adapting pitch due to the limited range of one player’s accordion. The conductor’s solution was to have the player “play [that note] up an octave”.

Finally, of these 59 instances, many seemed to indicate more skilled players’ input in the troubleshooting process and the conductor’s decision-making, as a conspicuous feature of this strategy. For instance, the conductor tended to seek advice from one of the more advanced accordion players who has also been long engaged in the CAO, because this player seemed to have better knowledge of playing the accordion and is familiar with most repertoires. When the conductor needed a second opinion on tempo for some pieces, he asked this player, “is that too fast?” or “is good speed?”. Once, this more skilled player was also observed to share personal ideas about synchronisation with the conductor after a run-through. In this player’s words, “just have to make sure we keep up because some [parts/players] dragging, I think”. When some less experienced players asked the conductor about coupler choice for a musical section, the conductor consulted this particular player first,

“what’s the coupler with one dot on the bottom?” to confirm the coupler name, before pointing the questioners to the desired coupler.

More experienced players’ involvement was also revealed in those moments when the conductor adapted music and addressed misprints. One of the examples was the conductor asking the skilled player about adjusting dynamic levels; he said, “you think we’ll do that? Down at bar 6 and up again at 7”, to which the player nodded in agreement. On rare occasions, the conductor seemed to forget what adaptations had been made to the music, and some players reminded him about those decisions. Besides, some players helped the conductor to identify misprints; one said, “that F note there, they always sound a bit weird”, and the other questioned, “on bar 4, we’ve got like a semibreve there, everyone I think has got a crotchet, that sounds weird aye”. The conductor took their feedback seriously and changed the F note to E and the semibreve note to a crotchet.

In some instances, a more experienced player was assigned new tasks and roles as a way of the conductor’s troubleshooting. This player was given another part to sight read to support other players who struggled to play that part. This player was also asked to temporarily take on the conductor’s role to give preparatory beats while the conductor was playing the tuba to accompany the orchestra. Both cases may be considered good opportunities for this player to further improve sight reading and keeping time skills (“Playing rhythm, meter and tempo”).

Throughout the two rehearsals, 20 instances were observed relating to “the conductor working with individuals of subgroups”. This strategy refers to those moments when the conductor worked on a problematic phrase with one or a few players. In so doing, those matters appeared to be overcome or somewhat improved during ensemble rehearsals. Issues being tackled under this strategy covered synchronisation and phrasing, articulation skills, playing rhythms, meter and tempo, managing dynamics and balance, repeating musical sections, pitch accuracy, and musical sensitivity and musicianship.

The following examples clearly explain the process of working with subgroups. On one occasion, the conductor interrupted players and pulled the Seconds and the Thirds out because they were not in sync with each other through a duet section, and therefore not in sync with the rest of the orchestra. After having these two parts play the section twice as a subgroup, they started to play synchronously. Then the conductor incorporated all parts into

playing the same section to check if the duet melody of the Seconds and the Thirds were still in sync within itself and also with other parts. Once satisfied, the conductor proceeded to the remaining sections of the piece. The same strategy was applied when dealing with dynamics, music styles and articulation-related issues. The conductor asked some players to redo a measure individually due to their unsatisfactory volume and styles and missing accent and *staccato* effects.

There were another two instances worth mentioning because they are indications of the conductor talking with one player individually to solve issues. One of the cases was about the conductor explaining to a returned previous member how to do the repeat for a musical piece before its run-through began, which seemed to be an effective precautionary measure because then this player was observed to be able to follow the group doing those repeats. In the other example, the conductor talked to the bass player individually to address minor misprints regarding pitch and rhythms in their part while showing his full score as a reference.

When this strategy was implemented, it was noticed that the conductor limited the conversations with individual players to no more than two minutes, and the maximum attempts of "repeated rehearsing" with subgroups were two times. Most simple issues appeared to have been resolved within the limited repeats. For more complicated issues such as playing *glissando*, the conductor also moved on to the next musical section after two playing attempts, even though the subgroup training outcome was not even ideal.

Observations also revealed that the conductor tended to provide motivational comments at a non-specific time to keep them engaged and motivated. This type of verbalisation was observed 51 times. Most of these motivational comments were provided as timely confirmation of players' achievement and recognition of their improvement in playing, so they may not be directly associated with enhancing a particular musical skill. However, these affirmative and inspiring comments appeared to generate motivation in players, which may eventually assist them with playing music and learning musical skills. Examples of such comments include "let's set the night on fire" and "those in the melody, they've been doing a nice job, just putting little rises and falls and that's good".

When the orchestra's morale seemed to be low, the conductor encouraged players by saying, "it's only a week since we've played it. I know it's been raining, it's been dismal and horrible

weather, but we need a bit of bounce. Come on, get into it". When some parts looked slightly nervous about playing, possibly because the more trained players in their part was absent in that rehearsal, the conductor said, "we haven't got [Laura] here to help us tonight, but it shouldn't be a hindrance. We can do without that; we can do it". Occasionally, the conductor shared jokes or funny moments of his everyday life with the players, which also appeared to be effective in creating a relaxed atmosphere. Besides, during some playing moments, players also received the conductor's short encouraging comments, such as "lovely", "much better", and "jolly good", when they played something well as required.

Of these 51 instances, some of the conductor's speeches appeared to be motivational and instructive. Those instances were categorised as motivational comments and cognitive instructions, indicating probable enhancement of specific musical skills. Examples of this type of conductor's verbalisations are that "don't die when we get there, keep it up… make a real bird of those accents" ("Managing dynamics and balance"), "you guys in the middle are actually pushing us along…just giving us a little shove with the old boot, keep moving, moving you know" ("Playing rhythm, meter and tempo"), and "don't make it too laborious… just pop on the old train there and get into it" ("Musical sensitivity and musicianship"). It was apparent that the gentle humour conveyed through the conductor's use of metaphor and jokes seemed to work very well for most CAO players. It has not only turned abstract and intangible knowledge teaching into more amusing and accessible ways of communication, but also softened the blow of criticism to make the negative feedback more receptive to the players.

- *Players' Individual Practice, Peer Support and Note Taking*

Although the CAO rehearsals seemed to be conductor-dominated, three player-initiated strategies were observed, represented by 21, 12 and 7 instances, respectively. Players' individual practice was the most evident strategy (21 instances) among the three, referring to individual players making good use of any rehearsal gaps to practise the repertoire. Such practice is spontaneous and independent, although still situated in a group setting. It is important to note that the rehearsal gaps refer to those spare minutes between changing pieces, right after the conductor paused the playing, and those short moments when the conductor was talking to or working with other players individually. There were no short breaks or intermissions in the CAO rehearsals.

The majority of the 21 instances occurred prior to the group rehearsal of each repertoire. It seemed that some players had a habit of practising on their own before the group rehearsal began. This may indicate that a warm-up is needed for players to refresh their memories of the pieces, and such a quick run-through may also give them opportunities to tackle some problematic areas. In doing so, players may have had more confidence in playing when the rehearsal started. For example, in one instance, a player was practising bellow shakes while the conductor was looking for his scores for the subsequent repertoire with many measures of bellow shakes.

The other scenario of individuals' practice seemed to be players trying to fix playing errors during rehearsal gaps. This usually occurred as soon as the conductor interrupted the playing. While the conductor was pointing out problems or offering instructions and solutions, some players already started practising the problematic areas softly and even quietly (only finger moving without making noise), hoping that such immediate and quick exercise would allow them to solve the issue and make it sound better in the next playing attempt. For example, while the conductor was imitating the *glissando* and explaining how to achieve its ideal sound effect, one player was practising the *glissando* quietly over and over.

The 12 instances classified as "players' peer support" suggested that over half of the CAO players had experienced peer support during rehearsals. Such support ranged from general inquiries to specific musical knowledge sharing. Most of the instances seemed to fall into general inquiries, such as players telling their peers where in the music the conductor was returning to, or which piece the conductor decided to rehearse next when such instructions were somehow misheard.

Only four out of 12 instances appeared to be associated with developing certain identified musical skills. These skills were repeating musical sections, switching couplers and pitch accuracy. It was observed that some players were discussing the repeat signs in a piece of music and trying to figure out their order. When a player could not match the coupler names with the coupler after the conductor proposed using the "Bassoon" coupler, the other player sitting nearby provided timely assistance. In rehearsing Piazzolla's tango, as the music required, one accordion player was temporarily taking on a singer's role, and another was playing the piano to accompany the singer together with the orchestra. On that occasion, one

moment indicated that the “singer’s” pitch accuracy might have been improved by having the “pianist” play the note on the piano to help with pitching.

Players’ note taking was recognised as the least evident strategy in the observed CAO rehearsals. However, this is possible because some other note taking occurred at an individual level, in which cases what exactly was noted on the score was unknown and hence not part of the observation. The seven instances of note taking observed were more like collective phenomena, and in those scenarios, almost every player who attended the observed rehearsals was making notes on their music while the conductor was clarifying certain issues or making adjustments for the music.

Based on what the conductor was talking about, it was deduced that the notes made were related to dynamics and repeat signs. In rehearsal situations, it is normal that conductors want to change the dynamics and how a piece of music should be repeated. When this occurs, keeping a record of the conductor’s instructions, directions, solutions, and adjustments is important. During the CAO observations, there were times that the conductor forgot what adaptations had been done to the music, although rarely. With the notes being references, players, in turn, reminded the conductor of the changes that had been made, and they were likely to reflect on their notes and learn about adjusting dynamics and repeat management.

5.2.3 The Identified NBB Strategies

A thorough examination of the two observed NBB rehearsals revealed that 13 types of strategies were being employed in this brass band, as shown in Table 5.4. This table has the same structure as Table 5.3: for each identified strategy, brief definitions and the number of occurrences (instances) in the observed rehearsals are presented, and the 13 strategies are ordered based on the number of instances. However, where the tables differ, an additional strategy was employed in the NBB rehearsals, namely “the conductor taking a breath”.

Table 5.4

Identified NBB Strategies

Identified Strategies	Definitions	Instances
The Conductor Taking a Breath	The conductor taking a breath.	145
The Conductor's Cognitive Instructions (when not playing)	The conductor giving feedback, correcting playing errors, introducing concepts and teaching musical knowledge.	82
The Conductor's Other Troubleshooting and Adapting Music	The conductor identifying problems and offering suggestions, e.g. providing creative solutions for complicated issues such as adapting music.	74
The Conductor's Vocal Directions (when not playing)	The conductor directing players by (for example) singing and imitating sounds.	64
The Conductor's Gestural Directions (when playing)	The conductor directing players during playing through hand gestures and body movements.	63
The Conductor's Motivational Comments	The conductor motivating players by giving affirmative comments, such as the use of metaphors and jokes.	58
The Conductor Working with Individuals or Subgroups	The conductor working with individual players or small groups of players for a particular issue.	54
The Conductor's Vocal Directions (when playing)	The conductor directing players during playing by (for example) singing along and imitating sounds.	19
Players' Peer Support	Players helping each other.	14
The Conductor's Gestural Directions (when not playing)	The conductor directing players by hand gestures and body movements.	6
Players' Individual Practice	Individual players making use of any gaps to practise.	3
Players' Note Taking	Players making notes on their scores.	3
The Conductor's Verbal Directions (when playing)	The conductor directing players during playing with the use of words.	1

Of these 13 varieties, ten are conductor-led strategies, and three are player-initiated strategies. The three strategies initiated by NBB players and nine out of ten conductor-led strategies (except "the conductor taking a breath") have the same definitions as the CAO's, but the

number of occurrences is somewhat different. The conductor taking a breath was undoubtedly the more frequently adopted strategy in NBB rehearsals, with 145 instances observed. The conductor's cognitive instructions and other troubleshooting and adapting music were next most important.

A similar number of occurrences were seen in the other four conductor's led strategies, in the range of 54 to 64 instances. Compared with these core strategies, the employment of the conductor's during-playing vocal directions and players' peer support are relatively rare but still occurred slightly fewer than 20 times throughout the two observations. The least used strategies, however, are players' individual practice, players' note taking, the conductor's gestural directions (when not playing) and during-playing verbal directions.

5.2.4 Analysis of the Identified NBB Strategies

A careful analysis of each identified NBB strategy is given in this section, particularly focusing on the probable development of types of musical skills under each strategy. As with the CAO's analysis (Chapter 5.2.2), the 13 strategies manifested in NBB rehearsals were also categorised into four larger groups, according to when the strategies were adopted and who initiated the strategies. The first group comprises four conductor-led strategies: the conductor taking a breath, his other troubleshooting and adapting music, working with individuals or subgroups and motivational comments. The second group encompasses three conductor-led strategies during non-playing time: the conductor's cognitive instructions and vocal and gestural directions. The third group is composed of the conductor's during-playing directions, including gestural, vocal and verbal. Due to the small number of instances, the three player-initiated strategies will be discussed last in the fourth group.

- *The Conductor Taking a Breath, The Conductor's Other Troubleshooting and Adapting Music, Working with Individuals or Subgroups, and Motivational Comments*

Of all the strategies employed in NBB rehearsals, the conductor taking a breath has the highest number of occurrences (145 instances), in which nearly 90% were about the conductor taking a loud and exaggerated breath during his preparatory gesture (just before playing began) and the rest of the instances were about constantly breathing deeply during playing. The NBB conductor seemed to place a high value on inhalation. This was reflected

in his direct teaching of the importance of breathing together (analysed later in "the conductor's cognitive instructions") and in these 145 instances where he led by example.

As said earlier, the majority of the instances were about the conductor inhaling before playing began; such playing included the run-through of a rehearsed repertoire and sight-reading task and almost every playing attempt of the conductor working with individual players/parts for specific issues. On each of those occasions, the conductor first looked around to see if every ensemble individual was ready to play. Once this was done, he took a deep breath while giving the preparatory beat to indicate that players should come in immediately. By implementing this strategy, it was noticed that most of the time, players blew the first note together and achieved a synchronised start. It was also observed that some players started mimicking the conductor's exaggerated inhaling during the preparatory beat. In the long term, it would seem positive that more players may develop a habit of "breathing before playing" (one of the identified musical skills) if this strategy is employed at this rate.

The remaining instances of the conductor's deep inhaling showed that the conductor also tended to breathe between phrases or sections while the band was playing, potentially influencing players' synchronisation and musical phrasing skills. Some players may understand the significance of breath management in brass playing, but they might be confused about when and where to breathe out, especially when playing in an ensemble setting. One's abrupt breath (such as breathing in the middle of a phrase) not only breaks the flow in his or her playing, but also undermines the clarity of ensemble sound (Alsop, 2018, p. 5). In the NBB rehearsals, the conductor's phrasing seemed to set an example for players to follow and develop their phrasing skills. Again, when most players follow the conductor's phrasing, a more synchronised performance may be achieved. However, there is also a possibility that players become reliant on the conductor's breathing in to do phrasing, especially when they are situated in a community band where learning musical knowledge and skills might not be the top priority.

The frequent employment of "the conductor's other troubleshooting and adapting music" was observed in NBB rehearsals. A total of 74 instances indicated that a range of issues had been identified and troubleshot, including pitch accuracy and intonation, dynamics and balance, synchronisation and phrasing, rhythm, meter and tempo, as well as musical sensitivity and

musicianship. Through the conductor's troubleshooting, players' knowledge of the above aspects and skills in performing them were likely to be increased.

As NBB has a large number of players, the way that the conductor tended to use to identify what the problems are and which particular part(s) is the source of the problem is by having each part play individually or by asking for a particular part(s) to repeat (a more specific analysis of "the conductor working with individuals or subgroups" is provided next). For instance, the conductor once asked the cornets, the flugel and horns to redo a section because he could barely hear their melodies during the whole band's playing. When hearing an inaccurate chord, the conductor asked different parts to play their note (of that chord) individually to identify whose pitch and intonation went wrong. With the same approach, the conductor could also identify who did not play as written (e.g. holding a note long enough), which resulted in unexpected overlapping between parts.

The conductor proposed creative solutions when encountering more tricky problems, such as pitch and intonation issues. In one of the repertoires, after identifying what part was responsible for the off-tune sound, the conductor diagnosed the issue as players having a tendency to change pitch when changing dynamics. In the conductor's words, "when you start getting louder, you tend to blow sharp... when you starting [to be] quiet, tend to go a bit flat". For this, the conductor suggested, "we just need to be aware of that. So if we're aware of that, we can start thinking, okay, I'm getting louder, it's gonna be sharp, so I wanna lip it down a bit".

In addition to "being aware", the conductor conducted a "three-step" exercise with each individual part, one after another. This started with blowing a note in *pianissimo*, then the same note at double *forte*, and finally doing a *crescendo* (from *pianissimo* to *fortissimo*) on this note over four beats. As a result, players' intonation sounded more accurate and stable during dynamic changes as they were "forced" to think carefully about remaining their pitch while the dynamics went up and down. Once the conductor was satisfied with the result, he proposed to redo the whole section where the intonation issues occurred because "if [they] can do it in isolation, there's no reason [they] can't do it in context".

A subdividing exercise was provided as another creative solution for the band's synchronisation issues in one of the repertoires. This exercise was believed to be useful in

keeping every part playing together. The conductor said, “we gonna do an exercise to force you to subdivide. You gonna play everything as quavers. So if you got 1 crotchet, it means you play two quavers, for the same amount of time. So dah dah dah (the conductor singing the melody in changed rhythms) … very metronomic, which is not how we gonna play it, but the purpose of this is to get us playing together”. In another scenario where some players seemed to struggle with playing a 12/8 section, the conductor suggested that they play it in 4/4, essentially a slow-down version of 12/8. Until every part could play the section in 4/4, the conductor asked players to redo it in its original meter, 12/8.

Furthermore, a number of instances indicated players’ contribution to the conductor’s troubleshooting and adapting music. It was observed that some more experienced players offered their opinions on whether the rhythms were accurately played; if a “trill” should start on the top note or the bottom; whether some notes should be played not entirely straight in a particular style (“Musical sensitivity and musicianship”); and which part seemed to be holding back and behind the overall tempo. On one occasion, for the band’s top and bottom ends to be synchronised, the conductor decided to work with the two ends separately, asking the bottom parts to play while the percussion played the rhythm of the upper parts. This case also suggested the percussion’s input in helping other parts fix their out-of-sync issues. Besides, the percussion player was observed to help the conductor address a misprint for one of the pieces.

The instances also suggested the conductor’s adapting music to suit his preference for dynamics and balance. For example, when a *crescendo* was marked on a long ending note, the conductor asked players to play it in a non-linear fashion. To adjust the balance between parts, the conductor said to the two euphonium players that they “just [need] one euphonium through there”; likewise, when the flugel was playing solo on an Intro, the conductor’s suggestion was “with the solo line, just ignore that *pianissimo*, think of it more *mezzo piano mezzo forte*, just bring it up”. Adaptations to tempo and pitch were also made to match the conductor’s preferences. In one of the pieces, the conductor said to some parts, “you’re better off playing that at that tempo”, and “if [those notes] are not speaking, I’d rather [you] take the A flats up an octave than as written”.

“The conductor working with individuals or subgroups” occurred 54 times, mostly to identify and address musical issues that some players faced in rehearsals, such as pitch accuracy and

intonation, and synchronisation and phrasing. Examples of working with individual parts to identify, diagnose and resolve these issues have already been examined earlier in detail in the analysis of "the conductor's troubleshooting and adapting music", such as the "three-step" exercise for pitch and intonation and the case of the percussion's involvement in helping to address unsynchronised tunes.

Also as evidenced in the instances, when some parts' dynamics and accentuation were performed not to the conductor's standard or rhythms were not precisely accurate, those players were pulled out to play (although still in a group setting) individually until the issue was resolved. Likewise, some players were asked to play through a section individually a few times to achieve the preferred march style, with the crotchet being long and the quaver being short (more details of this instance are provided later in Extract 5.3). Overall, it was observed that the targeted training with the same subgroups was either no more than two minutes or fewer than three repeats.

NBB rehearsals are usually two hours long. In order to keep players engaged and motivated, the conductor regularly made motivational comments to show that he was paying attention to the various parts. The 58 instances of this strategy indicate that players may receive these motivational comments at any point of the rehearsal. These comments may be important to players because they confirm whether players' performance was acceptable or not. When players were encouraged to keep doing it, the acquisition and enhancement of the related musical skills seemed foreseeable.

Most of the motivational comments were timely recognition of players' improvement, which were very specific in that the conductor explained clearly why the playing was good. For example, players were praised several times for being aware of listening to their peers, which helped them adjust their tuning and play in time with others. The conductor's original quote went like this: "You know what, that (referring to players' intonation) was way way better, a huge improvement over what we did at the start, and that was together. I think you're aware of it, you're listening and adjusting, that's what we want. Fantastic". In these instances, players are likely to deepen their understanding of the interrelatedness of engaging with peers' performance, pitch accuracy and intonation, and synchronisation and phrasing, and carry on engaging with peers' playing and thinking about pitch and be in sync. These were

the things that had been emphasised in the NBB rehearsals, in the conductor's words, "playing together, play in tune, that's the basics of brass banding".

In addition, players were also praised for watching the conductor, the musical sensitivity and musicianship revealed in their playing and the management of dynamics and balance. Examples of these affirmative comments include "so half of you were watching, well done that half"; "band, really good accompanying there, keeping well under the horns there, good balance"; and

> Nice style! The stuff I keep saying at the start of every band practice is finally starting to embed because you played lyrically, you played like you would sing it"; and "dynamics, we adhere to that. Previously it had just been all the same, sort of level blat, but now you came down to *mezzo forte* and then you came back up to *forte* where appropriate.

On another occasion, players' hard work on a sight-reading task was recognised, especially how the rhythms and articulations were played, as the conductor said, "some pretty good reading through there. Good rhythm (pointing at horns), that was accurate, even down to the *staccato*s".

A number of instances suggested that sometimes such comments could be simpler, acting as brief confirmations of the sound that players (either one player/part or the whole band) produced. For instance, the conductor said, "I wanted to run through to see what your standard is like, so beautiful sounds, nice, well played, I can't say anything more than that"; "some really lovely sounds coming out of the trombones there. That's what we want, well done". In very rare situations, the conductor was observed offering one-word comments during run-throughs, such as "good" to praise the overall sound of the band, "better" for players' improved singing ("Musical sensitivity and musicianship"), or simply a thumbs-up for coming in at the right timing ("Synchronisation and musical phrasing"). The motivational comments provided prior to playing were observed twice, appearing to be lightly teasing players between the gaps of changing pieces. Although those comments may not necessarily facilitate the development of certain musical skills, they might have helped lighten players' moods, making them more engaged in this collaborative music-making process.

- *The Conductor's Instructions and Directions (When Not Playing)*

Of the three types of the conductor's instructions and directions employed during non-playing periods, cognitive instructions seemed to be the conductor's most preferred strategy,

which was used for assessing and correcting playing errors and teaching musical knowledge and concepts. By analysing the 82 instances under this category, it is recognised that these verbal-based instructions mostly appeared after the ensembles' playing attempts but occasionally occurred before playing. Besides, they were used singly in most of the cases. Sometimes they were applied in conjunction with vocal directions, but the chances of using them together with gestural directions were rare. Musical skills that may be gained or advanced through the implementation of cognitive instructions appeared to be synchronisation and musical phrasing, breathing before playing, watching the conductor, engaging with peers' performance, managing dynamics and balance, playing rhythm, meter and tempo, musical sensitivity and musicianship, pitch accuracy and intonation as well as articulation skills.

Around 40% of the total instances were related to correcting players when they were out of sync with each other and providing general guidance on how to remain in sync. Typically, when some players failed to come in on time, the conductor paused the playing and said, "okay, together", implying a restart from the top and taking special care to come in together. Practical guidance such as "breathe together, so we could play this first note together" was also given, and this may help players gain a better understanding of the close relationship between "synchronisation and musical phrasing" and "breathing before playing". Once this concept has been introduced, a habit of "breathing before playing" will likely be formed, and players' synchronisation and phrasing skills may be enhanced.

Likewise, the interrelatedness of synchronisation, watching the conductor and engaging with peers' performance was also reflected in the conductor's cognitive instructions. When players were out of time with each other, the conductor said, "I need you to watch and change note at the right time… listening in and also watching, so we're moving together". Such instructions were essentially concept teaching, helping players establish connections between musical knowledge and increasing the chances of players paying attention to the conductor and actively listening to their peers in future rehearsals.

Other guidance offered in improving synchronisation includes subdividing rhythms and playing as written. On one occasion, the conductor said, "we need to come off together after the first beat of bar 36", and to do so, as the conductor instructed, "you need to be thinking, one and two and three, and one and two and three, and one and two off", because subdividing

rhythms is “the only way [we] gonna be together”. In another scenario, the conductor proposed to “play exactly as written to keep the style consistent”, because when each note is being played straight (full length) with neither more or less, the band is more likely to move together.

In some cases, it was also noticed that the conductor’s criticism was expressed in “a positive manner” with the conductor’s rational understanding of the difficulties that players were experiencing (Bonshor, 2017). When one of the players came in a bar earlier, thus not in sync with the rest of the band, the conductor paused the playing and said to that player, “Luca…your note are weird the accents I’d say…don’t listen to them [other parts], they’ve got the off beats and they’re throwing you”. The conductor also seemed to be very careful with his tone when offering “negative” comments, such as “the bottom of the tune was slightly behind”.

Besides improving the synchronisation of the overall sound, there was one particular instruction worth mentioning because in which the conductor provided players with practical guidance on how to do phrasing in hymns. On that occasion, the conductor interrupted players in the middle of their run-through and suggested, “we’re keeping this very simple… into B there, we’re not doing a big gap, it’s just carry on. Take a breath at the end of that fourth bar if you are carrying it on, so nothing overly complicated”. This cognitive instruction gave players an idea of where exactly and when to breathe for this particular piece, and quite possibly, the player may have generalised phrasing from this example to other hymns.

Nearly 20% of the instances of cognitive instructions were about assessing and correcting dynamic errors and developing players’ dynamic concepts. For example, the conductor once pointed out that the dynamic was “a bit tentative” (not loud enough), there was no difference between *mezzo forte* and *piano* in the band’s playing, and a common tendency for players to decrease the volume when the melody line goes down. When hearing imbalanced volume between different parts, with the aid of the full score, it was easy for the conductor to explain to the players the written dynamics marking of each part and make an adjustment. For instance, the conductor said, “it’s only *mezzo piano* for most of us. The cornets, flugel and euphoniums are *mezzo forte*, so everyone else don’t try to match them”. One of the examples of explicitly teaching dynamic concepts was the conductor describing the volume of *mezzo forte* as “full and rich, not quite *forte*, but a nice comfortable volume”.

Furthermore, a limited number of instances suggested a possible acquisition of musical sensitivity and musicianship through the conductor's combined use of cognitive instructions, vocal directions and gestural directions. Examples of learning from those combined strategies are provided later on pp.158-159. It is important to mention here that to save the trouble of reteaching the same idea whenever a similar musical style is encountered, the conductor introduced a concept of "thinking over before blowing the instrument". This possibly has raised players' awareness of stylistic playing and thus improved their musical sensitivity. As the conductor said, "you'll notice something we're doing from our own is we're getting picky, thinking about details. So when you're playing, just think, oh, what style should I play, what dynamic am I, maybe I should play that. Think of those things in advance before I point them out".

Pitch and intonation accuracy were also assessed and cognitively instructed many times in the NBB rehearsals. Two main instructions, "doing buzzing exercise" and "playing what is written to sing", were provided to improve players' tuning accuracy when the band sounded out of tune. A buzzing exercise was requested when playing "Nearer my god to thee", a classical Hymn from the Hollywood movie "Titanic". The conductor said, "now what we gonna do… is we gonna buzz it. So mouthpieces out, you've got the tune you know how it goes, most of us have seen Titanic". After buzzing, the conductor asked players, "who can tell me what the whole point of this was, with the buzzing?" One of the players answered, "thinking about pitch". The conductor showed agreement and added, "the other thing it does, of course, is it makes you use more air. So it makes you think about air and how you use air".

When playing one of the brass band classics, "When the saints go marching in" (arr. G Richards), the conductor was not satisfied with the vocal singing section because it was sung slightly off tune. To which the conductor assessed, "we can sing better than that, that was awful", and then he suggested that players should play the singing section instead of singing to "get the pitch". Both exercises were introduced in a way that encourages players to think about music and develop a concept that they may be able to transfer from one piece to another. In short, players might have framed a concept that they could use these two exercises to adjust their intonations in future when encountering similar situations.

In addition, cognitive instructions were also applied to assess and correct unsatisfactory rhythm, meter and tempo in the band's playing. When some players were rushing, the conductor said figuratively, "be careful not to get away on me. When we come back into the full tune at L, just crept ahead, slightly more than I was comfortable with". In rare cases, cognitive instructions were also adopted to correct players' articulation errors, such as the note duration, when it was not properly performed.

Finally, there were a few cognitive instructions that the conductor's intentions were unobservable, so it was not possible to link those instances to the probable musical skills development at this stage. Such instructions were typically provided at the beginning of the rehearsals before the first piece run-through started. As the first repertoire was always a hymn, the whole band (except the percussions) was cognitively instructed to blow the last chord or note of the piece until the conductor was satisfied. In the conductor's words, "can I just have the last chord, please, just as a pause *mezzo forte* down an octave" and "let's try that note again. That didn't quite sound right". The intention of implementing such "last note/chord" exercises was set to be further explored in focus group interviews.

In addition to cognitive instructions, vocal directions were adopted frequently (64 instances) in NBB rehearsals, primarily as post-playing feedback and occasionally as pre-playing demonstrations. It was also realised that vocal directions were often used in conjunction with cognitive instructions and during troubleshooting and adapting music to a) direct players' attention to where adjustments were needed, and b) demonstrate the unsatisfactory sound that the band had produced and the desired sound that the conductor was expecting. The exact uses of vocal directions were also observed when the conductor worked with some individuals or subgroups. However, vocal directions were rarely used singly or adopted together with gestural directions.

Of the 64 instances, slightly more than half the number were about the conductor using vocal imitations to draw players' attention to where the errors occurred, and these observed errors seemed to be unsynchronised playing, inaccurate rhythm, meter and tempo, lack of musical styles ("Musical sensitivity and musicianship"), and unsatisfactory dynamics and balance. The other half the number showed that vocal directions were also employed to demonstrate the conductor's intentions, hence more accessible to players of different levels. Instructions that had been further illustrated via vocal directions were related to synchronisation and

musical phrasing, playing rhythm, meter and tempo, articulation skills, managing dynamics and balance, pitch and intonation, as well as musical sensitivity and musicianship (as discussed in the analysis of "cognitive instructions").

When players were interrupted due to unsynchronised playing, the conductor sang the melody of different parts and demonstrated what adaptations one could make to fit in with the others. On one occasion, the conductor seemed to enjoy the style the horns had played, so he suggested the euphoniums and the tuba also shorten their notes to match with the horns' "that sort of lilt". To demonstrate the "lilt", the conductor imitated the horns' playing by singing. The conductor also sang the tuba's notes in the desired length to clarify exactly how short he wanted them to be. In some instances, vocal directions were adopted to demonstrate the differences between what the band had played and what the conductor desired to hear. For example, when playing a slow piece of music, players were out of time with each other because they changed their valves at slightly different timing during chord changes. To fix this issue, the conductor first pointed out that he wanted "each change to be clean" without "slides between notes". Then he sang the ideal sound of chord changes and players' unsynchronised version for them to compare before redoing the phrase.

In addition, vocal imitations were employed to demonstrate inaccurate rhythms or tempo, pitch and intonation, inadequate accents and note duration ("Articulation skills") and dynamics. For instance, when the tempo was getting slow, the conductor paused the playing, explained in words that "[at] D we build up, and so now the tempo just doubles", and then sang the melodies at doubled speed to show the players how fast it needed to be. When intonation was not very accurate, the conductor imitated the off-tune sound and asked players to restart. Likewise, with articulation and dynamic errors, vocal imitations were provided to show the degrees to which the notes needed to be lengthened and accented and how loud a musical phrase needed to be played.

Gestural directions provided during non-playing time were only observed six times throughout the two rehearsals, and this strategy mostly occurred after a playing attempt. An analysis of these instances showed that gestural directions were used during troubleshooting and working with individual parts or employed with cognitive instructions and/or vocal directions to indicate the conductor's wanted style and effects. In fact, they never appeared singly.

In one of the instances, for example, the conductor used hand gestures to depict a "linear" *crescendo* and a "non-linear" *crescendo* as his way of troubleshooting. According to the conductor, a *crescendo* in "a linear fashion" is what players usually do: "start building straightaway" after seeing the marking and increasing the volume gradually. However, for a *crescendo* marked in the ending of a hymn, the conductor wanted it to be played differently; in other words, in a non-linear fashion. While the conductor explained these two ways of playing a *crescendo*, his gestures were involved demonstrating the differences. The conductor's original quote was, "we gonna hold off that *crescendo* [in bar 53], so I don't want that increase to be linear (gestures motion shown in Figure 5.5), I want it to be like that (gestures motion shown in Figure 5.6), so most of the *crescendo* should happen... all of a sudden in late bar 55".

Figure 5.5

"Linear" Crescendo Gestural Movement

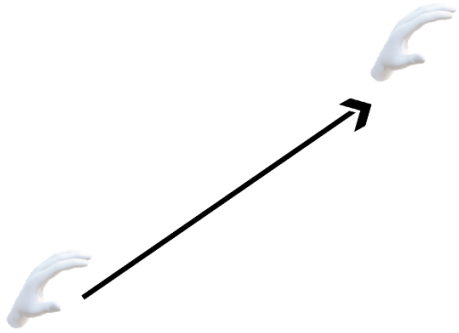
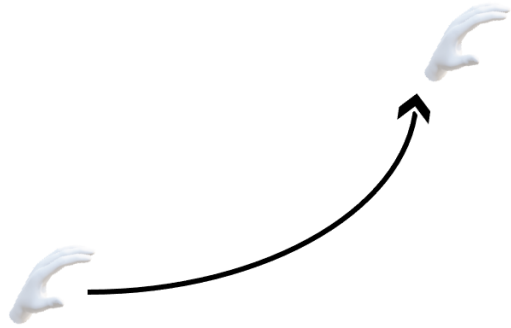


Figure 5.6

"Non-Linear" Crescendo Gestural Movement



Some examples of the conductor's joined uses of gestural directions, vocal directions and cognitive instructions were presented below in Extracts 5.3 and 5.4. In these instances, the conductor communicated his preferred musical styles, through which players were likely to extend their knowledge of stylistic playing hence a probable development of music sensitivity and musicianship.

Extract 5.3

A Combination of Cognitive Instructions, Vocal and Gestural Directions

The conductor (post-playing)
[00:50:12] Yeah, that's better, that's much better. And the other thing we can do, if we remember, is in a March in general, the rule is a quaver is short and a crotchet is long.
[00:50:23] So dah dah dah… *(singing the phrase with desired style while using his arms to indicate the length of the notes)*
[00:50:28] So you think, you know, short, short, short, long, short, short, short, short, short, short, long. That might help too.

Extract 5.4

A Combination of Cognitive Instructions, Vocal and Gestural Directions

The conductor (post-playing)
[00:57:03] Once we go into this 12/8 bit, we need that sort of… snap, crackle and pop, if you'd like.
[00:57:09] So we just have this this, dah dah dah… *(singing the phrase in a relaxed and delightful style while his body swaying gently)*, very sedate, very lovely;
[00:57:14] Yum bah dum… *(singing the phrase in an invigorating style while his body moving rhythmically)*, it's double forte, it's high energy;
[00:57:18] There's lots of effects…
[00:57:20] Dah dah dah *(singing the phrase in a strong accented style while his body leaning forward)*, that sort of effect.

Such joint uses of instructions and directions not only appeared as post-playing feedback, but also as pre-playing teaching. For example, before a run-through of "Hey Jude" (arr. D Broadbent), the conductor reminded the band about the desired style of this piece: "so the main point with this one to remember… is the style doo da doo (the conductor imitating the rhythm with his hand stressing on each beat)". Likewise, for the piece "Intermezzo" (P Mascagni), the conductor offered the first solo cornet thorough and practical guidance on the style as they had to play the opening alone. The conductor said, "take your time over the 5/4s, di dah yah (the conductor singing the Intro phrase with his baton moving rhythmically), don't feel rushed. It doesn't have to be the strict tempo through there, as what I've said before, this

is a wishy-washy handwavey Italian operatic stuff, so be as gooey as you like. I'll just hold it there, and come down, start the next bar with you".

- *The Conductor's Directions (When Playing)*

In the three types of the conductor's directions observed during playing, gestural directions seemed to be the most frequently adopted strategy (63 instances). These gestures may represent the original intention and requirements of the compositions and the conductor's interpretations of the music, specifically his desired ways of playing and presenting the music. The instances suggested that gestural directions were often used singly to indicate synchronisation and phrasing and changes in dynamics, tempo/meter, articulations and musical styles (music mood). However, in occasional situations (eight out of 63), the combined uses of gestural and vocal directions were also observed. The analysis of such uses is provided next on p.161. There was no observed evidence of the joined use of gestural, vocal and verbal directions while the band was playing.

Gestures appeared to be very useful in directing synchronisation and phrasing. During playing, it was noticed that the conductor gestured to different parts to come in or to stop. One instance showed the conductor gesturing to the tuba player to pause as his part has a bar off. The degrees of loudness and softness (dynamic changes) was also indicated by switching between conducting pattern size. When the melody built up towards a rousing climax, the conductor's gestures gradually moved a greater distance and became larger in size. On the contrary, as the melody went down, the gesture size shrank with very little strength. For those repertoires that seemed to have many movements or passages, and the meter (time-signature) sometimes varied, the conductor's rapid changes of rhythmic patterns were also observed several times. Additionally, tempo modifications were indicated by the conductor's increased and decreased speed in waving his hands or baton.

Compared with dynamic, meter and tempo changes, some of the signals for articulation changes appeared to be subtler in the conductor's hand gestures but still observable. For example, when indicating *legato*, the conductor waved his baton or hands smoothly and fluidly, in a curved and continuous motion. When playing a march (*staccato*-ish), the conductor's hand gestures became "snappy" and energetic, with a brief stop on each count. There were also times the conductor slightly held on to the count to indicate a *tenuto* note and much longer for a *fermata*/pause. Of all observed articulation effects in the brass band, the

signal for accentuation was mostly obvious as it was indicated through thrusting–"a sharp motion toward the players" with "the tip of thumb and index finger together" (Rudolf, 1980, p. 197).

In addition to hand gestures, the conductor's distinctive body movements also conveyed the style and character of the music. For instance, when the band was running-through "Hey Jude", at a point, the conductor wagged his head with the rhythms in the style that he described as "doo da doo". Another time when rehearsing "Intermezzo", the conductor seemed to be entirely immersed in its "gooey" (the conductor's original word for its style) tune with his body gently swaying with the music. The conductor was also observed to sway with the lively "minuet" rhythms while the band was playing the third movement of "A British Isles Suite" (J Bates). If players had, by chance, noticed these signals during playing, they would have gained an idea of what kind of emotions were supposed to be expressed. As a result, players' sensitivity to music and musicianship may have been gradually developed.

The observations also indicated that vocal directions were adopted only 19 times. In 15 out of 19 instances, vocal directions were provided to remind players of the details in the music and reinforce the conductor's requirement. Half of these instances pointed to the combined employment of vocal and gestural directions in improving players' articulation skills and synchronisation. For example, when the band was playing an energetic piece called "When the saints go marching in", the conductor was observed to sing the accented notes quietly while using both his hands for some thrusting motions to emphasise those beats. In other cases, the conductor's soft singing occurred almost simultaneously when a "coming in" gesture was made to bring a part in. In those instances, as the conductor's singing was either quiet or soft that most players might not have heard, it was deduced that most players noticed the conductor's simultaneously occurring gestures to produce desired sounds. This was evident in the band's overall sound being accented and in sync, as the conductor indicated.

In the other half number of the 15 instances, vocal imitation was used singly for directing synchronisation and rhythm/meter/tempo. In those cases, the conductor's singing was believed to be loud enough to be heard by the players, so it may have worked effectively to bring different parts in and reinforce how the rhythms should be played. For example, while the band was playing, at one point, the conductor suddenly sang the two beats of the tuba's

part as a way to bring the tuba player in. In order to reinforce players' sense of 12/8 rhythm, the conductor counted 12 beats to help players subdivide the rhythms during playing.

A few remaining instances of the conductor's during-playing singing appeared to express his feelings towards the music. In those cases, the conductor almost seemed to lose himself in the music that he could not help singing along and whistling the tune. This kind of vocal direction might have stimulated players also to make an attempt, to feel the music and express their emotions. In addition, players' sensitivity to pitch and intonation might have been improved when vocal directions were implemented to measure pitch. This instance occurred during some individual pitch correction moments where the conductor asked each part to blow a note to identify whose tuning went wrong. At one point, while the cornets and horns were blowing the designated note, the conductor sang the note in its accurate pitch to indicate the difference between the two. This has not only helped the conductor to measure players' intonation but also provided an opportunity for players to listen and discriminate the pitch differences.

Throughout the two observations, during-playing verbal directions was only observed once with no accompaniment of other directions. During the last playing attempt at the end of one rehearsal, some players looked a little tired and distracted. The conductor said "to coda" to direct players to jump to the ending phrase of the piece. Based on the limited number of its occurrence and the context of this particular instance, it is speculated that verbal direction is not one of the commonly used strategies in NBB rehearsals, and it was possibly used at that particular point to call players' attention to the unfinished playing and remind them where to go.

- *Players' Peer Support, Individual Practice and Note Taking*

The three types of player-initiated strategies were also observed in NBB rehearsals. Compared with most of the conductor-led strategies, the applications of player-initiated strategies were far less frequent. Even for players' peer support, which seemed to be the most evident of the three, it was only observed 14 times in total. Of the 14 instances, three were about players discussing key changes and giving each other advice on pitch accuracy and intonation. For example, during a fast-paced piece, one of the players appeared to be struggling with pitch and intonation. Once the run-through finished, this player asked for

advice from another player sitting next to who seemed to be warm-hearted to share specific knowledge and skills of blowing those notes at the accurate pitch.

The remaining instances showed that things being discussed or addressed between players might be more general. These include players of the same part talking about the part, repeating a conductor's instruction to one another when it was somehow misheard, helping neighbours look for music scores, and sharing personal understandings of the conductor's hand gestures with each other. Additionally, during the conductor's troubleshooting, when some parts were asked to play the phrases individually, the percussion player beat out rhythms on the percussion instruments to accompany his peers, without being asked by the conductor. Although musical skills acquired through such peer support may be limited, this gesture of goodwill might have made players feel supported and the band a cohesive team.

Players' individual practice was only observed three times, with two instances occurring at the beginning of the two rehearsals, even before the run-through of the first repertoire. These occurrences may be understood as players' common habit of warming up the instruments and preparing themselves for the rehearsal. The other instance occurred right after a playing attempt was interrupted. Before the conductor directed players to the inaccurately played rhythms, the percussion player had already begun his practice of those problematic rhythms. It seemed apparent that the percussion player was aware of the issue and intended to fix it immediately. By implementing this strategy, playing errors might be rectified, and players might deliver a better performance in the next run-through.

In ensemble rehearsals, making notes of the conductor's feedback is useful, as notes may stay as a permanent visual record while players are not likely to remember everything being said and adjusted during each rehearsal. In the NBB rehearsals, three instances were observed where most players took notes while the conductor gave instructions and made adaptations to the music. One of these cases was when the conductor cognitively instructed players to control their tempo and "not to get way on [him]". The other two collective note-taking phenomena were associated with the conductor's decision to change a *crescendo* to a non-linear style. In addition to these, there might have been some other individual note taking but this was not part of the observation.

5.3 Players' Conceptualisations of Ensemble Musical Experience

This section addresses the third research question by outlining ensemble players' conceptualisations of many aspects of their ensemble rehearsals, with a particular focus on their thoughts about musical skill acquisition in ensemble rehearsals. Due to the nature of the semi-structured interviews, some aspects other than musical experience arose and thus were explored in the focus group interviews, such as the human, social, emotional, and psychological aspects. All these aspects may have formed the basis of how players view their ensemble musical experience; indeed, they are all part of this ensemble experience.

The specific interview questions that were asked in the focus group discussions have been presented in Appendix I, J, K and L, corresponding to the four focus group interviews (i.e. CAO1, CAO2, NBB1 and NBB2) respectively. These questions covered a wide range of topics that most of the identified musical skills (presented in Chapter 5.1) and strategies (presented in Chapter 5.2) had manifested in the observed rehearsals were discussed. For both ensembles, all the responses from those questions gained in the focus group discussions have effectively formed themselves into a list of extensive and abundant emergent themes, and nothing relevant has been omitted. These emergent themes have then been categorised into the following five overarching themes:

- the ensemble experience–playing and learning in a group,
- receiving instructions and directions from the conductor,
- surviving the ensemble experience,
- lifelong learning and development,
- the social experience of ensemble participation.

It is noteworthy that these five main themes are somewhat inevitably overlapping. For example, receiving instructions and directions from the conductor is part of the ensemble experience, and lifelong learning and development are possibly credited with playing and learning in a group. Essentially, the last four overarching themes are part of the first theme–the ensemble experience but with a different focus. This explains why some of the emergent themes were coded into one or more overreaching themes based on the nature of the emergent themes. The result of this coding and analysing process are presented in Appendices M and N. The analysis of interview data is therefore carried out in a manner that all the emergent themes are reported under these five main categories. It should be noted that

a different researcher might have different ways of grouping the emergent themes so that the final overarching themes might be somewhat different.

5.3.1 The CAO Players' Conceptualisations

Through analysing the data gathered from the two CAO focus group interviews, a list of themes emerged under a total of 21 interview questions and subtopics has been compiled and classified into the five overarching themes, as shown in Appendix M.

- *The Ensemble Experience–Playing and Learning in a Group*

At the beginning of each focus group interview, interviewees were asked to share how they felt about their ensemble experiences in general. All six players who participated in the focus group interviews claimed that playing in an accordion ensemble such as the CAO is a different experience compared to playing solo. Due to a lack of confidence and competence in accordion playing, the interviewees thought that playing a solo can be a very "daunting" task, whereas they felt less likely to worry about things such as getting lost when playing in the ensemble setting, because they "get cover from everyone else". Additionally, playing in an ensemble provided an opportunity to play various music styles, because the repertoire that the conductor selected may differ from what players usually played.

Apart from the "advantages", playing in an ensemble also has its specific demands. Four interviewees referred to the need to listen to and work with other ensemble players, because most pieces have several different parts. While the players stressed the importance of engaging with peers' playing, the conductor seemed to have a different focus of interest. When asked to recall what musical aspects the CAO usually works on during rehearsals, almost all interviewees immediately referred to dynamics and balance. Some interviewees believed that the conductor's strong focus on dynamics was due to his brass background. From their long-engaging experiences with the CAO, every conductor they have encountered is different in that each has different conducting styles and focus of interest. In addition to dynamics and balance, two interviewees mentioned that synchronisation had been addressed from time to time in CAO rehearsals, that "being consistent with each other... being on beat".

Among all the identified musical skills discussed in the interviews, "synchronisation and musical phrasing" and "engaging with peers' performance" were repeatedly emphasised by

the interviewees. When asking interviewees' thoughts about synchronisation in ensemble playing, all interviewees were unanimous in the view that it is the "most important thing". As Freya put it, the ensemble performance would "just sounds like a dog's breakfast" without synchronisation, because the arrangement of the ensemble repertoire is usually that every part is interlaced with each other, and many things are happening at the same time. If one does not play his or her part as written, for example, "hold [a note] a little bit longer" as the music required, it may "disrupt the whole sound effect".

However, in reality, since most CAO repertoires have many parts and players are of varying levels (ranging from self-taught level to the top grade in New Zealand), expecting everyone to play the same and every part to play in sync are very difficult to achieve in a group size like the CAO, according to some interviewees. An outspoken respondent commented that the CAO's weakest point is synchronisation. Another respondent also voiced a concern about whether the CAO players understand what the conductor's job is:

> We each have our own internal beat system... and then when you come together, you've got to alter so that you have the collective metronome, and that's meant to be the conductor. But not everybody watches the conductor... they're there as players, they're not there as orchestra members... they're so focused on playing and on getting it right or not getting it wrong... And they don't always realise that they're part of something and then they're not listening to other people... I don't think people do it deliberately, and it's just not a skill that they've learned.

This view was echoed by many other interviewees, whom all proposed that the CAO should devote more rehearsal time to synchronisation issues than they currently do, and many felt that additional sectional practice would address this problem. When asked to specify more clearly the meaning of "sectional practice", they said, "each part doing practice on their own, it's like all Seconds together or Fourths together or Firsts together... and then bring it together once you know that everything is tight".

The interviewees were also shown a video clip that portrays themselves playing in sync without having the conductor holding a baton in front of the orchestra to keep time. In those rehearsal pieces, the conductor played the tuba along with the bass accordion player to accompany the orchestra, and as an alternative, one of the leading CAO players was assigned a temporary role to give preparatory beats. When interviewees were asked how they managed to play in sync at those moments, all interviewees owed their success in synchronisation to

engaging with peers' performance. This engagement was referred to listening to other peers, particularly the bass accordion and the conductor's tuba sound.

The respondents recalled that they generally would follow the bass accordion, whose role is to keep the orchestra in time. However, for those pieces shown in the video clip, the conductor's tuba sound is what they primarily followed, which can be seen as a different way of the conductor beating time. When they listened to the tuba sound and followed its beat, they knew they would be at the right speed because the tuba sound was prominent, loud, and kept in time. As for the preparatory beats given by that particular player, one interviewee stated, "I did not find being counted in like that helping at all".

Some respondents considered other factors that may also be responsible for this synchronisation under "the absent conductor". One believed that knowing the pieces well was a prerequisite because a sense of rhythm about those pieces may have already been developed through repetitive ensemble practice and rehearsals. Other respondents regarded the complexity of the pieces as a factor. They thought that if the piece is too complicated, such as frequent tempo changes, it would be difficult to achieve a synchronised sound without being conducted.

As demonstrated in the above case, the impact of engaging with peers' performance on synchronisation was obvious and mostly agreed upon. However, being able to listen to peers is not a skill that one can take for granted, and instead, it takes years of ensemble engagement and experiences to be trained, said one of the more senior members. In this respondent's words, "I intend to listen to the other parts and things. I think it's because we've been playing so long in the orchestra, like some of the newer ones probably don't take notice". This view was echoed by other respondents in the same group, who defined listening to other parts as an essential lesson that one needs to learn when playing in an ensemble. The point of "listening" is to "keep in with what's happening", and when every ensemble member listens to each other, they will likely "keep together as a cohesive group".

The above viewpoints provoked a lively discussion. The interviewees began to illustrate why listening to peers' performances is crucial in CAO rehearsals. The main reason reported was that there is a difference sometimes between what the conductor is conducting and what the orchestra is playing. The reasons behind this might be a) "not everybody watches the

conductor", and some people focus too much on their own playing; and b) "it's hard for the conductor to pick up everything", meaning that the conductor's directions do not always aid the performers. Such discrepancies, when occur, require a player to "listen to what's going on" in the ensemble and "play to what the orchestra is doing instead of with the conductor", in order to "keep in and to make the whole thing work". This is because, again, the ultimate goal of ensemble playing is to achieve a synchronised sound.

In addition to aiding synchronisation, the interviewees commented on other beneficial effects of engaging with peers' playing, such as helping them identify misprints in the score. After watching a few edited video clips of the observed rehearsals, all three respondents who were asked this question confirmed that some of their actions in the clips were associated with recognising misprints. They said, "when you're listening to everybody else... you can hear when certain notes don't gel together... like a discord", and "at the end of the phrase, you have a semibreve and you're holding it, and everyone else's stopped... and yeah we would have noticed that, you know, why is that happening". These respondents also commented on their noticeable facial expressions change when hearing strange noise or unsynchronised playing in the video clips. One of them seemed embarrassed and said, "in listening, you have to also learn to sometimes keep a neutral fact... especially on performance... because it's like giving things away".

Musical sensitivity and musicianship were believed to be among the most valued aspects of any musical performance. When the interviewees were asked about their general thoughts on musical expression and what they rely on to interpret the music as an ensemble player, various perspectives were expressed after seeing the VSR materials. As all respondents in the first focus group stressed, musical expression in a musical performance is "very important" because otherwise, the music "would be pretty boring and mundane to listen to". Unlike soloists who have the liberty to interpret and express the music however they like, ensemble players' interpretations of the music are "good to be all the same". For Taylor, however, "expression is very little discussed" in the CAO and "it is to do with the first accordions" because they usually have the melody. "For me", Taylor continued, "it is a bit irrelevant... because I'm usually playing the chords or whatever".

When it comes to interpretations of the repertoires, almost all interviewees agreed with the statement that they relied on a combination of things to interpret the music, including the

conductor's interpretation, musical notation, and personal feelings. While some interviewees felt that notation is what they generally rely on and the conductor's interpretation is also highly valued, others argued that personal interpretation deserves a place. This is because a) the conductor's musical intentions have not been clearly expressed to the players, and b) in some pieces, there were no written indications of how the music should be played. In those occasional cases, some interviewees said, they adopted the way that they were trained on other instruments to interpret the music ("think stylistically"), while some followed their feelings about the music, which were usually generated after a few run-throughs. However, one respondent admitted that she tended to listen to other players sitting next to her and follow their interpretations, especially when playing an unfamiliar musical piece.

Based on their personal experience with the CAO, half of the interviewees agreed that there is a possibility to learn specific musical knowledge or skills in the rehearsals, either directly or indirectly. For instance, when talking about switching couplers, the respondents indicated that they had been given general advice on coupler choices from the more senior members when they first joined the orchestra. This confirms the involvement of peer support in ensemble experience and the collective learning nature of the ensemble rehearsal.

Bellow effects, as one of the most distinctive playing techniques of the accordion, were discussed in the interviews. Most interviewees appreciated the effects, such as bellow shake or bellow drum, and defined them as good variations that give a piece of music "a bit of colour". One of the interviewees reported that the CAO did not provide direct guidance on how to do a bellow shake. The fact that he was seen performing a bellow shake in the video clip could be ascribed to learning through imitation. This was done through listening to and observing other ensemble players' shaking and mimicking the frequency of the shaking sound, although he was not sure if it was technically correct. Speaking of techniques, some more senior members of the CAO also pointed out that the new recruits need some accordion technique training, such as bellow shake and playing *glissando*.

Some clarifications regarding the uses of the identified musical skills were obtained from the interviewees after they watched the related video clips. For example, one player appeared to voluntarily improvise the bassline for some musical pieces during the observed rehearsals, although she is not the bass accordion player. After viewing her clip, she told us that she learned the accordion by improvising, and her improvisation skills were then developed

through years of CAO engagement. For most CAO repertoires, only the bass accordion part has the bassline written in, which gives her considerable opportunities to "adlib a bit" based on what is written on her part. When asked why she does improvisation while the bass accordion player is taking on the accompanying role, she stated that:

> I think sometimes it needs fill-in... depending on the piece. [Bella] (the bass accordion player) is good with the main bass part, but sometimes you really need the chord, and sometimes the [bass] part hasn't got chords or something like that... and it sounds a bit bare... So I just put it in, and [the conductor] never said not to.

This player also shared her improvisation techniques when asked how she usually improvises. She said, "I look at the key, then I know what basses. If that was in the key of A, I know that to play a D and A and then an E mainly and usually fits in". Another interviewee in the same group showed agreement and added:

> on the accordion bass... like you've got, say in C Major, so you've got C, and G is the dominant and then F is the subdominant, and they are like you know, the main three chords. It'll be a few others but you know, it'll be mainly that.

Regarding improvising during ensemble playing, other two interviewees in the same focus shared their opinions. One shook his head and said that he is not capable of improvisation. The other was confident in improvising but expressed a strong preference for not doing it in the setting of ensemble playing. The reason was that "in an orchestra situation, everyone's supposed to be playing the same thing and together. Otherwise to me it sounds like a big mash".

One instance that has been analysed in Chapter 5.1.2 and also Chapter 5.2.2 was seen as evidence of a more skilled CAO player using sight reading skills as a result of the conductor's troubleshooting. When asked in the focus group to talk about this experience, this player reported that helping fellow players out was an enjoyable experience, and the sight-reading task was also "a good opportunity to hear what another part's doing".

About the manifested body movements (during-resting and during-playing) in the observed rehearsals, interviewees were also asked to clarify what those movements mean. Five out of six interviewees were captured making certain body movements (e.g. nodding, swaying, tapping and counting) when resting while other players were playing. After seeing the related

VSR materials, most interviewees regarded their actions, especially tapping, as a representation of enjoying the music or engaging with peers' performances. Alternatively, they suggested that those actions might also be seen as learning an unfamiliar music style (tango) and rhythms or keeping time with others to be ready for coming in.

One of the interviewees expressed surprise at his movements in a video clip, where he followed the conductor's vocal imitation, beating two types of tango rhythmic patterns (see Figure 5.1) with a hand while tapping four beats in a bar with his feet. This action was thought to be associated with "playing rhythm, meter and tempo". This interviewee expressed that he might not even be aware of those simultaneous hand-feet movements and certainly has never had any relevant training in this aspect. A possible cause for that "might be lost in music", he said with a laugh.

The VSR materials also included each interviewee's during-playing movements, such as tapping, swaying and nodding. Half of the interviewees believed that they were aware of those movements and suggested that most of them could be understood as musical expression or enjoyment gained from the music. As Sage put it, "when you feel the music and you're getting into the music, you do probably do things that you don't think about, and you just move with the music and doing accents and stuff. Your body moves in certain ways".

As for the foot tapping in the video clips, half of the interviewees said that was a useful way to keep themselves in time. Amongst these three respondents, one considered his foot tapping a habitual action. He explained, "I can't keep time without my own beat going with my foot, even though when you're performing and in an orchestra situation, you're always told that you shouldn't". Other interviewees also considered during-playing foot tapping a bad behaviour and provided an alternative solution for keeping time, that is, watching the conductor peripherally.

On the whole, the majority of the interviewees reported that they felt lucky to have an accordion orchestra in Christchurch and also very fortunate to have this conductor. The overall ensemble experience with the CAO was enjoyable. One interviewee added, "having a good neighbour can lift the game", suggesting that sometimes one's ensemble experience could be influenced by other ensemble peers. On the other hand, some interviewees believed that the varying levels among the CAO players somewhat limit what kinds of music can be

played and how they are played. They also stated, “I think the conductor had to adapt to the people in the orchestra... and you [as a player] kind of have to work with who you’ve got”. This seemed to imply that there has always been a compromise in the CAO environment for the conductor and the players. Besides, it was suggested by one of the outspoken interviewees that the CAO could consider playing some new pieces, because “it gets a bit boring” after playing the same repertoire for years.

- *Receiving Instructions and Directions From the Conductor*

In the analysis of the previous theme, the interviewees have confirmed the existence of collective learning in the CAO rehearsals, and in particular, the involvement of peer support (as one of the player-initiated strategies) in those learning opportunities. This section thus focuses on discussing some of the moments when the conductor-led strategies were employed in the recorded rehearsals, and presents various conceptualisations of those strategies.

About the conductor’s instructions and directions when playing was paused, the discussions centred primarily on his cognitive instructions and vocal directions, because the use of gestural direction was very little, as indicated in Chapter 5.2.2. One of the focus groups responded particularly to the conductor’s use of cognitive instructions and vocal directions before rehearsing the repertoire. Every interviewee in this group agreed that both strategies were engaging and helpful in that they drew their attention to the details in the music and prepared them for the upcoming run-throughs. For example, the cognitive instructions in the video footage reminded them that they need to pay attention to the details in the music, such as dynamic changes and articulations. On the other hand, the vocal imitations demonstrated what kind of accents the conductor expected to hear. Under the conductor’s implementation of both strategies, the respondents could keep those verbal and vocal descriptions in mind during playing.

When watching the video clips of the conductor’s use of metaphors in his cognitive instructions as the post-playing feedback, all six interviewees seemed amused, and the overall response to this question was very positive. According to the interviewees, the conductor’s metaphorical speaking was funny and considerate because he was very gentle with criticism. For example, when some players were rushing the tempo, rather than telling them off, the

conductor jokingly said that it felt like the guys sitting in the middle were giving others “a little shove with the old boot”.

In addition to being an amusing and thoughtful means of communicating with orchestra players, the use of metaphors was conceptualised as making the instructions easier to understand, and a very engaging way to draw players’ attention to their playing errors and “get them to listen and think”. One of the respondents confessed that she did not even realise that she was rushing or holding a note longer than she probably should. When playing by herself, she said, “you don’t notice things like that... [or] perhaps [you] let it slip” because it does not matter how those details were played. However, the conductor’s metaphorical-cognitive feedback reminded her that an ensemble is supposed to play together, and as part of the team, she needs to play in accord with others. In addition, she felt that the conductor’s cognitive instructions made her aware of the playing techniques that she did not know, such as playing *glissando*. As a result, she could have it fixed by consulting her private accordion tutor after the rehearsal.

The interviewees also discussed the conductor’s combined use of cognitive instructions and vocal directions as post-playing feedback. After seeing representative video clips of such combinations, several viewpoints were expressed. Most interviewees viewed vocal directions as an indispensable strategy to clarify the cognitive instructions and get the conductor’s points across. They also expressed a strong preference for the conductor’s contrasting vocal imitation of the sounds that the orchestra produced and his desired effects. In so doing, the interviewees reported, “the comparison between the two extremes” was self-explanatory. With a clear understanding of what the conductor was expecting, some interviewees said, they could mimic the conductor’s preferred sound effects based on his singing.

Some interviewees explained why there is a need for vocal directions in CAO rehearsals. As a community ensemble, one of the more advanced players stated, “some people don’t have the full knowledge of music, the way that they’ve learned the accordion they may not have gone through all the stages like some of us”. Due to this, this player continued, “when the conductor says that they want something done a certain way, if they don’t demonstrate and explain it fully, then some people still not get it, and the piece will just carry on”. The other more senior member also added that “some of them when they first started in the orchestra, they didn’t know accents... dynamics or anything like that”.

The other reason for needing vocal directions was an element of ambiguity in the conductor's cognitive instructions. According to some interviewees, the conductor's cognitive instructions could be very abstract sometimes and failed to get down to specific. For example, when describing a desired musical style, the conductor said, "we need a bit of bounce", which some interviewees found confusing. One recalled, at that moment, "I think what he meant by bounce is the *staccato*, maybe, but I'm not too sure".

Another comment about the conductor's cognitive instructions was his strong tendency to address dynamic issues. One of the respondents reported that the conductor went on about dynamics "virtually every time" during rehearsals, which is aligned with the observational data on many instances of "managing dynamics and balance". This respondent said:

> There are some pieces of music, I am really struggling to get my head around the style, and he wants dynamics, that's advanced, you know. That sort of like an accordion 8.0.1, and I'm dealing with 1.0.1, with the notes... make sure I get the rhythms coming in at the right time... I know why he's doing it, but...that's probably my insecurities about where I met with my accordion playing. So, I aim towards that, but I know that my focus is on just getting the notes, the right notes at the right time... before I worry about dynamics... To me, that's an extra.

Some interviewees found the conductor's vocal directions interesting and suggested that a distinguishing feature of such directions is the conductor's "brass style" singing. As one of the respondents put it:

> Each instrumentalist they use their own what they're familiar with to get that through... like a singing person [or] an accordionist would explain it differently. [So when the conductor sings], I just think, there you go, a brass player. He's explaining what a brass player would... he goes 'Bah'...particularly when we're doing the marches.

Following the discussions of the conductor's cognitive instructions and vocal directions during non-playing moments, the interviewees were shown several video clips to revive their memories of the conductor's use of during-playing directions, including gestural, vocal and verbal. Some senior CAO members expressed a general thought about these means of during-playing communication. For them, there have always been differences between the conductors that the CAO has had. Those differences are usually reflected in the conductor's

focus of interest and the conducting styles (i.e. ways of communicating ideas and interacting with the orchestra players), which is normal.

So far, these senior members felt that the current conductor's visual and aural means of communication were interesting and engaging. They draw the orchestra players' attention to the notations as they play. Without these "nice reminders", many things such as accents, dynamics, and repeats may not happen, because players "don't always observe what is exactly written on the music". In the long run, as one of the respondents imagined, if the conductor gives these directions all the time while practising, those musical details should "sink in" players' heads. As a result, players would remember to follow them in the performance even when those directions do not exist.

Various perspectives were expressed when discussing the effectiveness of these three types of during-playing directions. The majority of the comments about during-playing verbal directions were positive. Half of the interviewees thought that verbal directions, to a great extent, help those players who "are glued to their music" to understand what they are supposed to be done instantly. This statement was confirmed by another respondent who confessed that he largely relies on the conductor's verbal directions to get reminded of various things than "looking at whether he's waving a bit more dramatically or not".

The other half felt that verbal directions remind them of repeating musical sections to a degree. For those pieces that the repeat is not too complicated, the conductor's verbalisations such as "go back to coda" and "no repeat this time" were helpful. However, for respondents whose first language is not English, understanding the conductor's verbal directions in which musical terms were used and quickly responding to them while playing has been challenging. In a group setting where other players seemed to understand the follow the conductor's instruction, a respondent said with a laugh, "I feel shy to ask him what that [term] is" and therefore "watching the conductor's gestural directions for information has become a better choice to me".

Regarding during-playing gestural and vocal directions, some interviewees had a brief debate. Despite disagreements, one common ground was found in their perspectives: the interviewees felt that the conductor's expressive body movement and singing along both represent how he wanted the music to be played. These gestural and vocal directions are good

indications for players to imitate on their instruments, which to a certain extent help them achieve the conductor's desired musical styles and develop their musical sensitivity and musicianship.

The disagreement centred on whether the conductor's vocal or gestural directions were more effective. Those favoured vocal cues reported that capturing the conductor's hand gestures is challenging, and there are two resasons for this. First, the conductor's hand motions are usually below the chest, so players sitting in the back rows may not be able to notice. Next, the conductor's briefcase blocks out some of his hand signals. These respondents also claimed that there is "a cognitive dissonance" between the conductor's gestural directions and his verbalisations (i.e. cognitive instructions and verbal directions). For example, while the conductor said that he wanted the next phrase to be "quiet, light and dancing", he was still doing the "big and solid" hand movement. This is because the conductor "virtually conducts the same way the whole time... doesn't matter what the dynamic is... what the energy he wants out of it". Hence, as the respondents stated, they personally felt "getting no clues [from the conductor's hands] beyond the beat".

Faced with the above statements about the conductor's gestural directions, especially his hand movements, those who initially expressed a strong preference for gestural directions did not deny it. However, they argued that others did not find gestural directions helpful because they probably did not watch the conductor a great deal, even just "from the corner of the eye". One respondent said confidently, from her observation, there has been significant improvement in the conductor's gestural directions (e.g. becoming more relaxed with feelings involved) over the last two years, which most ensemble players probably may not even notice.

During the discussions about the conductor's instructions and directions, a significant percentage of the interviewees also commented that the conductor working with individuals or subgroups is an excellent practice. As one of the interviewees commented on the VSR materials, rather than "playing the whole piece all the way through", the conductor stopped them right when they were out of sync, making them repeat it multiple times until everyone was in sync. However, another interviewee felt insufficient rehearsal time was devoted to working with individual players or subgroups. In this player's opinion, a breakthrough in

stylistic playing would have been achieved if this strategy had been used more frequently in the CAO.

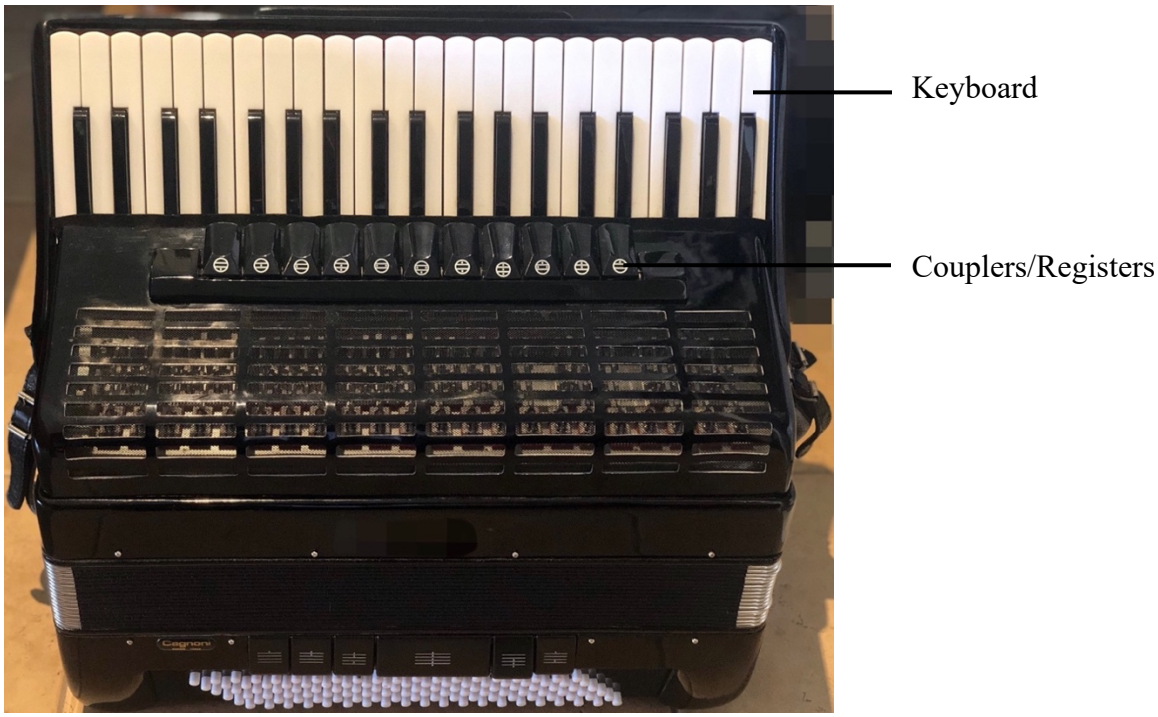
- *Surviving the Ensemble Experience*

The focus group interviews also allowed the interviewees to discuss the challenges and difficulties faced in the CAO rehearsing experience and how those struggles had been dealt with. As a result, some "survival" tactics to help interviewees keep their engagement with the rehearsal were pointed out. The employment of some identified musical skills and player-initiated strategies was also believed for the same purpose.

Interviewees were shown video clips capturing themselves looking at their instruments while playing. When asked their opinions about that action, over half of the interviewees expressed that it was not a norm. They generally have a good sense of keyboard geography in that they can "do a lot of the jumps and stuff without looking down at [the] keyboard as much". Thus, looking at the keyboard would only be called for unless the pieces are new, they have not had enough practice before the rehearsals, or when coupler switching is required, as shown in the video clips. The interviewees explained that switching couplers could be tricky sometimes, because there are so many different couplers alongside the keyboard (see Figure 5.7), and it is hard to remember where each one is located. In this case, the respondents said that glancing down the keyboard area during playing was to ensure they were heading to the correct coupler.

Figure 5.7

The Accordion Keyboard and Couplers



Since these comments suggested that changing couplers demands a quick response and some concentration, the interviewees were asked about their attention management, specifically, how they managed to switch their attention between reading the score, watching the conductor and playing the accordion (including changing couplers) while playing a piece of music. Some more experienced players demonstrated that there is indeed a lot of concentration, coordination and effort involved to "make it work". As one of the respondents described,

> it takes a lot to make sure that you can keep an eye on [the conductor] and your music and your keyboard... You look down [at your keyboard], you look back up [at the score], make sure you still what you see is the place in your music, and you're still keeping in time with [the conductor].

Other interviewees who are relatively new to the orchestra also implied that such coordination among multiple actions is one of the challenges, to which they have found some special ways to cope with the situations when coupler switching is required and keep the playing flow. One of the respondents stated:

> I've got to confess there are times when I just don't change. If I don't feel confident with the amount of time I've got, I stay where I am because otherwise I will lose my place in the music. And I think it's more important

> for me to be rhythmically correct and get the notes correct then it's to change the couplers. So I do have to make decisions.

For the other two respondents, who are also new members of the CAO, changing the coupler can be very important for some musical pieces. With this idea in mind, they reported that they would still try to change it as required. The tricks they used are rather similar, based on the belief that someone else who plays the same part would cover for them. As one of them put it,

> when I see the coupler markings on the score, I stop playing one bar beforehand to locate it and make sure I am pressing the right coupler. Then I look back at my music, find where I am and continue to play with the orchestra.

This trick, however, does not always work. According to the respondents, after changing the coupler, "if I come back in time, then I'm quite lucky. If I come back off time, which is quite common, I think I just sort of skip and then catch up to the next bar". When asked how they managed to catch up after losing their place in the music, the respondents claimed that it was done by listening and following other orchestra fellows who play the same part.

One focus group, in particular, talked about coupler choices. As analysed earlier in "The Ensemble Experience–Playing and Learning in a Group", this group of interviewees confirmed that they received suggestions about coupler uses from other orchestra players at the beginning of their CAO participation. Such advice includes using the oboe coupler when playing the second part and bassoon or violin coupler for the third part, as a general rule. However, as time passed, these respondents started developing their thoughts about the coupler uses. For instance, they felt that the third part is usually "quite low in pitch", so if they were to play the Third, they would choose either bassoon or bandoneon coupler. In addition to the advice from other orchestra members and personal experience, one of the respondents mentioned that they also follow the coupler markings written on the scores.

Despite the peers' advice and indications of coupler markings, this group of interviewees reported that they still felt puzzled sometimes about coupler uses. The reasons behind the confusion are that a) some music scores do not have any coupler markings, b) in some cases the couplers would be adapted by the conductor and c) sometimes the accordions do not have those couplers that the music or the conductor asked of, due to a different design or smaller in

size. An outspoken respondent said, “even if we somehow managed to do what we were told, it (the coupler) just did not sound right for the music”. For example, this respondent described, “I was told to use bassoon coupler for those light and cheerful Christmas carols. Then I felt that everybody was in a higher pitch, and I was down at the bottom”.

When asked to clarify a moment in the video clip where two of the respondents were having a conversation about couplers, they confirmed that it was indeed one of those moments when they had no idea which couplers to use, and they were trying to find out. One of the respondents expressed that “asking to be sure” is the way to survive because, in the past, this respondent had experienced being told off for using an inappropriate coupler, which was “embarrassing”. Another respondent in the same focus group said that they would appreciate more guidance on coupler uses.

Half of the interviewees were shown the VSR materials depicting themselves doing finger exercises during the observed rehearsals. Some of those practising moments occurred when the interviewee was resting while other orchestra players were playing, and some occurred during a rehearsal gap when nobody was playing. The interviewees who were asked this question gave an account of their actions. One of the respondents, Sarah, believed that her practising fingering in the air in the absence of sound and making some conducting gestures during a rehearsal break were a sign of internalising and imagining sounds. About the fingering practice, she explained,

> that was about getting the fingering work because it’s got the tricky thing in that bit... I actually had the keyboard in my head, and I was doing it, because I felt like I was on an odd angle or something. So I had a virtual reality thing going on.

Sarah also considered her conducting-like behaviour to be a way to imagine how her part fits in with others because that is how she usually processes musical information in years of ensemble engagement. As she stated:

> When I was playing the accordion... I have a tendency to wander off listening to what the other part was doing. And if I’ve got to count 14 bars, God helps us, alright. So it’s no point in me counting 14 bars because I’ll lose track. It’s better for me to think, right when I hear this, I do that. While I’m looking at the music, I measure conducting trying to get the rhythm right. I just think, oh, there’s 4/4 time or ¾ time, and I’ll just be conducting it and then I’ll sing it in my head. And I’m trying to figure, put things like [what] I’ve absorbed another part playing in there, then I think, oh in this bit,

> it's gonna be this, and then I come in on so-and-so. So that's what I'm doing, it's all about me, you know, where my part fits in and what cues I've got to listen for, what I mean to do it, when I meant to take my breath before I start, yes, I'm prepared.

Unlike Sarah using her internalising and imagining skill to survive in CAO rehearsals, the other two who were also asked this question believed their actions had nothing to do with imagining sounds. However, it was suggested that their quiet finger exercises, either on their lap or on the keyboard, can be understood as "players' individual practice". This strategy was employed not only to keep themselves occupied and engaged even when they were told to take a break, but also helped them become more familiar with the tricky fingering and techniques within a limited time. As Tessa indicated:

> I do not usually look at my keyboard when I play the accordion, so getting my fingers into the habit of a particular movement is important because I am always worried about making mistakes, that embarrasses me. Also, because of my previous finger injuries, sometimes it can take them a while to get used to the movement, so there (in the video clip) I was running through the *glissando* a couple of times to make sure they did what I wanted.

Another strategy observed in CAO rehearsals, "players' note taking", was also believed to be a survival tactic to help interviewees record the conductor's requirements on the music and any adaptations made to the music during rehearsals. According to half of the interviewees, the notes being taken serve as a written record of what the conductor said in rehearsals. When the inconsistencies between the conductor's gestural directions and his verbalisations (i.e. cognitive instructions and verbal directions) occur, if they look at their notes, they would know what the conductor's "true intention" is, which reduces the chance of becoming confused by his mismatched gestural directions. Moreover, due to the conductor's troubleshooting, sometimes the details in a piece of music would be adapted, for instance, modifying dynamic levels and repeats. The notes, in this case, remind them of what changes have been made to the music so they would not follow the original notations. For these reasons, "constant note taking is necessary", as the respondents summarised.

When asked about the uses and acquisitions of other identified musical skills (e.g. musical sensitivity and musicianship, playing rhythm/meter/tempo, playing techniques), the interviewees also expressed a sense of struggle. For example, as briefly indicated in the previous themes, some interviewees felt that musical expression was very little discussed in

CAO rehearsals, and the conductor's interpretations of the pieces were not always clearly communicated. Hence, they worked out other ways to improve their interpretations of the pieces that they found particularly hard to connect.

Two survival tricks were shared in this regard: following recordings and following ensemble peers. According to the respondents, listening to the recordings (in their own time) increases their understanding of those unfamiliar pieces. By observing how other professional musicians expressed themselves in the video recordings, they gain ideas of how those pieces may be interpreted. However, if it was during rehearsals when a piece was played for the first time, the respondents reported, then they had no choice but to listen to the neighbours and replicate their interpretations.

Furthermore, the interviewees considered some of their body movements in the video clips to be their strategic ways of keeping time. These body movements include foot tapping, counting and nodding along with the music. According to Fiona, foot tapping or counting could sometimes be beneficial in playing because it "helps me keep myself in time with [the conductor] when the rest of the orchestra is kind of out". Even for those moments when the interviewees were resting while other ensemble peers were playing, nodding helped them keep in time with the group so that they would not be late when they were supposed to come in.

Finally, some interviewees expressed that doing a bellow shake was a real struggle. Although the ensemble playing environment provided opportunities for CAO players to learn from each other, some of this learning might stay somewhat superficial, especially for indirectly learning complicated instrumental playing techniques such as bellow shake. The respondent who described his experience of playing bellow shake by imitation hinted that some direct guidance or training from the CAO on playing techniques would be much appreciated. The other interviewee thought doing a bellow shake was a painful experience because the accordion banged on her defibrillator when she tried to shake the accordion bellow. She was allowed to do tremolos instead to mimic the tremulous sound effect as a coping strategy.

- *Lifelong Learning and Development*

A number of themes that emerged from the CAO focus group interviews are associated with lifelong learning and development. At the beginning of the interviews, both groups were

asked what they like about the accordion. Those who started the accordion a lot later than others felt that the accordion is a unique instrument. The accordion sound is cheerful, making it an excellent tool for playing passionate music. Besides, these respondents discovered that the couplers on the accordion make it "a versatile instrument". With those, they can play a piece of music with varied tone colours and ranges. Those who have played the accordion since a young age also expressed appreciation of the accordion sound. Moreover, they stressed that it could sound even better when playing with both hands.

One of the respondents felt delighted to be finally able to play the accordion, despite in her later life. This respondent stated,

> I have always been fascinated with accordions. When I was a kid, we used to go to community dances, and there was somebody who played the accordion and I thought that was such a cool thing. And one of my cousins played and wasn't till I was 50 that I decided that I would go back and get one and do it.

However, learning to play the accordion was not an easy task. In this interviewee's words, playing the accordion is

> fiendishly difficult... presents a lot of challenges which I haven't come across in piano or organ or recorder or all of the other things that I do. And it's good that [in the CAO] I only have to use the right hand, because the left hand is presenting me lots of challenges which I'm gradually overcoming.

In addition, playing the accordion in the CAO and being presented with a single-part score posed challenges to this interviewee, primarily when she was assigned an accompaniment part without much melody. This is because she found it "a bit tricky" to come in after a long rest or on an offbeat without seeing the whole score. Hence, as she put it, "I'd like to be able to see the whole score... see all the parts so I can figure out how they fit in... when I come in. I need that sort of the visual thing... to get things done".

Despite challenges being part of lifelong learning, the interview participants agreed that participation in the CAO is beneficial. Since they joined the CAO, their musical knowledge and skills have been either newly gained or further enhanced. A few interviewees thought that the CAO's involvement had provided them with considerable opportunities to play different music genres and styles and various arrangements, enabling the development of their musical interpretations, sensitivity and musicianship. For example, one of the respondents felt thrilled about playing a Piazzolla's tango piece (one of the CAO's repertoire), who said, "it's so awesome and different to what I've done before, I'm looking

on that as being very good for me from the point of, you know, doing something a bit different". The same interviewee also suggested that her body movements embodying the music during the run-through of the tango piece may be seen as trying to learn about the Argentinian tango style. Due to her consuming passion for this music, this interviewee added, "I've [also] listened to it on YouTube and gone through it several times".

Furthermore, some interviewees pointed out that their accordion playing techniques, improvisation skills and sense of timing and rhythms may have also been improved through years of CAO involvement. For instance, some respondents suggested that they had never attempted those accordion techniques such as bellow shake and bellow drum before being requested by those rehearsed pieces. Even for one of the more senior and advanced players, the bellow drum he was doing in the recorded rehearsal was his first-time experience. He said enthusiastically,

> I've never ever done that in a piece, so that was a bit different. [I was] trying to make sure that it's heard and [I'm] not hurting [my] hand. But yeah, it does add some difference to the piece and it's just another facet of the accordion that there's so many things can actually do.

By joining the CAO and attending its weekly rehearsals, the interviewees also alluded to the notion that the CAO experience helped them shape their accordion playing and somewhat enhanced the overall quality of the musical productions. Based on the instance shown in the VSR materials, the respondents confirmed that the conductor's instructions and directions had drawn their attention to the musical notations and corrected their playing errors, including but not limited to dynamics, articulations, repeats and rhythmic values.

The conductor's assessments and corrections were also believed to raise the interviewees' ensemble awareness and develop their ensemble skills. According to the respondents, they are generally aware that they need to listen more carefully to themselves and to other ensemble players ("Engaging with peers' performance"), making sure that they are not going any faster or slower than others ("Playing rhythm, meter and tempo") because the point is to play together as a unified whole ("Synchronisation and phrasing'). For some interviewees, the conductor's cognitive instructions also assisted them with identifying knowledge gaps, for example, realising a lack of *glissando* playing techniques.

Last but not least, as a collaborative musical activity, the ensemble rehearsal was believed to have provided players with potentialities to learn from each other, i.e. peer learning. After viewing the VSR materials, some interviewees confirmed that there was indeed the development of playing techniques (learning to do bellow shake) and switching couplers (learning about coupler choices) through peer support in the CAO rehearsals. The former technique was learned indirectly through imitation, and the latter was based on direct advice from the more senior and trained CAO members. However, these respondents implied that such peer support was somewhat limited regarding the depth of the knowledge being shared between players. Hence, a wish for more guidance on those aspects in future rehearsals was commonly expressed by some interviewees.

- *The Social Experience of Ensemble Participation*

In addition to musical learning and self-development, interviewees also referred to what CAO participation means to them and how much pleasure is derived from this ensemble involvement. One respondent said, in her opinion, "an orchestra sort of about more than music, you can get relationship as well". For example, "if you had a bad day", playing in the orchestra helps you "bounce" back because "you can have a giggle with the person next to you". This respondent also mentioned how much she enjoyed the portability of the accordion in that it can be easily carried around and make music with others. This was echoed by the other respondent, who recalled his participation in the CAO jam sessions and commented that it was great fun to jam the accordion with other instruments.

As mentioned in the previous themes, one interviewee particularly stressed the importance of having a good neighbour in ensemble rehearsals, not only for the potential music learning but also for the enjoyment of playing with others. In this respondent's words,

> I think depending on who you're sitting by, it affects you playing. Like when I have [a very expressive player] sitting beside me, it sort of makes me lift my game, because I [got inspired]. I notice oh, she's doing so-and-so, I'll give that a go. But [when] I was sitting by someone who's disapproving, oh doesn't make your day, and I just think, oh my god, they must think I'm such a plonker.

Additionally, this interviewee implied that the orchestra players' communications could have improved further. For example, the interviewee said that it would be great to have a conversation like this with the person sitting next to them:

> Sometimes you say ‘look, I really have no idea what’s going on here, how many pages have you got, [or] is yours second part, is your part like mine?’, you know? And it’s just that knowing that there’s someone else there who has got the same piece of music, you could just say ‘do you find this a bit tricky?’, you know, just sort of that reassuring that you’re actually okay, you’re not as dumb as you might think you are.

The other interviewee strongly agreed with the above view, who also thought the connections between CAO players are missing because people do not talk to each other much. As this interviewee put it,

> we’re a band, we come here to play to enjoy our time in the orchestra, and we are supposed to talk with each other, like ‘oh what are you doing there, how do you manage to do that, can you teach me?’, you know. But what happens now is we play and then we go home, it feels like people can’t be bothered, to ask or care.

The other point made by this respondent was the language barrier. As mentioned earlier, being one of the few orchestra players who are non-native English speakers, this respondent felt too shy to ask questions during rehearsals.

While a few interviewees suggested room for improvement in the interactions between the CAO members, the majority enjoyed their CAO experience. Most interviewees find the conductor’s instructions and directions, whether visually, aurally, or combined uses interesting and engaging. They spoke in particular highly of the conductor’s metaphorical-style verbalisation when it comes to criticism because it was very considerate of him to be mindful of the feelings of others.

Although one of the interviewees mentioned a need for new musical pieces, all interviewees confirmed that they found pleasure, more or less, in playing the CAO repertoires. Their body movements reflected enjoyment, such as swaying to the rhythms while playing a cheerful march or a smooth dance-style Waltz. Even during resting, some interviewees indicated that listening to other peers’ playing is just as delightful, especially when the piece is in their preferred music style. As for being temporarily given another part to sight read, the respondent also considered it an excellent opportunity to play “something a bit different”, which she found “interesting and enjoy[able]”. The other interviewee in the same group echoed her words, “it’s quite good listening to some of the other parts... because sometimes you miss a bit of that” while the whole group was playing.

5.3.2 The NBB Players' Conceptualisations

A total of 19 interview questions and subtopics were discussed in the two NBB focus group interviews. All the themes that arose from the interviewees' responses have been categorised into the five overarching themes, as shown in Appendix N. These five themes are the same as the CAO's, and they are the ensemble experience–playing and learning in a group, receiving instructions and directions from the conductor, surviving the ensemble experience, lifelong learning and development, and the social experience of ensemble participation.

- *The Ensemble Experience–Playing and Learning in a Group*

In order to prepare the interviewees for the in-depth discussions, a couple of general questions were asked at the beginning of the NBB focus group interviews, including the interviewees' general views on their ensemble experiences. Five of eight interviewees pointed out the positive side of playing in the brass band. Compared with playing their brass instruments alone at home, some respondents suggested that "it just sounds a lot better in a group" because "when you're in your room making your sound... [it feels like] putting notes in the air and bouncing back at you"; however, the "bigger band sound is more of a full sound, and it can actually mix together a little bit better".

Some interviewees compared their experiences playing in different types of ensembles. For example, one felt that brass bands generally "sound a lot nicer than concert bands", and this is probably because all the instruments in a brass band are brass instruments, which "are built of the same principle", and thus their sounds naturally "meld with one another". The other interviewee in the same group added, "sound like an organ". Another respondent, however, commented on this view and said that different ensembles differ in nature; wind bands or orchestras, for example, have more tone colours. Other interviewees expressed that as brass players, they felt more involved in brass bands, because they "actually play a lot more in [a] brass band rehearsal as opposed to [playing in] orchestras and concert bands and jazz bands" where "you often get put in as an effect line, and you have 50 bars of rest and then some sharp notes".

The other benefit of playing in an ensemble like the NBB was believed to be that the repertoire covers a wide range of music styles, making the ensemble experience very interesting. As the respondents put it,

> at home... sometimes I find it hard to be motivated at all pick music, whereas when you're in the band you've got music you know, you've got a musical director who's focus on getting new music and putting programmes together so you get more variety... [and] what I love about the brass band is the wide range of music you can do, so you're not stuck on one style all the time.

Conversely, several interviewees commented on the requirements and limitations that the ensemble playing imposed on them, such as less freedom with tempo and intonation. The respondents expressed that they could be more liberal with their tempo and only have to look after their own tuning if they play alone. However, when playing in a group, they would "have to figure out how to play with other players". For example, they need to listen to fellow players while they play because otherwise, they may find themselves "just off the beat" or "slightly out of tune". Additionally, one of the respondents felt that the brass band "tend to push harder music at" them.

Before stepping into the key interview questions, the respondents were also asked to recall (without watching any video clips) what musical aspects the NBB usually focuses on during rehearsals. As a result, five main aspects were mentioned: dynamic changes and balance, sound and tone quality, breathing, phrasing and synchronisation, articulations, and music styles and expression. The majority of the interviewees reported that "the dynamics are a big thing in the band" and "a lot of work on balance [between different parts]". A couple of interviewees thought that "the biggest focus of the band is the general sound and tone quality".

Another couple of respondents referred to "phrasing at the start of the pieces" and "breathing between phrases". These two aspects were believed to have been significantly emphasised, particularly when playing hymns or other lyrical pieces. A few respondents alluded to synchronisation. In their words, much rehearsal time went to "get[ting] together... get the changes of time and speed and transitions flowing" and making sure "rhythms go in between sections like fitting together... where things go from one section to another". Finally, a few respondents added articulations and stylistic playing. For the latter, one described,

> style-wise seems to be a rather primary aspect of what we end up doing. A lot of the rehearsal is what sort of style are we thinking about, what sort of feelings are we trying to convey, whether it's a hymn much more lyrical [or] if it's a march then we're a little bit more strident.

The theme of "airflow control" recurred throughout the dataset, and it appeared to be the bedrock of many identified musical skills for brass players. For example, how well players manage their airflow determines how well the dynamic changes are handled. One of the video clips shown to the interviewees was believed to be a demonstration of this link, in which the conductor instructed players to pay attention to their dynamics as they played because the volume became quieter as the melody line went lower. A variety of perspectives were expressed after viewing such VSR materials.

One of the interviewees remembered this instance clearly. In retrospect, it occurred at the ending phrase of that piece, where "it's got a nice big *diminuendo* to double *piano*" while his tummy "was going flat as pancake". Another respondent showed agreement and explained that "because at the end of the phrase you've got less air, but to maintain the volume as you get lower requires more air". For some other respondents, that was "just another fact of the brass instrument". In their words,

> lower notes are harder to get louder and high notes are hard to get quiet, because the lower [pitch] your get, the more air you have to provide, and then the higher you get, [you need to] try and cut more [air] to soften it up quite a bit.

This statement was extended by one interviewee, who added jokingly,

> it's a real bugger because often we want the warm sound in brass bands. [To do that] you actually want the lower notes to be the louder one, and the top notes to be quieter. So it's actually exactly the opposite from what's natural on the instrument.

Due to the brass instrument mechanisms, some respondents admitted that sometimes they encounter difficulties managing their airflow and keeping the sound balanced. One of the respondents who plays the tuba in the band demonstrated,

> I'm fairly new player of the tuba, so I'm still in the cornet mindset where I'm two octaves higher. It's not quite as difficult to get lower on the cornet [because] it's a smaller instrument so not as much air is required. [However], when you're going lower on the tuba, you actually need to provide more support, project more.

A few respondents explained the same situation in reverse by saying that as cornet players, it is difficult to be quiet when getting to a higher pitch. As one of them put it,

> when you start getting up to like the top of the stave, [you see] a *piano*, and it's like 'wait, I need to be quiet' but I couldn't. It's like [I need to] cut through more [because] this is a lot quieter than it should be.

As a solution, a respondent proposed that "you just have to compensate constantly". Rather than blindly following the dynamic markings, one needs to constantly make a conscious effort to adjust how much air he or she puts through the instrument. This is because if one plays the same volume through, such as *mf*, it will not sound like *mf* when the melody line starts going lower, said the respondent. For one of the interviewees who plays drum and percussion in the band, what he is "constantly fighting" is not airflow control; instead, it is to keep the speed consistent while making dynamic changes. He stated,

> with drummers and percussion, a classic thing is if we play more quietly, we slow down and if we play loudly, we continue to speed up. That's what we sort of are constantly trying to train ourselves to be consistent [with the tempo], regardless of the dynamic markings.

In addition to dynamics, airflow control was believed to affect pitch and intonation. As shown in one of the video clips, the conductor reminded players to pay attention to their pitch when changing dynamics, because they tended to blow sharp when the dynamic became louder and vice versa. For this, a number of thoughts were shared. One of the interviewees commented that tuning is fundamental in group playing situations, but it is also "the worst part of the brass bands". This is because "even if just one person does it wrong, it's going to make the whole thing out and throw everything off".

Some interviewees responded specifically to the instance in the video clip, and they regarded what the conductor said as, again, the mechanics of brass instruments, which requires players to stay focused on controlling their airflow to keep the intonation warm and balanced while changing dynamics. Despite being aware theoretically, in reality, "it's very easy to get carried away". As the respondents put it,

> when you put more air through, put all the effort into getting loud and getting the volume, it's easy to forget about the pitch and blow sharp, you know. And then when it's low volume and you wanna hideaway and make sure you're not heard as much, the opposite happens. You think about one thing, and you forget about something else.

Other respondents tried to analyse the causes of this pitch and intonation issue. In Caroline's opinion, she would call that "lazy playing, which is kind of playing without thinking". She added that sometimes people thought, "we know this piece, we can just play it", and then they went out of tune. Until they "get reminded, suddenly everyone's listening [to their pitch] and it sounds fine". The other reason, Hank suggested, could be that they relied too much on

the valves to get them "within the ballpark", meaning close to the right pitch. Such dependence on the valves perhaps resulted in the fact that they paid less attention to the pitch in that instance. Another interviewee added,

> I think we're usually onto [pitch and intonation], but as it gets near the end of the rehearsal or the end of the piece, it gets a lot worse, especially people are like, starting to get tired [and] like everything kind of goes out a wee bit, so the technique is not quite as good as you going up or down.

"Engaging with peers' performance" was also seen as a crucial aspect of the brass band playing. According to the interviewees, constantly listening and paying attention to their peers' playing help improve the accuracy of pitch and intonation. As Carl demonstrated,

> when you're playing along with the band, obviously you hear yourself playing and you [also] get a bit of feedback from listening to [what] other people doing. So [when] you're out, even just a few Hertz, it's very obvious to figure out [whether] you're too sharp, too flat and you just lip it up or down to that point.

Carl quoted what happened in the video clip as an example to further demonstrate his statement:

> I guess that pops up here because there's various ones where we all played like E flat or something. It's very obvious I'm playing it wrong here, straight away from listening, then I think I need to lip it a bit back.

Carl's demonstration triggered a discussion within his group. Other respondents indicated that listening to their surroundings for tuning is necessary when playing with the team, even though the band is not always in tune. They conceptualised this as "driving to the conditions/tune to relative pitch". One of the respondents explained this concept:

> I remember a while ago, before lockdown, [at one rehearsal] we spent quite a long time on tuning. Lots of people got out there the tuning apps on their phones and we were focused on tuning to ourselves rather than the band. And we were dead centre in tune with ourselves, but we weren't, because the band was at different variances of sharp and flat. It was better, it made far more sense to be in tune with the band, even though it wasn't in tune; it was 'in tune', if that makes sense.

The other more trained player echoed this concept and illustrated that

> oh yeah that's the thing, like we had a couple of weeks ago, people were getting out their tuners in band and I turned around and told them off because, that's absolutely the worst practice you can have in a brass band, you should not have a tuner on your stand. You should not be tuning to that, you should be tuning either to the basses, you should be tuning to the principal cornet, you should be tuning to the principal euphonium... As long

> as we're all together with each other, you should all be in that. If you you're at the objectively correct pitch, you're not at the 'correct pitch' unless it's our pitch.

This more advanced player summarised:

> at the end of the day, like as you warm up, as you play more, you're gonna get sharper anyway, because that's how brass instruments work. So even if we tune that at the start to a tuner, by the end it will be different no matter what you've done. So you just have to constantly be listening, you find a relative pitch and you have to stick to that, because the whole band will change and you just have to keep giving and taking until you're compromising on a pitch there.

In addition to improving pitch and intonation accuracy, some interviewees thought that engaging with peers' performance also helped them to keep track of the music so that they knew when they were supposed to come in. This point is explained in detail in the theme of "Surviving the Ensemble Experience". Last but not least, listening to peers' playing was also conceptualised as enjoyment and an essential part of the ensemble experience (this will also be discussed later in the theme of "The Social Experience of Ensemble Participation").

A detailed discussion occurred when the interviewees were asked to share their thoughts about synchronisation in ensemble playing and comment on the four measures shown in the video clips, which the conductor employed during the observed rehearsals to keep the band in sync. For the first part of the question, the interviewees all agreed that synchronisation "is really important" and it is "a certain part" of group playing. In one of the interviewees' words, "when you're playing in a group, you need to be thinking as a group", because otherwise "it just sound horrible".

The overall response was positive regarding the four observed measures for improving synchronisation: breathing together before playing, watching and listening to each other, and playing exactly as written and subdividing notes. As one respondent commented that "they are all very good and effective strategies... We've all been told them often... [and] we all use [them] to certain degrees". However, it was also agreed that sometimes these strategies tended to be forgotten, as one interviewee described, "slip upon the wayside". Taking subdividing notes as an example, one of the respondents added that despite frequently emphasised in the band's rehearsals, "some sections of the band may be thinking about it, but others aren't". This may explain why the conductor constantly reminded players to subdivide

their notes. By doing this, these synchronisation tips would hopefully become "second nature" over time, meaning that players would "do [them] unconsciously". Interviewees' specific views concerning these four measures are discussed in the following theme: "Receiving Instructions and Directions From the Conductor".

In response to the question: "What are your thoughts about musical expression? As a performer, what do you rely on when interpreting music?", a range of responses was elicited. Two interviewees responded to the first question and suggested that "a [music] performance is nothing without [musical expression]". With the second question, most of the interviewees agreed with the statement that they relied on a combination of things to interpret the music, including musical notation, the conductor's interpretation, section leaders and personal feelings. As Emma described,

> well, I mean, you have to pay attention to the music in front of you and you play the music in front of you, but you get the vibe of what the conductor is doing, and you can kind of guess off of how they're gesturing or how smooth their beats are or how sharp the beats are or... And then also listen to what everyone else is doing and then kind of zoning into the music... just kind of feeling the music and just trying to get the best sound and mix with everyone... I mean, just feel it.

Provided that it is an ensemble playing situation, most interviewees believed that the conductor often has a vision, so they usually follow the conductor's interpretations. One of the respondents added that this is different from playing a solo or playing the soloist part, in which one would have a lot more licence to lead his or her own musical expression. Some respondents gave an example of how exactly they followed the conductor's expression. When playing "a really reminiscent piece", as the conductor's breathing can create an atmosphere, if they "all breathe together and... breathe the right kind of breath" with the conductor, they are "completely sorted for the rest of the piece" in terms of expression.

Besides, the role of musical notation in assisting players with interpreting music was stressed in one of the focus groups in particular, in which some respondents claimed that "if you know how to read all [those] signals like dynamics, [you know] what the composer is trying to do". About this, however, some interviewees in the other focus group thought that "the music has minimal kind of direction itself. It'll have one word every few lines that says, you know, 'this is the style in Italian', and then it's, you know, 'what does that mean?'". For this reason, this group mentioned that they "rely on the section leaders adding in some styles", meaning that

the principal players of each section have a responsibility to lead the style for other section members.

Both groups emphasised the importance of building a personal emotional connection with the music. In one of the respondents' words,

> in any sort of musical performance you're doing, if you haven't looked into the music and found some meaning in it yourself or some sort of, you know, 'oh I like this bit', some sort of connection to it, then from at least you it's gonna seem quite wooden.

This respondent added,

> I mean yes, you [do have to] follow what your leaders are doing, what the music is looking like, and a lot of it comes from what [the conductor] is envisaging as well... but it can't just be, you know, one sided [or] sections individually. Even if you don't particularly like some pieces of music [you] play, you still got to find some sort of emotional connection with it, to express what it's saying.

When asked how exactly respondents build their connections with the band repertoires, one of them demonstrated,

> sometimes there is an emotional context, like with 'Nearer My God To Thee'. I was thinking of Titanic when it's going down and you think a massive great big ship sinking into the North Atlantic, hundreds of people dying. It's a solemn, highly charged with emotion piece, [so] you just think of that [and] nothing else matters.

Another interviewee in the same group expanded on this point:

> Yeah you've just got to be sensitive to what the music is trying to portray and then do your best to portray that in your whole body. [Sometimes] it's not even like specific thoughts, it's just a bunch of emotions like, I don't even know how to describe it, it's like you've really got to take care of each note, and make each note really, really special.

Hearing all these perspectives shared by the brass players, the percussion player joked:

> tough for percussion! We might have in bar 144, we have to play one note on the [Timpani], we have to go like (acting playing the Timpani expressively), that's how we express ourselves, instead of this (acting robotic ways of playing the Timpani), this would have done the job, but we can't show we're feeling it.

Other interviewees in the group giggled. This appeared to indicate the light-hearted nature of ensemble members' interaction, the ensemble morale and group-mindedness in the NBB.

As part of the "musical sensitivity and musicianship" topic, music style preferences were discussed in one of the focus groups in particular. Most of the interviewees in this group agreed that they are generally happy with playing the broad range of styles that the NBB repertoire has covered; however, they have their preferences. One of the reasons was that "certain pieces of music suit certain instruments better", so "the ones that are the most fun to play are the ones that are better suited for the instrument". According to one of the respondents, "a long lyrical music very much works well with euphonium or tenor horn, but bouncy, sharp or more bright music definitely works better for a cornet". A respondent who plays the cornet in the NBB showed agreement by stating that "although I enjoy playing a lot of the hymns, sometimes I find hymns a little bit more annoying because I'm basically putting no sound out of the instrument at all, and we're still being heard quite clearly". The other euphonium player also expressed that "I prefer playing the lyrical stuff".

In addition to the effects that the brass instrument mechanisms have on players' preferences of music styles, sometimes such preference is determined by "how well is that piece actually written or arranged". As a respondent put it,

> did [the composer] kind of put it together well, so it's sort of interesting for everyone in the band, like all the instruments take turns getting a decent melody, rather than one person getting all the melody and you just being stuck on chords the entire time?

For this reason, this respondent added, "I don't really like marches, because the tenor horn part is usually really boring".

Other respondents echoed this view, and a euphonium player stated,

> that's kind of why I think test pieces are so good, because sections are different like, different instruments doing different things. So, there'll be like a fast, bright, fiddly section for the cornets, and then there's like some nice lyrical, slower sections where maybe the tenor horns have got the main melody, or even some like heavier like beefy section where I'm like playing with the tubas and trombones for example. And because there's so many different things and different styles happening, there's at least gonna be some bit in there that you're gonna really like.

Another respondent shared what he usually does when faced with the "boring parts" of the pieces. He stated:

> I'll be trying to push myself on things to make it more interesting", for instance, "when I'm playing sort of hymns or quieter I really enjoy, I'll be pushing myself so, I'll be trying to get the quietest most resonate sound I can, or the loudest warmest sound. Or the marches, I'll think about all the

> offbeats, as great articulation practice. I don't have to do that at home now, do I? I have done my articulation practice for the day in the rehearsal.

The interviewees' observed body movements in the recorded rehearsals were also discussed during the interviews. The movements (e.g. swaying, nodding and foot tapping) that occurred during resting while other band members were playing were mostly considered to be enjoying the music or the sounds produced by other band players. Additionally, some interviewees suggested that their movements, especially the counting (both verbally and finger counting) and foot tapping, may be seen as tools to keep themselves in time with the band. These were particularly useful when they "have many bars rest" and face a "risk of losing time". As one of the respondents put it,

> the counting is sort of a habit that ingrained of quite a few years of doing it where you've had lots of bars of rest... so in that one (an instance in the video clip), there is just a case of me keeping track of where I am, so that when I come in, I'm not late or early.

In addition to helping themselves keep time, finger counting is also a "standard technique" that some interviewees used to help their neighbours keep up, aiding in the overall synchronisation of the band. For example, one of the respondents said, "if you know someone's a bit lost, you're like (raising fingers for the number of bars), you know, it's just a quiet way to help someone". The other respondent also commented,

> it's useful, sometimes like I just finished my last bit, I didn't start counting and I don't actually know how a lot far into these bars of rest time. And you look over, someone else's got, if you're counting in like groups of five [bars] and you see through, and you're like, I'm either like 3 bars or 8 bars or 13 bars through.

Responding to the video footage that one interviewee frowned as he heard a funny noise from other parts, this interviewee defined that as evidence of engaging with peers' performance. In his words,

> I probably heard something interesting or something weird like that, because it's practice, I'm not gonna be keeping it too subtle. I don't think it was me actually getting grumpy, it was more of a reaction of 'woo, what was that? What happened there? [Was] someone out of tune or played a wrong note?', you know, that's it.

The during-playing body movements shown in the video clips were also viewed as evidence of enjoying music and keeping time. One of the respondents was surprised to see himself

joining the conductor and taking a big breath before playing. He said, “I don’t know whether I was aware of that, I just can’t recall doing that knowingly. I probably just so in the moment when I play, that’s just a reflection of focused on it”. About his swaying, this interviewee added,

> some might call that affectation, but I mean, it’s just hard to imagine sitting there like a robot really, it just doesn’t feel right. It’s not as if it’s a lot of movement, but it’s just something it... I just really dig that music, man.

About the swaying with the “minuet” rhythms while playing “A British Isles Suite”, three other interviewees agreed on the point that that was “entirely on purpose”, and they were “quite consciously aware that was happening”. One of them stated,

> I think that particular piece just calls for it, doesn’t it? It’s got a feel to it, and I just can’t sit still. [And at that point] someone probably starts [swaying to the pulse] and then people say, ‘oh yeah let’s go go!’. I think it’s just an attempt like cohesion and a group of playing the style together.

One of the respondents saw his foot tapping while playing as “a real metronomic type of action to keep time”. As a tuba player and the bottom of the band, this interviewee felt responsible for the overall synchronisation, as he was often told by the conductor that “if [the percussion] is not there, you are responsible for keeping time”. However, other interviewees commented that foot tapping is a bad habit, especially during playing. The reason was that “if you’re not completely in time, [your foot tapping] can lead a band astray”. These respondents continued to explain that “[imagine] have someone on the other side of the band tapping their foot wrong, out of time, it’s incredibly distracting [when] you see that out of the corner of your eye”. One of these respondents suggested an alternative, “if you must tap your foot, I was told that [you can] do inside your shoe, not the whole foot”, to which other interviewees in the same group agreed.

These interviewees also pointed out that “counting out loud” is the other distracting body movement. They reported,

> long time ago we had some people count out loud in rehearsals, sort of whispering and gets quite annoying... because the thing is they’re going ‘1 2 3 4, 2 2 3 4’ and your rests start at different place. It’s really... like shut up.

For these bad habits, one of the respondents drew a conclusion:

> if [you’re] not playing, it’s fine when [you’re] enjoying it and [you] go along with it. But if [you’re] doing it while [you’re] playing, I think you are just cutting yourself off, because you start getting into your own world a bit too

> much, you're not looking at the conductor, you're not listening to the rest of the group. The [right] tempo is what the conductor does, [and you're supposed to] move with the conductor.

Chapter 5.2.4 has mentioned that as part of the cognitive instruction strategy, the NBB conductor tended to start a rehearsal with a hymn and ask players to blow the last note or chord of the piece before its run-through began. However, the intention of performing this "last note/chord" exercise was unobservable; thus, what musical skills may have been trained through such exercise were unclear. One of the focus groups was asked to share their thoughts on this exercise. A few interviewees in this group conceptualised the exercise as a way to get every band member to hear the key and the chord structure, "like the chord where we're based off", one said. By playing the last note together, a few others said, "you get the sound and the balance in blow" as well.

According to other respondents, the purpose of doing this exercise at the beginning of the rehearsal was to help players "get into the zone", meaning warm-up. In one respondent's words,

> if no one's played anything together and you say, 'the practice [starts] right now, play it!', the very first note just won't sound good. So [to] get that out of the way, [you say] 'let's play a note and hold it for a bit. Okay, stop now, and play properly'.

When asked why the conductor particularly chose the last note/chord of the piece, one respondent explained,

> most of the time on hymns, not everyone has the first note, [but] more often people have the last note. So if you pick the first note you're missing some players, like quite often the trombones come in halfway through, [whereas] if you pick the last note, you've got more people playing usually.

The percussion player Peter was shown the video clip capturing himself playing to accompany the band without being told to, which has been considered evidence of players' input in the conductor's troubleshooting and peer support in Chapter 5.2.4. In the focus group interview, Peter responded to his actions and said jokingly, "well, I like helping the band, and it's boring just sitting in there while they are going through stuff minute after minute after minute. So yeah, it's just doing something really and it's fun".

When asked if such accompaniment involves sight reading, Peter suggested that all he did was listen to the rhythms of those players who needed help with subdividing their notes and play in accordance with them. This improvisation ability was developed through Peter's big band involvement. As he recalled, "[this] happens in big band a lot" so he learned to "work out a part" according to the situation. Other interviewees in the same focus group complimented Peter on his initiative and support of the band by saying, "[Peter] often do that intuitively, and he won't wait for [the conductor] to ask him to play the beat, he'll just do it... he's basically being our metronome and he's good at it".

When it comes to players' peer support, one of the interviewees reported that she often finds herself trying to influence other players by making her actions very obvious to people sitting around her. As she demonstrated,

> for example, in some other groups where there's some other people [who] are not as competent... I definitely keep track of the timing much more obviously to the person next to me, making sure that they know where we are, and also making it very clear when I'm picking up my instrument [and] getting ready to play into the section, so hopefully they realise 'oh wait, we're coming in soon', if they've miscounted.

Even in formal performances, this interviewee reported, she would have similar behaviours. For instance, if some players are not following the conductor, she would stick with the band while "trying to push things a little bit" by "leaning in the direction of what the conductor is doing", and hopefully, that will "guide [other players] head in the right direction". For this, other interviewees in the same focus group expressed their appreciation of this respondent's thoughts and behaviours and acclaimed her as "a true leader".

Overall, the experience with the NBB was considered fun and encouraging. Some interviewees particularly emphasised the educational aspect of the NBB. As a local band focusing on developing brass players, the NBB "has a very good training atmosphere", and players "can make mistakes and not be hauled over the coals for it". As one of the respondents demonstrated,

> if you play something wrong, it's like, 'yeah, that was me, it's my bad', and then you don't feel any shame, [because] it's like, 'alright, you made a mistake, let's go back through it again and just play it again', you know, it feels very relaxed.

One of the more experienced players expressed a similar opinion by comparing the NBB experience with her other ensemble involvements. She felt,

> in some other brass bands, it's all really toxic atmosphere around, like admitting you're maybe not as good at something as you could be and it gets very competitive. There's never been issues like that [in the NBB because it is] for all levels, [so] you don't feel embarrassed to make mistake. The environment is supportive, good quality and techniques at low pressure, and even just playing in this band has made me a better player in other bands.

- *Receiving Instructions and Directions From the Conductor*

In the last theme, the interviewees' conceptualisations of some major aspects of playing and learning in the brass band are reported, which include their views on many identified musical skills and one of the player-initiated strategies, "player's peer support". This second theme brings together the interviewees' opinions on some of the conductor-led strategies and the specific measures the conductor adopted for various musical problems.

Various points were made regarding the conductor's gestural and vocal directions when playing (the two primary sources of directions while the band was playing). More than half the interviewees expressed that the conductor's exaggerated hand gestures helped draw attention to important musical details. As a few respondents demonstrated,

> sometimes you glaze over if there are changes in meter or time signature throughout the piece, you just kind of glaze over it. But if [the conductor] has been really exact with that, like quickly changing his [conducting] styles, [then we know] that we're getting into the next time signature, the beats are changing, [and then] yes, we've definitely changed it.

The other respondent expressed a similar view:

> Sometimes you might register [the conductor's] hands are getting smaller, and that gives you quite a clear indication on playing smaller... I mean, it's just a very guide if you are unsure, [the conductor] is showing you what he wants [and] what the music's doing, [as long as] you look at him.

When asked to what extent the interviewees watched the conductor and paid attention to his gestures, the interviewees suggested different amounts. One respondent claimed that she is very aware of watching the conductor. In her words, "I usually look up a line and once you got to know the music, know what's in that line and then I'll just look at [the conductor], like both eyes up". For her, the benefit of keeping an eye on the conductor is that:

> If you're always looking up, you always see the downbeat, even if things are going a bit south in the bar and maybe you're fumbling over some semiquavers. If you're not looking, you're gonna be late into the next bar. If you're always looking, you can just correct it right on the next bar rather than letting things keep spiral. So that's why I personally am always trying

> to look as much as I can, because I will be the one to fumble over the semiquavers. But if I'm watching, I'll just stop, come back in on the downbeat and be back on it.

Other interviewees also believed that they tend to watch the conductor a great deal while playing, but it was more "like having something in the corner of [their] eye" because "technically [they're] still looking at [their] music". Some of these interviewees reported that they also find themselves "raising their eyebrows" during playing, "as if that will let [the conductor] knows 'I'm with you' or 'I'm good here'". Another interviewee noticed that he started to pay more attention to the conductor recently, so he considered himself "getting to improve the habit of watching the conductor more frequently".

Other interviewees conceptualise watching the conductor as a situation-dependent action. One of the explanations for this was "how difficult [the] part is right at that time and how well [they] know [that part]". For instance, as a few respondents stated,

> if it's a bit hard, usually I'm concentrating far more on my music and just sort of seeing [the conductor] out the edge of my vision, and [in that case] I may or may not notice [the changes of his gestures]. But if I know what I'm doing quite well, [or] the sections are a bit more straightforward and easier like chords or long notes, I tend to look [at the conductor] more.

The other scenario would be whether it is a rehearsal or a formal performance. According to several interviewees:

> In rehearsals you try and go with the conductor's [gestures], because he's the one that's right, and if everything falls apart and you have to stop and say, 'that was terrible', then it doesn't really matter. But in performance you kind of have to keep it together with the band, I mean, you [still] pay a lot of attention [to the conductor] but you just might not actually go with [his directions] if the rest of the band is going somewhere else.

Additionally, "as a general rule", the interviewees described that "when the timing gets out, like things are really going south, that's when you have to focus far more on [the conductor], definitely look up and see if you're doing wrong". The interviewees also mentioned how important the exaggeration of the gestures is by hinting that small movements might not grab their attention. As they put it, they "really only got half of one eye on [the conductor]", suggesting that they also have to distribute their attention to other things, such as reading scores.

In addition to grabbing players' attention to musical details, one interviewee indicated that the conductor's body movements also "help with the overall vibe of the playing" (i.e. engendering players' enthusiasm and influencing their musicianship). As one interviewee put it,

> when I sit in a band playing... if it's a conductor that does nothing just wagging the stick, it [leads to] boring playing, [but] when the conductor puts a lot of energy in, it's [gonna be] exciting playing. [Like in the video clips] the style where [the conductor] was putting the energy and it's given out like 'oh boy, you guys should go with it', it's all that. [Even through] you may not, or it may just be out of the corner of your eye [that you see it], it actually makes a huge difference to how you feel playing.

Other interviewees in the same group showed agreement, and one added that

> I think a lot of the time, people may not realise how much they are aware with the conductor and how important the person with the stick waving at the front is. But there's a reason why there's a conductor, you know, [he's] keeping time and [he does] all those things, and that's really [what his] job is, [and] it really wouldn't work so well without a conductor.

When it comes to the conductor's vocal directions during the band's playing, one of the focus groups generally agreed that it is "usually a very bad sign". As one respondent in this group described, "singing along is usually an indication that something's gone very wrong, like someone's completely missed what they were supposed to play, or like can't be heard or way way out". The other focus group, however, thought that these during-playing vocal directions did not seem to differ significantly from those that occurred when playing was paused. For them, both types of vocal directions specified the conductor's intentions and "set benchmarks" for players to follow. Alternately, the conductor's during-playing singing along could just be the conductor immersed in his pleasure, as one respondent stated:

> as a semi-professional musician, [the conductor] is really passionate about music. And I think at the end of the day, he's just in his own little world enjoying the music, we're not in his own little world, but he's enjoying conducting and hearing the band and he's just singing along.

While others considered during-playing vocal directions differently, one interviewee seemed to imply that not everyone in the band receives the same information from the conductor due to the seating arrangement. Speaking from a personal experience, before watching the video clips, he was unsure if he was even aware of the conductor's singing along because he is always situated beyond the back row.

The interviewees also shared their insights into the two mostly used strategies during the recorded rehearsals when playing was paused, the conductor's cognitive instructions and vocal directions. The majority of the interviewees saw these as necessary strategies. They acted as reminders, with which many problems instantly fixed themselves, because "there's always something [players] forget about or [they're] not thinking of it at the time". One respondent added that "at least in [that] moment [the issues get] fixed, and then generally the more [you] get reminded, the longer [and] the more likely it is going to stick in your head and you just automatically do it later".

Some respondents were inspired by the VSR materials and demonstrated how the conductor's verbalisations and vocalisations may have "improved [their] mindset". In the case of chord changes, for instance, the conductor pointed out that the changes between each note must be clean, and then he sang the ideal sound of the chord changes and the sound that the band had produced for comparison. This cognitive instruction, in retrospect, instantly made a respondent realise that what they had played was "not right and sounded awful", and as a result, he would bear that in mind. The other respondent cited the example of the conductor correcting articulation errors and stated that those verbal instructions and vocal imitations helped him into the mindset to be short on the quavers and long on the crotchets when playing marches. Before the conductor pointed it out, this interviewee focused too much on the quavers and became slower and dragged the rest of the band.

The comments on the conductor's use of vocal directions (when not playing) were rather positive. The interviewees almost unanimously thought that the conductor's vocal imitations clarified his cognitive instructions and "set benchmarks" for them to imitate. As some respondents described,

> [we] might be playing what's written but what we're playing is not what [the conductor] is thinking... Even just hearing the style that he wants, everyone has their own interpretation... like if [he] said 'shorter', that's very unclear because how short is short, or how long is long?

This comment inspired other respondents and one added,

> sometimes it is kind of difficult to understand what [the conductor] is envisaging by description. Then singing it, it gets the idea across a lot more... you know, a picture paints a thousand words. So it's all about confirm[ing] what the middle ground is and creates a good example to [us to] imitate, you know what you're aiming for, and if you're off, you know you're off. That's little room for confusion.

Based on the above statements, some more senior players of the NBB believed that the conductor's vocal directions (when not playing) also aided their musicianship development. One respondent exemplified,

> sometimes [the conductor] will get like, half of the band that he likes how they're playing it, he'll get them to play it and everyone else to listen and then match the style, [because] it's always easier when you hear it rather than just when someone describes it.

For another senior respondent, the differences between the conductor using words and singing may be:

> If you say words, you can send people to sleep. [The conductor] has got some passion and energy there [in his singing], like he's demonstrating that passion and energy is much more likely the players will get pulled into that passion and energy, because you've got the picture of him doing it.

Upon verification, this respondent agreed to the statement that the conductor's vocal directions (when not playing) could also arouse players' enthusiasm for playing and provide possibilities for them to gain certain musical sensitivity and musicianship.

One of the interviewees reported that the other possibility of acquiring musicianship is from the conductor's cognitive instructions. He recalled that when the band played "A British Isles Suite", the conductor gave some style-related advice for different movements because each movement is different. With the third movement, for example, the conductor's advice was to think about the "Elizabethan 1500s courtly dance-type thing" as they played. However, the final movement was described by the conductor as "a riff on Elgar's 'Land of Hope and Glory', which is 400 years later". Based on this information, this respondent said that he was thinking about "British pomp, that kind of thing" while playing.

Some specific measures adopted during the observed rehearsals for tackling particular musical issues were also discussed with the interviewees. For instance, for issues related to airflow control, pitch accuracy and intonation, and managing dynamics and balance, cognitive instructions such as doing the "buzzing exercise" and "playing what is written to sing" were offered, and a "three-step exercise" was also implemented as the conductor's other way of troubleshooting. In general, the interviewees' conceptualisations of the buzzing exercise were that "buzzing keeps you really honest"; it is a commonly used and fundamental exercise for brass instrument players, and it has an instant and magic effect on improving the overall tone. As some interviewees put it,

> buzzing is the fundamental principle of how we play our instruments. [It requires us to] get as much of a tune as [we] can out of the mouthpiece [without relying on] the valves and the amplifier to get [us] close to the right pitch. [Hence,] it's quite useful to go back to that fundamental thing sometimes, the basic note creation, [because] it's the only way [we] can really be assured [we're] doing correct technique and [we're] not just compensating with an instrument.

Specifically, the benefits of performing buzzing with the mouthpiece were conceptualised as that it "brings breath management into the viewpoint" in that players are forced to "put out so much air from [their] stomach to make the same sound" as if they are playing the instrument. Moreover, "buzzing the melody [requires them] to think about the note" because they "have to pitch it right"; This is different from playing the instrument normally, which they can just "push down the buttons (valves) and that'd do it for [them]". Lastly, a long-engaged NBB player felt that buzzing to a degree could lift players' confidence. Based on this respondent's observation,

> some band members, especially early on, they think they can't get high notes, and you [ask them to] take the mouthpiece out and they play, they can actually play higher on the mouthpiece. So I think often the instrument just gets in the way and then confuses them, but when they can buzz they can get the high notes, and then they've got more confidence when they put instrument into playing.

All in all, as the interviewees summarised, "there is always a really significant difference when you come back to play after buzzing the melody, like you can hear it instantly in the tone, in the tempo and the pitch... [it] just sounds better straight away".

When asked whether buzzing helps to sharpen the skills of "Internalisation and imagining sounds", the interviewees gave a clear "yes". Some explained that "you've got to hear the notes in your head first, like looking at the notes on the page and imagining what they should sound like, [because] otherwise it won't come out from the mouthpiece". A more experienced player held a similar view and added,

> often when people play [off-tune], it's because they're not hearing it in tune. So actually by getting them to buzz it, it's like you get them to hear it and blow it, and then when they play it, they've got the pitch in their head and it's a much much better sound, which is why I always got taught by my teachers that we should be hearing the notes before we play.

Despite knowing the benefits of doing the buzzing exercise, some interviewees mentioned that buzzing could sometimes be a difficult task. In one respondent's words:

> I don't have the greatest aural ability, so I do find buzzing quite challenging, especially when you don't know how [the melody] goes [or] if the interval is larger. It all comes down to pitching really, [depending] on your musical background, [like] some players can pitch intervals, but some just can't.

When talking about another instruction, "playing what is written to sing", the interviewees suggested that it is a rather similar measure to the buzzing exercise, and the purpose of doing it is also to hear the tune in their heads. According to the interviewees, most NBB players, including some of themselves, are non-singers and have no perfect pitch. If they were asked to sing an "A", they would "not be able to pick where they meant to start". "Playing what is written to sing" is therefore "a really useful practice", providing the players with "a point of pitch reference". As shown in the VSR materials, after the players played the singing section and heard the tune in their heads, they seemed to know "how it's supposed to sound" and become more "confident about what note [they] need to start on" and "sing it more accurately".

One of the interviewees, who is also an erstwhile conductor, commented on the "three-step" exercise, which was adopted for training airflow controls, pitch accuracy and dynamic changes during the observed rehearsals. In his words, "*crescendo* in the long notes and then *diminuendo* while keeping the [correct] pitch" is a typical airflow control exercise "where [they've] all have taught to do". It is particularly effective in solving issues such as blowing sharp when the dynamic gets louder and vice versa, as shown in the video clips. This respondent's words further confirmed the interrelatedness of airflow, pitch and intonation, and dynamics in brass playing.

During the observed rehearsals, "synchronisation and phrasing" was one of the main issues being stressed and worked on. When the band played out of sync, the conductor instructed players to "listen in and watch each other" and "play exactly as written". When facing more complicated synchronisation matters, "subdividing notes" was proposed as another way of troubleshooting. Additionally, as one of the conductor-led strategies, "the conductor taking a breath" also played a significant role in developing players' habits of "breathing before playing" and phrasing during playing. During the focus group interviews, video clips related to implementing these measures and strategies were shown to the respondents, who then actively shared their thoughts.

One interviewee commented on the instruction of "listening in and watching each other". This interviewee confirmed that this is a useful method for improving synchronisation that the conductor often reminds them of. In this respondent's words, "like if it just comes in like two people, [you] look across the other person, and suddenly it's just fixed because you're actually thinking about playing with that person rather than playing by yourself". The other interviewee showed agreement by stating,

> I've definitely found that, like if [the conductor] said, 'oh Luca, you're with the trombones at that point', [and then I think], 'oh okay, I need to listen more to them so I can see where I fit in'. If they're doing something, I should be doing the same [and] I'm not at variance with that.

As for the conductor instructing the band to "play exactly as written" in order to be in sync, one of the more experienced players thought it "should be a given". However, according to this player, the reality is that sometimes players are lazy and "blat it down", and sometimes some NBB players would fall into the temptation to "swing" the rhythm a bit even when that was not called for. The other interviewee in the same group argued that it is not always about laziness. Speaking from his personal experience of playing the tuba, this respondent said that sometimes it is just hard to accommodate that (play as written) when it comes to dynamic changes. For example, despite seeing a *pianissimo* on the score, he might need to think about the dynamic level at *mezzo forte* to "get the sound out" because, again, the airflow required for playing the same dynamics varies for different brass instruments.

"Subdividing notes" was conceptualised as a "crucial" and universal measure for dealing with out-of-sync issues in brass bands. According to the interviewees, "there is definitely an emphasis on subdividing" in almost all brass bands and other ensembles they had come across, because it "really does create some metronome in your head, [in that] you're forced to think about [timing]". Thus, the interviewees viewed the instance in the video clip where the conductor suggested players think about 4/4 and subdivide the rhythms when playing a 12/8 section as an excellent example of subdividing notes and simplifying meter. As one of them put it,

> when you look at a segment like 12/8, it's like [looking at] six or seven sharps, and your brain just goes 'oh God, I have to think so much I don't know!'. So, if you just simplify it completely down to 4/4, and it's a lot easier to deal with.

In so doing, as shown in the video, a more synchronised sound was produced. Additionally, interviewees indicated that subdivision also helped them achieve a unanimous musical style in the instance being discussed. In their words:

> in that 12/8 bits, [if you] actually beating in twelve, you [gonna] play your 12 quavers all the same. [But] thinking in 4/4, you kind of divide it into triplets, so it's like one, two, three; one, two, three; one, two, three; one, two, three, and you can get that pulse or lilt, you know, the right kind of rhythms and feels to it. Otherwise feels very straight and boring and you don't have that bounce.

The conductor's breathing before playing and constant phrasing throughout some pieces, as a distinctive feature of the NBB rehearsal, were regarded as key measures to aid synchronisation for some interviewees, in their words, "an effective way to make everyone think together and play together". Taking breathing before playing as an example, the respondents recalled, "often... people come in late because they breathe late, and then once they start late, everything's late. If you breathe together, you usually breathe in tempo as well, so it's more steady when you start". In the other focus group, however, one interviewee proposed that "breathing together is less about synchronisation and more about confidence to all produce the note at the same time when starting". He reasoned that some NBB players tend to be a bit hesitant "at the start of the piece or when... coming in after a rest", and hence they don't produce the note when they intend to. Under the "breathing before playing" instruction, everyone has to consciously breathe one beat before and thus produce the note simultaneously, to which other interviewees in the same group seemed to agree.

As for the conductor's "dramatic and exaggerated breathing/phrasing" during playing, the interviewees thought that it "clearly signifies when and where we should all cut off together, breathe and start playing together again". This is important because "sometimes the conductor wants to keep the phrase going in, especially [when playing] hymns, but [some players] don't know where to take a breath" until they see the conductor is about to take a breath. Some respondents pointed out that the conductor's breathing may also be seen as a reinforcement of his instructions or directions. They recalled,

> I'm sure [the conductor] had said before that, that 'we're all going to breathe it at these points', and the breathing is like a reminder, kind of indicating how long the breaths should be and when you should stop playing and phrase it.

Besides aiding in synchronisation, the conductor's taking a breath, as mentioned in the previous theme ("The Ensemble Experience–Playing and Learning in a Group"), was also regarded as leading players into "the right kind of vibe" and promoting players' musical sensitivity and musicianship. Taken together, as a few interviewees summarised at the end of their interview, the conductor's various doings (e.g. instructions, directions and breathing) are "just repetition[s]" which "keep reminding [them] of the basics" of playing their instruments, because sometimes they forget about things.

- *Surviving the Ensemble Experience*

Survival is another reoccurring theme that emerged from the discussion. For instance, despite knowing the importance of watching the conductor, the percussion player felt that he possibly tends to "watch the music more than the conductor". The reason is that, as the drums and percussion for the band, "you don't have that melody line to find your way". Besides, in his scores, "the letters don't match the start of a new section", for example, "you can have [the letter] C there, and then two bars [later] might be where the new form starts and the first beat of the new melody in a different rhythm". The percussion player also compared the "big band music" and the NBB's music. For him, the former usually has a more unambiguous indication of how many bars of gaps between sections, such as "8 bars [to the next section]". Therefore, he concluded:

> If there's something really important, I do concentrate on the conductor, but then I [also] have to [focus my attention on the music to] find my way. It's just survival, [or otherwise] I have either don't know where I am and I'll miss some key things, you know, it's really tough.

In addition to devoting more attention to the score, interviewees reported that some uses of the identified musical skills and strategies in the rehearsals were also for survival purposes. As many interviewees confirmed that their body movements shown in the video clips could be seen as evidence of listening to fellow players to keep in. This suggested that one of the purposes of engaging with peers' performance was to keep track of the music. The percussion player, for instance, expressed that his verbal counting while listening to other parts is his survival tactic. In his words,

> I'm aware that I count, [because] sometimes I hadn't done enough work to know [my] parts so I just had to count. [In the past performance,] I had people coming up to me from the audience who I knew, joking at me about seeing my lips moving, but that's the way I do it, obviously I was having to concentrate so hard. I mean, if it's something I know well, I can do [the

> counting] more internally or like a ventriloquist, but [when] I'm struggling with [the music], and maybe there's a few time changes or something, I'll just [count]... it's just my way of surviving.

The other interviewee Calvin held a similar view, conceptualising his finger counting on his leg as a manifestation of engaging with peers' playing to keep his place in the music. As Calvin stated, "sometimes, especially when I'm resting, it's a case of figuring out exactly where we are in regard to what else is happening around me, [and that's why] I've got the count on my leg". Calvin continued, "but sometimes if that counts somehow get screwed up, I'm just like, 'oh, I'm supposed to be playing here' by what I'm listening to".

Another interviewee expressed that foot tapping was also considered a trick to keep time, no matter if it was used during playing or resting. Speaking from this respondent's experience, he has always been "really definite with keeping time and [tapping]" as he plays along. When other parts are playing while he has many bars rest, foot tapping is particularly important so that he could "bear in mind the tempo". Another interviewee in the same focus group felt that his nodding behaviour while listening to other parts' playing might also be a way to keep track of the music.

Besides keeping time, engaging with peers' performance was also used during the buzzing exercise to achieve better accuracy of pitch and intonation. As some interviewees indicated that buzzing is about pitching based on their inner hearing ("hearing the tune in [their] head"), so for those who are less capable of pitching (e.g. picking up intervals), buzzing can be a challenging task. Therefore, when a buzzing instruction was received, some interviewees confessed that they would buzz while listening to the front-row cornets. The reason is that those players usually "play the melody line", so following them is likely to be in tune. As the interviewees put it, "it's just a lot easier to base what you're doing off of the melody". Even in the case of normal playing, one interviewee added that "I'm relying more on my ear than [what] I think the note should be", because "you get a bit of feedback from listening [to others]" and "it's a lot easier to [adjust your tuning accordingly]".

As evidence of internalisation and imagining sounds, a player's humming actions during the observed rehearsals were discussed in the focus group interview. In this player's view, humming is an effective way to improve pitch and intonation accuracy, and in principle, it is

rather similar to the conductor's "buzzing exercise" and "playing what's written to sing". Taking that particular piece shown in the video clip as an example, this player explained, "I know that I've split a lot at the start" of that piece, and humming "helped me hear [the tune] in my head first", thereby reducing the chance of splitting and achieving a more accurate pitch.

The other interviewee Henry also saw his whistling the tune during a rehearsal gap as a sign of internalisation and imagining the sound. After watching his video clip, Henry confirmed that he tends to whistle in rehearsals when he is not playing. As Henry put it,

> often when the conductor's talking about someone over there, like take certain sections and go 'okay, these players play this section', in the meantime I've got this difficult bit coming up. And I'd work it out and I can sort of practise it [by] playing in my head, whistling things and doing the valves quietly as well. And then by the time it gets back to me I can play it, [because] I don't wanna look stupid.

This view was echoed by other interviewees, who reported that they do similar things at rehearsal breaks to learn their parts and prepare for their turns. For those individual practices, some interviewees felt that it often involves the use of imagining sound skills. As some respondents described, when they were "doing the valves on their laps and trying to get the fingering right", they were "thinking about the notes, hearing the pitch, and imagining it fitting in with what other people are playing at the same time". Additionally, tonguing and "breathing the notes/pseudo whistling" were also used for the same purpose: making use of the brief gaps in rehearsals and trying to "figure it out where and how [their] beats fit in with others".

In contrast to the brass players, the percussion player claimed that no "imagining sounds" component was involved in his individual practice after watching his video clips. As he recalled, there is a Glockenspiel section in that particular hymn shown in the video. Only recently did he learn to play the Glockenspiel; in other words, it was still a new instrument to him. This is why in the video clip, he was seen "using the other ends of the mallets" and playing above the Glockenspiel quietly, because he was still learning about the instrument and his part. In his words,

> [although those sections] aren't actually hugely technical parts, they're new to me, and reading a key with six or seven flats isn't really up my alley. But you know, you just have to get used to it, get in there and get the notes right.

- *Lifelong Learning and Development*

Most interviewees pointed out that there has been lots of learning and self-development since joining the NBB. As some of them put it, "I feel like I've learned more in Nor'West in the past five years than I have in any other band", and "I think the great thing about Nor'West is because the focus is on development". Generally, by playing in the NBB, the interviewees mentioned that they have had opportunities to learn to play music in various styles. Even though sometimes they are "pushed" to play more challenging music, it is part of the learning. Additionally, as a team activity, "figuring out how to play with other players" is the other educational aspect of playing in the NBB.

The majority of the interviewees described the process of learning new musical knowledge and skills in the ensemble as a matter of habit forming: "the more [you] get reminded [by the conductor], the longer [and] the more likely [his requirements are] going to stick in [your] head". In the long term, those requirements likely become second nature and "you [will] just automatically do it". For instance, after being reminded by the conductor many times about dynamics and balance, the respondents felt that they would "keep in mind the fact that the different notes have different volumes and trying to keep it more even" as they play.

In this habit-forming process, according to the interviewees, the following aspects were often addressed and raised to their subconscious levels. These included but were not limited to pitch and intonation, dynamics and balance, breathing before playing, rhythm/meter/tempo, articulations, phrasing and synchronisation, engaging with peers' performance, musical sensitivity and musicianship. The respondents also confirmed that some of their body movements and behaviours observed during rehearsals were evidence of such subconsciousness. Given the above, it seems plausible to suggest that the above musical aspects were frequently emphasised in the NBB rehearsals through the conductor's "reminders" (i.e. taking a breath, instructions, directions and other troubleshooting measures), hence facilitating the development of those musical skills.

In addition to enhancing the identified musical skills, some interviewees expressed that instrumental and conducting skills could also be gained through NBB participation. As mentioned earlier, the percussion player reported that improvisation skills could be developed through ensemble involvement. One of the interviewees said that he "didn't fit in quite right

at first" when he joined the NBB because he used to play Trumpet in big bands. However, the NBB has trained him to be a cornet player. Another interviewee expressed a similar idea. As a previous NBB cornet player, he felt that he had been "told about alternative fingerings so much more" since he was asked to play the tuba for the band. According to some interviewees, the current NBB conductor has also benefited from such internal structural adjustment, as he has been successfully turned into a conductor from an NBB tuba player.

- *The Social Experience of Ensemble Participation*

As reported earlier in the theme of "The Ensemble Experience–Playing and Learning in a Group", almost all interviews expressed that playing in the NBB has been enjoyable. From the learning aspect, NBB creates a "supportive environment... for all levels" and has "very good training atmosphere". By watching the conductor's doings in the VSR materials, especially his "exaggerated" vocal and gestural directions, the interviewees felt that their enthusiasm for playing and making music with others was certainly aroused. Additionally, some of the conductor's measures, such as the buzzing exercise for tackling pitch and intonation issues, were also thought to enhance players' confidence in playing their instruments.

Besides gaining enthusiasm and confidence, being able to play the musical works and genres that the interviewees personally like is enjoyment in itself. More than half the interviewees said similar things such as "I really like that song" or "I'm just really enjoying the beat of that movement" as explanations for their observed body movements during rehearsals. As some interviewees described, "that's why [we] dance along, [like] we got the shoulders and the feet [moving] and swaying from side to side" when playing "Hey Jude".

As "a team activity", Calvin also conceptualised listening to peers' playing while resting in rehearsals as a source of enjoyment. In his words,

> if [you're] in the band just to play the instrument... [and] you're not there to enjoy what else is happening around you and enjoy what you're hearing as you're playing, then I don't think you're getting the full experience out of it.

One interviewee felt that such enthusiasm and enjoyment are not confined only to the rehearsal period; instead, he often finds himself "humming, whistling or singing [some melodies] down the corridor" as he "[goes] up to the cars after the rehearsal".

Finally, some other interviewees added that such enjoyment not only derived from learning and making music with other ensemble players but also from socialising with others. As a few interviewees stated that “we socialise outside of the band... we can go down to the bar after the rehearsal, and like ‘ah, look at this thing that we did wrong’ [and] ‘look, it sounded good the next time we did it’”. One of the interviewees even commented that “[the weekly rehearsal] is my social life. That sounds really appalling, but it is the social highlight of my week”.

6 DATA IMPLICATIONS

This research hypothesised that an extensive range of musical skills might be developed through participating in a community music ensemble, and strategies may be used in supporting the skill acquisition. Focusing on the receiving end's learning experience, another concern of this research is ensemble players' conceptualisations of their ensemble experience. On the basis of the aim and the hypotheses, the first research question sought to identify the uses of musical skills and their potential development in the chosen ensembles. The second research question sought to determine strategies employed for learning the identified musical skills. The third question in this research was to uncover how players conceptualise their ensemble musical experience.

In reviewing the literature, very little was found on the acquisition and enhancement of musical skills through community ensemble participation. Prior studies have focused generally on the social, emotional, mental, spiritual and psychological benefits of joining a community music ensemble, and musical skills seemed to have been treated more as an exclusive research topic within the context of formal music education. Although several reports have noted lifelong learning as part of the community ensemble involvement, the process of how musical skills may be gained in such a non-formal learning environment has not been scrutinised thoroughly, and ensemble participants' conceptualisations of such learning experience have remained ambiguous.

This thesis addresses the three research questions by examining the rehearsals of two local community music ensembles. It provides a systematic analysis (see Chapter 5) of the kinds of musical skills that may be acquired in such a setting, the types of strategies adopted in this learning process, and various conceptualisations that the insiders (i.e. ensemble players) formed about their ensemble learning, music making and socialising experience. The implications indicated by this detailed analysis of these three aspects (i.e. musical skills, strategies, conceptualisations) are presented in Chapter 6.1, Chapter 6.2, and Chapter 6.3, respectively. While the sample group is small, it provides unique, critical and illuminating insights into this little-known music learning phenomena, suggesting that the community music ensemble is not only a place for music making and socialisation but indeed an educational context. The wider implications of the findings are discussed below. It is important to note that any generalisations made in this thesis are based on the four formally observed rehearsals and conceptualisations of 14 ensemble players.

6.1 Musical Skills in the Community Ensemble Environment

Through a total of four observations across the two community music ensembles, it is significant that there is considerable overlap between the musical skills revealed in the CAO rehearsals and the NBB's, despite the essential differences between the two ensembles, such as the instruments being played, the music background and experience of the conductors and players. These overlapping skills include articulation skills, engaging with peers' performance, internalisation and imagining sounds, managing dynamics and balance, musical sensitivity and musicianship, pitch accuracy and intonation, playing rhythm, meter and tempo, repeating musical sections, sight reading, synchronisation and musical phrasing, as well as watching the conductor.

Within these skills that both ensembles shared in common, playing rhythm, meter and tempo is the skill set with the highest number of occurrences in both ensembles. This musical skill set was primarily manifested in both ensembles in the form of tapping and counting, which seemed to be the tools that players commonly used to keep time in rehearsals. Both conductors also attached great importance to this aspect, which may foster players' further development in this skill set. Engaging with peers' performance was also frequently manifested in both ensembles. Such a critical ensemble skill was emphasised by both conductors, mostly when the ensembles were out of sync, out of tune, or had major pitch inaccuracy. Another skill set, internalisation and imagining sounds, is highly valued in formal music education (Beckman, 2011; Pratt et al., 1998; Slette, 2014; Smith, 1934) but was not discussed in either of the community ensembles, and the use of this skill was only observed on very few players.

The implications of these findings may be that the community music ensemble essentially differs from the formal music education setting. As the fundamental nature of ensemble performance is playing music together (Cook, n.d.; Goodman, 2002), the musical aspects directly related to playing a piece of music (e.g. rhythms and dynamics) and skills associated with improving synchronisation (e.g. engaging with peers' performance and watching the conductor) between parts would generally receive more attention or employed more frequently in any types of ensemble. Moreover, the limited uses of internalisation skills also appear to suggest ensemble players' individual differences. Due to the difference in their

prior music learning levels (i.e. before joining the CAO or the NBB), some players may be more used to applying certain skills in music performance than others. This further demonstrates the volunteer nature of community music ensembles and that players' musical capabilities vary (Coffman, n.d.).

Despite many commonalities in the types of skills observed in both ensembles, the number of their occurrences in each ensemble varies. Some of these common skill sets, such as managing dynamics and balance, articulation skills and repeating musical sections, appeared to be vital aspects of the CAO rehearsals, but were not the main concerns for the NBB's. On the contrary, skill sets including musical sensitivity and musicianship, watching the conductor, synchronisation and musical phrasing, and pitch accuracy and intonation seemed greatly valued in NBB rehearsals. Additionally, sight reading skill was regularly exercised in NBB rehearsals but was not very evident in the CAO's. This was likely because the CAO was making use of the time to rehearse their concert repertoire. These findings suggest that the types of musical skills that may have been developed in ensemble rehearsals to some degree depend on the conductor's focus of interest. This also shows that the observed skills may be somewhat rehearsal purpose dependent.

In addition to the skills in common, some musical skill sets appear to be unique in that they were only observed in the NBB rehearsals rather than the CAO's, and vice versa. These skills include breathing before playing, switching couplers, playing techniques and musical improvisation skills. This result may be explained by different instrument mechanisms and ensemble arrangements and regulations. Breathing before playing appeared to be a distinctive feature and the most frequently occurring musical skill in NBB rehearsals. The conductor highly encouraged this practice as it is an effective way to have all players play simultaneously (improving synchronisation) and ensure that players would have enough breath to complete the first phrase. Likewise, switching couplers is a typical instrumental skill in accordion playing hence only manifested in the CAO rehearsals. In addition, different ensemble arrangements and regulations might explain that specific accordion playing techniques were only identified in CAO rehearsals but not in the NBB's. Similarly, the manifestation of musical improvisation skills in CAO rehearsals was possibly based on prior approval obtained from the conductor.

Furthermore, some commonalities were also recognised in the unaddressed issues of both ensembles. It appeared that inaccurate pitch and intonation and rhythm/meter/tempo issues might have been occasionally neglected in rehearsals, especially in a sight-reading situation. This seems normal in ensemble rehearsals, and there are two likely causes for why these issues were not being addressed immediately. First, as the CAO and the NBB rehearsal is only two hours, the conductors must set priorities and decide how much time can be devoted to each problem. Next, sight reading requires playing a piece of music as written without preparing in advance. In an ensemble setting, errors and omissions might be inevitable to keep all players playing a musical piece at first sight. This is because there is a limit to how many things a player can focus on at any point in time, not to mention that many players who participated in this research are not expert musicians. To a degree, these omissions appeared to have revealed players' struggles and again, demonstrated the individual differences in musical competence and experience in a community music ensemble.

The attentiveness in ensemble rehearsals was explored in Chapter 2.6, and it appears generally agreed that a well-trained ensemble player is expected to monitor their own sounds continuously while actively engaging with the sounds produced by the rest of the group and immediately react to the conductor's instructions and directions. However, for an amateur instrumentalist and a relatively inexperienced ensemble player, there is a limit to how many challenges they can concentrate on at any point in time, especially when they have possibly not done much practice between rehearsals. They need to decide and maybe prioritise the requirements from the printed music sheet or the conductor. For example, in a sight-reading task, they will likely decide to keep their place in the music and hopefully hit the right keys, rather than risking their fluency for articulation effects.

Above all, these identified musical skills may be seen as examples of the types of skills used and can be potentially gained or strengthened within the community ensemble rehearsal. However, in a broader context, the manifestation and development of musical skills might be somewhat different due to various reasons, including the difference in players' prior music learning levels, the conductor's focus of interest, the instrument mechanism, and the ensemble arrangement and regulations. These findings also indicate a weak link between the skills observed and the rehearsal purpose.

Although the observed musical skills were organised into independent categories and analysed individually to give a clear account of the types of musical skills identified in each community ensemble, those identified musical skills are inextricably interrelated. Such interrelatedness was recognised in our findings but also justified by the literature. First of all, while not identified as a skill category, music literacy is essentially the root of many identified skill categories. Within the ensemble context in which playing as a whole is a requisite, players need to be more or less musically literate (i.e. to read music scores and understand musical notation) to translate musical markings into the same notated sound (Marvin, 2008; Norton et al., 2005). Thus, in the present study, music literacy underlies at least ten identified skill sets, including articulation skills, managing dynamics and balance, musical sensitivity and musicianship, pitch accuracy and intonation, playing rhythm, meter and tempo, repeating musical sections, sight reading, synchronisation and musical phrasing, playing techniques and switching couplers.

6.1.1 Musical Sensitivity and Musicianship Reflect Overall Musical Capability

As explained in Chapter 2.4, musicianship may be understood as a situational and multidimensional concept (Brown, 2012; Elliott, 1995; Rickard & Chin, 2012). Thus, for the ease of identifying and categorising skills manifested in CAO and NBB ensemble rehearsals, a brief and narrow definition was given earlier to the term "musical sensitivity and musicianship", referring to "being musical", including engaging with music, interpreting music, expressing emotions, stylistic playing, singing with accompaniment and accompanying a singer. However, in a more general sense, players' musical sensitivity and musicianship may be seen as a comprehensive set of abilities reflected in every aspect of their ensemble playing.

A basic a conception of "musicianship" is "skill and sensitivity in performing or perception in appreciating music" (Butler, 2009). Hence, "playing techniques" are closely related to musicianship as part of the performing skills. For those whose musicianship is limited, they may find playing 12/8 a struggle ("Playing rhythm, meter and tempo"), and some might experience difficulty following the repeat signs ("Repeat musical sections) or changing couplers ("Switching couplers") without losing their place in the music. Due to the difference in players' musicianship, players' interpretations of the articulation ("Articulation skills") and dynamic ("Managing dynamics and balance") markings are also likely to vary and possibly

differ from the conductor's. In effect, the sound produced by each player will be somewhat different. For a similar reason, players may phrase ("Synchronisation and musical phrasing") at a different time due to various perceptions of a musical passage.

Beyond playing capabilities and the interpretation of music, musical sensitivity and musicianship may also determine whether an ensemble player can internalise and imagine music without hearing the actual sound ("Internalisation and imagining sounds"), how well a sight-reading task is being played ("Sight reading"), and what kind of creative decisions are made when improvising ("Musical improvisation skills"). As ensemble skills may be part of musicianship, in the current research, it is deduced that watching and listening to fellow players ("Engaging with peers' performance"), playing in sync with the ensemble ("Synchronisation and musical phrasing") and keeping an eye on the conductor ("Watching the conductor") as a reflection of one's musical sensitivity and musicianship. Such associations were supported by Brown (2012), Smith (1934), Luce (1965) and Lovelock (1965).

6.1.2 Technical competence contributes to realisation of musicianship

As part of the musicianship, ensemble individuals' playing techniques not only influence their rhythmical skills and the ability to switch between musical sections and couplers but are also associated with their employment of other musical skills. In the present study, where the participants are piano accordion players (the right-hand section contains a piano-type keyboard), brass instruments and percussion players, how experienced they are in playing their instruments has a direct impact on their uses of (one of) the following skills. These skills include but are not limited to pitch accuracy and intonation, managing dynamics and balance, articulation skills, synchronisation and musical phrasing and musical improvisation skills.

First, piano accordion players generally have concerns about fingering because ideally, they may wish to move from one note to the next without looking at the keyboard. This indicates the link between the accordion playing techniques and pitch accuracy. For brass players, the accuracy of pitch and intonation is hinged on whether they buzz harder or softer (i.e. airflow control) and also on using different valve combinations (i.e. fingering). For the percussion players, pitch accuracy could still be a challenge when playing the pitched percussion, just as rhythmical skills for the unpitched percussion.

Secondly, one of the major breakthroughs that every accordion player might wish to make is the bellow management, because technically, the acoustic mechanism of the accordion is pressing the keys while compressing and expanding the bellows to force the air through the reeds inside (Harrington & Kubik, n.d.). This means that how well the accordion bellow is controlled (i.e. how much air is allowed to flow across the reeds) determines the dynamic changes. It seems to be the same principle in playing brass instruments if human lips are seen as the accordion bellows: how brass players manage the airflow through their lips will change the dynamic levels. Besides, it may also result in differences in phrasing as some players might run out of air and need to take a quick breath in the middle of a phrase, even though it may sound interrupting.

Likewise, due to the different qualities and mechanisms of the instrument, different articulation techniques are required (Chew, n.d.). In wind and brass instruments, techniques of articulation include various patterns of tonguing, whereas for the accordion, the articulation being performed primarily depends on one's bellow management and slightly on key touching technique. Ultimately, synchronisation is likely to be impacted by ensemble players' instrumental techniques in a group playing setting. Imagine if a newly joined ensemble member has only started learning the instrument and their instrumental techniques are relatively limited; for a while, they are unlikely to keep up with the ensemble and play in sync with others, hence affecting the overall synchronisation.

Changing couplers (or registers) are a special accordion technique. On large models, they are usually installed in both the treble and the bass sections, but sometimes there are chin couplers installed for players' convenience. Couplers may be called "shifts" ("switches" or "stops"), which make "available extra sets of reeds to be sounded simultaneously with the main rank, in various combination", thereby giving a variety of tone colours (Harrington & Kubik, n.d.). Mechanistically, it is apparent that the couplers are correlated with intonation.

In practice and performance, players generally follow the coupler marks printed on the music sheets for switching between couplers, as those represent the original intentions of the composer or the arranger. Sometimes players may use a coupler based on their interpretations of the music, which is where their musicianship comes into play. For instance, a player may decide to use the violin coupler when playing a lyrical section because it turns the powerful

accordion sounds into soft violin-like sounds. Likewise, a bandoneon coupler also softens the bright accordion sounds and gives a piece of music a nostalgic feeling.

In a solo performance, changing couplers might be out of consideration for modifying timbre, although one of the consequent changes is volume range. This means that, with different couplers, the maximum and minimum dynamic levels one can reach on the accordion usually differ. For this reason, in the setting of ensemble playing, the conductor as a "mediator" may be responsible for adjusting coupler uses for every part because inappropriate coupler choices may lead to imbalanced overall sounds. For example, if the first accordion part (which usually has the melodic line written in) uses a piccolo coupler while other accompanying parts use the master coupler (i.e. the accordion sound), the sounds produced by the first accordion players would be too soft and drowned out in the group playing. In this case, having other parts using the accordion coupler is not the right choice, as their sounds are too loud and make the first part inaudible.

6.1.3 Interrelated Ensemble Skills

Numerous skills at both musical and social levels are demanded to play together in ensemble settings (Goodman, 2002, p. 165). In Goodman's words, ensemble was referred to as "the precision with which musicians perform together" in a group setting (p. 153). This appears to suggest that the most basic and essential requirement of an ensemble is that each individual part fits together, in other words, in time.

Several identified musical skills are involved in this coordination of timing. With synchronisation ("Synchronisation and phrasing") being an ultimate goal, each ensemble player must endeavour to play in time with the rest of the group. During this coordination of timing, players need to follow the ensemble's clock, which in some cases (such as the CAO and the NBB), the conductor is who indicates the overall speed and provides a "shared common timekeeper" for players (Goodman, 2002, p. 154). As the changes in phrasing, dynamics, meter, tempo and articulation effects are often indicated through the conductor's non-verbal directions, including the employment of hand gestures, body movements and facial expressions (Price & Byo, 2002, pp. 343-345), "watching the conductor" becomes one of the essential ensemble skills. It "reminds" players to phrase and perform all these changes and effects at the right timing, thereby achieving a synchronised sound.

As there is a limit to how many things an ensemble player can concentrate on at any point, watching the conductor is not always possible. Hence, based on the conductor's main beat, some ensemble players tend to create their own internal pulse to help them keep time, which is usually shown outwardly through foot tapping and counting (Goodman, 2002, p. 154). This is where part of the rhythm, meter and tempo skills ("Playing rhythm, meter and tempo") come into play. Besides being able to play a variety of rhythmic patterns and adjust the meter and tempo when needed, maintaining the pulse is also a major component. From this point of view, synchronisation skills and playing rhythm, meter and tempo are highly correlated.

At a more critical level, playing in sync with others ensemble players requires more than just the ability to watch the conductor and maintain the beat. According to Goodman (2002), the interaction between players ("Engaging with peers' performance") has a direct impact on timing (pp. 154-156). Ideally, players will constantly anticipate every beat and react to the production of each beat. In simple terms, a player follows another by anticipating when the next note of a fellow player will sound and responding to the note produced by other players. This mutual cooperation is primarily defined by ensemble players' aural communication (being able to hear each other) and visual communication (being able to see each other), and perhaps verbal interaction within the ensemble rehearsal context. It is reasonable to infer that how well players engage with their peers can make a difference in ensemble synchronisation.

In addition to the interrelatedness of these timekeeping skills, synchronisation is closely associated with musical phrasing (breathing), pitch accuracy and intonation, articulation skills, managing dynamics ("Managing dynamics and balance") and repeating musical sections ("Repeating musical sections"). After all, in the ensemble context, it would be ideal if every individual who plays the same part shows phrases (taking a breath) and simultaneously produces every note with the same intonation. Likewise, when articulation, dynamic changes and repeats are required, how well players can manage these changes and how synchronously they can play directly affects the overall sound. As a special feature of the NBB, breathing before playing proved to be an effective method for improving synchronisation.

Looking from another perspective, some of these ensemble skills are not merely to coordinate timing but are also tightly associated with gradations in dynamics ("Managing dynamics and

balance"), changes in articulation ("Articulation skills"), timbre and intonation ("Pitch accuracy and intonation") and expression and interpretation ("Musical sensitivity and musicianship"). Since an instrumental ensemble will have at least two and often multiple parts or instruments, overall dynamics must blend well for listening; in other words, good balance. This can be achieved by each ensemble player constantly listening to and watching each other ("Engaging with peers' performance"). As Goodman (2002) believed that the ensemble individual's attention or concentration is divided between "monitoring the sound came out from his or her own part and attending to the sound emanated from the rest of the group" (pp. 156-157). This way, they are more likely to capture all the tiny nuances emerging from other parts, so fine adjustments with their own can be made for better balance and resolution.

Goodman (2002) used a great example to illustrate this "anticipation-reaction" process. When the dynamic level of an oboist's tone starts to fade away, a fellow player in the same wind quintet may slightly quicken the tempo towards the end of the phrase to cover for the oboist in case the oboist runs out of breath; alternatively, the co-players may increase their dynamic levels to maintain the overall volume (p. 156). Such cooperation and compensation among players appear to be a significant part of ensemble playing because ultimately, a more balanced sound is desired as a unified group. Similarly, if a player is constantly watching and listening to the ensemble fellows, anticipating their next move and reacting upon such prediction, he or she is likely to quickly adapt to the articulation changes and adjust the tuning to stay in step with others. As a result, the whole ensemble will likely attain great articulation and consistent tone quality.

As the expression and interpretation of music may also be communicated "visually" and "aurally" among ensemble players or between the conductor and the players, to some degree, engaging with peers will influence players' musical sensitivity and musicianship (Goodman, 2002, pp. 156-159). For instance, in a string quartet, a player might project interpretative ideas by watching another co-player move around wildly when playing a peaceful and unhurried passage of music; alternatively, listening to an emotional and expressive performance of a fellow player may stimulate one's musical imagination and enhance one's sensitivity to music.

A similar relation exists between watching the conductor and musicianship. As said earlier, the role of the conductor is more than just waving the baton in front of the ensemble to help every player move together; much more information, including the mood and character of the music, may be conveyed via the conductor's change of postures, facial expressions and seemingly capricious gestures (Goodman, 2002, pp. 158-159; Price & Byo, 2002, p. 344). If ensemble players can read these visual signals about expression, their musicianship is likely to improve over time.

Musically speaking, articulation is often understood as how a single note or a group of notes should be played. As Geoffrey Chew (n.d.) explained, "articulation" is primarily used as a term, referring to "the degree to which a performer detaches individual notes from one another in practice (e.g. in *staccato* and *legato*)". Accordingly, "articulation marks" are the appended symbols in musical notation that denote the notes' relationship (Brown, n.d.).

In music practice and performance, articulation is interrelated with many other musical skills, because articulation marks often indicate the modification of dynamic levels, timbre, and intonation of the note(s) (Chew, n.d.). Sometimes, the articulation marks may also result in the duration of the note(s) being adjusted, thereby slightly altering rhythms, tempo and meter. For example, *staccato* signifies a note of shortened duration, and a pause sign directs performers to hold a note longer than its written value. Due to the changes in note duration, musical phrasing and synchronisation may also need to be adjusted accordingly.

6.1.4 Sight Reading as Part of Ensemble Playing

Sight reading is generally understood as playing a piece of music at first sight. From a psychological point of view, there are four subskills involved in the process of sight reading. They are perceptual skills (decoding note patterns), kinaesthetic skills (executing motor programs such as experienced sight readers orienting themselves on the keyboard without looking at hands), problem-solving skills (improvising and guessing), and recall and memory (recognising patterns) (Spencer, n.d.).

Although sight reading is not an essential skill that one needs to master to play an instrument or enjoy music, in the ensemble setting (at both professional and amateur levels), players' sight reading capabilities might be occasionally challenged. This challenge usually arises

when an ensemble embarks on a new piece, or a conductor wants to run through a piece of music to obtain a rough impression. Ideally, before deciding to keep a music work in the repertoire or not, the band needs to be able to quickly gain an impression of how a new piece is going to sound. As a result, the players will gain enthusiasm and motivation to learn it, thereby remaining engaged and focused on future musical endeavours as an ensemble.

Based on a comparison Spencer (n.d.) made between practising a rehearsed piece and a sight reading piece, it is apparent that the expectations and focuses are entirely opposite. For sight reading, the big picture is more important than the details in the music; thus, minor errors and omissions are acceptable. However, in a sight-reading exercise, players are expected to maintain meter and tempo and arrive at the correct notes in any way. Based on such requirements, sight reading may correlate more with rhythm/meter/tempo and pitch accuracy than other identified musical skills.

However, a more capable and experienced sight reader might be able to play expressively with regular phrasing the first time when they play through an unfamiliar piece. Some may even be able to take articulation and dynamic effects, repeating sections and changing couplers into account. When encountering musical problems, some may be capable of improvising and simplifying tricky ornaments to achieve more fluency in sight playing. In this case, a strong association may be found between sight reading skills and musical phrasing, musical sensitivity and musicianship, articulation skills, managing dynamics and balance, repeating musical sections, switching couplers and musical improvisation skills.

6.1.5 Internalisation and Imagining Sounds as an Advantage in Ensemble Playing

Internalisation and imagining sounds appear to be one of the most discussed topics in aural training within formal music education. In Carl Seashore's (1938) words, the image is the very essence of the musical mind. He described the ability to imagine how the music sounds as "a condition for learning, for retention, for recall, for recognition, and for the anticipation of musical facts" (p. 6).

The conceptions of internalisation and imagining sounds seem to be reasonably straightforward. Edward Klonoski (1998) defined "internalisation" as a capability of "mentally creat[ing] or recreat[ing] auditory images without singing, playing, or otherwise

outwardly reproducing the pitches" (p. 81). "Musical imagination", in some cases was explained as "hearing music from notation in the absence of physical sound" (Thompson, 2004, p. 81). The definitions of these two terms are similar in terms of the "inner hearing" process but not precisely the same. In the present research, these two were combined as one skill set, referring to the occurrence of "thinking in sound" in the observed rehearsals. In other words, the moment ensemble players appeared to be "inwardly hearing and comprehending musical notation separately from the act of performance" (McPherson & Gabrielsson, 2002).

Unlike other identified musical skills, "thinking in sound" is not a prerequisite for playing in an ensemble. However, if one can hear music in one's head, one's playing is likely to be improved, and cooperation with one another is likely to be promoted in a group-playing situation. Players who can produce mentally imagined sound (either through reading the scores, singing and humming, thinking of fingering or improvising) may have an overall idea of how a piece of music would sound and have proper control over their pitch and intonation (especially with brass players), rhythmic elements, dynamic levels and articulation. These players may also be actively engaged with their fellows' performance, and consequently, they are unlikely to miss their turns when their parts should come in. Ultimately, the sound coming out from their instruments are more likely to fit in with the group's sound, thereby achieving better synchronisation.

Lastly, if the players who are good at "thinking in sound" are also excellent sight readers, they may benefit from translating the notation into sound while reading a piece of music at first sight. They might have developed a rough idea of when to phrase and how to appropriately express their emotions towards the music from reading and simultaneously hearing the notation, and they are likely to have fewer mistakes and omissions during run-throughs.

6.2 Identified Strategies for Developing Musical Skills

The observational data gathered from the four rehearsals indicate that various strategies were employed in the two community instrumental ensembles. Twelve strategies were observed in both ensembles, with one additional strategy ("The conductor taking a breath") only appearing in the NBB. Although some differences were observed between the two ensembles

in types of musical skills possibly developed through each strategy, it seems positive that these strategies have fostered the acquisition and advancement of the identified musical skills.

Of the 12 strategies both ensembles shared in common, three were player-initiated strategies, namely players' peer support, individual practice and note taking. Although these strategies appeared to be less frequently employed by players of both ensembles, their uses may have supported the development of certain identified musical skills. It was recognised that musical skills acquired under peer's support were limited to repeating musical sections, switching couplers and pitch accuracy and intonation because most support was provided for addressing general inquires. Despite the limited usefulness of this strategy, the role of players' peer support appears to be "problem-solving" in this research. The implementation of this strategy indicates community music ensembles as a collective learning context, which is in line with the previous studies (Slette, 2014).

Musical skills that may have been strengthened through the players' individual practice are playing techniques and playing rhythm, meter and tempo. Based on the slightly different number of occurrences of this strategy in each ensemble, it may be inferred that the CAO players tend to exploit the rehearsal gaps to make quick attempts to fix their playing errors related to certain accordion techniques or rhythm/meter/tempo. In contrast, the NBB players might have been more accustomed to listening to the conductor's assessment of their performance or waiting for his further instructions before making a move. This may suggest that the group dynamics in ensemble rehearsals were hinged on the conductor's leadership styles. Nonetheless, this strategy appears to have a dual role, with the primary one being a warm-up and the subordinate being problem-solving.

Players' note taking was adopted in both ensembles several times. This strategy seems crucial in helping players translate the conductors' instructions, directions, solutions and music adjustments into written records, hence performing a visualising role. By implementing this strategy, musical skills such as managing dynamics and balance, repeating musical sections and playing rhythm, meter and tempo may have been developed or further upgraded. The employment of these three player-initiated strategies seems to imply players' initiative and intentionality in learning, which may be seen as explicit learning.

The majority of the problems observed in both ensemble rehearsals were however addressed by the conductors, suggesting the community music ensemble as a conductor-led music-making setting and, to a degree, the dual roles of the conductors as the ensemble leader and music educator, which are in accord with the literature (Baker & King, 2013; Bell, 2002; Boonshaft, 2006; Dan Halpern Music, n.d.; Feldman & Contzius, 2010; Gillis, 2008; Ivaldi et al., 2021; King, 2011; Priest, 2002; Ulrich, 2009; Wigglesworth, 2020). Of all observed conductor-led strategies, two were frequently applied in both ensembles for problem-solving purposes: the conductor's other troubleshooting and adapting music, and working with individuals or subgroups.

During rehearsals, the CAO and the NBB conductors offered solutions and even made adaptations to the music as their way of troubleshooting. Sometimes these adaptations were in response to the music, but sometimes to the player's ability or the limitations of available instruments. Musical skills might have been enhanced due to the conductor's troubleshooting, including playing rhythm, meter and tempo, managing dynamics and balance, synchronisation and musical phrasing, pitch accuracy and intonation, repeating musical sections, playing techniques, articulations skills, switching couplers, and musical sensitivity and musicianship. In both ensembles, experienced players' input in the troubleshooting process was also evident, indicating that the community ensemble rehearsal is essentially a collaborative music-making setting (Coffman, n.d.; Joseph & Human, 2020).

The conductor working with individuals or subgroups is a troubleshooting strategy in nature, and it was adopted more often in the NBB rehearsals than in the CAO's. The reason for this is unclear but may be related to the conductor's preferences and conducting styles. This strategy's implementation has potentially improved players' synchronisation and musical phrasing, playing rhythm, meter and tempo, managing dynamics and balance, articulations skills, repeating musical sections, pitch accuracy and intonation, and musical sensitivity and musicianship. The instances also showed that in both ensembles, the rehearsal time spent in such "targeted" training with the same individual or group and the number of attempts made was limited. This may indicate the conductors' awareness of holding players' attention and keeping their engagement with the ensemble as a whole, because when too much time is allocated to an individual or subgroup's training, other players who were not involved are likely to become disengaged.

Giving motivational comments is another strategy that both conductors applied in the observed rehearsals from time to time. Some of these comments appeared to be jokes to lighten the rehearsal atmosphere, but some might have been more directly associated with musical skill attainment. The skills that may have been sharpened under this strategy were playing rhythm, meter and tempo, musical sensitivity and musicianship, pitch accuracy and intonation, synchronisation and musical phrasing, managing dynamics and balance, engaging with peers' performance, watching the conductor, sight reading, and articulation skills. A slight difference in how the two conductors motivated their ensemble layers was also observed: metaphors and jokes may have been used more frequently in the CAO, while the NBB conductor tended to praise the players with precise comments on what had been improved. However, this might also depend on the nature of the ensemble players. Despite the different timing and ways of offering a motivational comment, this strategy's role in both ensembles seems to be the same, i.e. to keep players motivated and engaged throughout the rehearsal.

The other six shared conductor-led strategies observed in both ensembles have been categorised mainly based on the timing of the occurrence: cognitive (verbal) instructions, vocal directions and gestural directions when players were not playing, and during-playing verbal, vocal and gestural directions. Of the three strategies appearing when playing was paused, cognitive instructions and vocal directions appeared to be the most frequently used strategies in the CAO and the NBB, whereas the application of gestural directions was very few. On the contrary, during ensemble playing, the verbal direction was the least used strategy of the three during-playing directions for both ensembles.

In the CAO and NBB, cognitive instructions were often adopted singly, appearing mainly after players' playing attempts but sometimes used before playing began. Musical skills that have probably been gained this way include managing dynamics and balance, articulation skills, playing rhythm, meter and tempo, synchronisation and musical phrasing, pitch accuracy and intonation, repeating musical sections, playing techniques, breathing before playing, watching the conductor, engaging with peers' performance, and musical sensitivity and musicianship. Depending on whether cognitive instructions were offered before or after a playing attempt, their roles seem to be different. As post-playing feedback, cognitive instructions may have acted primarily to assess the quality of just-played sections, teach musical knowledge and concepts, and correct playing errors with simple guidance. However,

when this strategy was applied before a playing attempt, it might have functioned as a pre-playing review to help players recall the conductors' previously emphasised points.

Likewise, vocal directions (when not playing) were employed mainly as post-playing feedback and occasionally occurred before playing. Despite the timing of employment, this strategy appears to have two roles: locating or demonstrating. The "compass" role is reflected in those instances in which the conductors sang the problematic areas to help players locate the errors or where adjustments were required. The demonstrating role is also determined based on many observed instances where both conductors sang the ensemble's playing, their desired sounds, or sang both as a contrasting type of vocal feedback. To some degree, this implication is consistent with those of Weeks (1996), who found that the conductor's "illustrative expressions" often acted as "contrast pair" to show "the faulted performed version" and/or "the conductor's preferred version".

The findings also show that vocal directions (when not playing) possibly served as a supportive strategy as it was often adopted in conjunction with other strategies than by itself. Due to the application of this strategy, a range of musical skills may have been acquired or improved, such as managing dynamics and balance, articulation skills, playing rhythm, meter and tempo, synchronisation and musical phrasing, pitch accuracy and intonation, playing techniques, and musical sensitivity and musicianship.

As the least preferred strategy when playing was discontinued, gestural directions appeared mainly after the ensembles had made playing attempts and were used jointly with other conductor-led strategies. Based on the limited number of instances in this aspect, it is deduced that this strategy also played a demonstrating role in the two ensembles' rehearsals. It was evident that two types of identified musical skills, managing dynamics and balance and musical sensitivity and musicianship, may have been learned if the conductor's gestures and movements were noticed and perceived correctly. The findings also show that in rare cases, both conductors used cognitive instructions and vocal and gestural directions jointly to explain the musical style needed for a particular phrase or section. In those scenarios, an acquisition of musical sensitivity and musicianship appeared foreseeable.

For the three directions provided during ensemble playing (i.e. vocal, gestural, and verbal directions), the CAO conductor and the NBB conductor clearly had their preferences between

vocal and gestural directions. The CAO conductor seemed to favour vocal directions, because this strategy had the highest number of instances in all strategies identified in CAO rehearsals, and this number is more than twice that of gestural directions. By contrast, the NBB conductor used gestures more often during playing to direct his players. Despite the conductor's preferences, the roles of these two directions in each ensemble seem the same. Gestural directions (when playing) appeared to function the same as those gestures observed when the band stopped playing, hence a demonstrating role. Vocal directions (when playing) seemed to have multiple roles: a dominant role as a reminder of previously discussed points, secondary as the conductor's habitual singing or "enjoying the moment", and last but not least, as a means of measuring pitch and intonation accuracy.

Furthermore, the findings indicate that via the conductors' during-playing vocal directions, there seemed to be the potential for players to sharpen their articulation skills, managing dynamics and balance, playing rhythm, meter and tempo, playing techniques, synchronisation and musical phrasing, musical sensitivity and musicianship, and pitch accuracy and intonation. The possibilities for honing articulation skills, managing dynamics and balance, playing rhythm, meter and tempo, synchronisation and musical phrasing, and musical sensitivity and musicianship were also evident in the conductors' employment of during-playing gestural directions.

The implementation of gestural directions in this research further supports the ideas of Price and Byo (2002), who indicated that the conductor's interpretation of the composition or the original expressivity of the composition might be conveyed and imparted through the conductor's employment of gesture and movement (p. 344). The ways that both conductors utilised hand gestures also seem consistent with how gestural directions are used in professional music ensembles (Rudolf, 1980).

As mentioned earlier, verbal directions seemed to be both conductors' least preferred communication during playing, compared with vocal and gestural directions. Despite this, the employment of verbal directions was still observed more than 40 times during CAO playing as opposed to one instance in the NBB. The instances seemed to suggest that this strategy had potentially functioned as a reminder, through which a broader range of musical skills may have been enhanced in the CAO, including managing dynamics and balance, repeating musical sections, articulation skills, and playing rhythm, meter and tempo. However,

repeating musical sections was the only skill possibly developed this way in the NBB. With caution (due to the small sample size), these findings might also be interpreted as evidence that verbal direction is not a commonly used strategy in NBB rehearsals. In addition, the findings also showed the CAO conductor's use of combined strategies (i.e. verbal, vocal and gestural directions) while the orchestra was playing, but no such evidence was observed in the NBB rehearsals.

While preliminary, these findings on the implementation of the three during-playing directions imply different levels of effectiveness, particularly evident in the CAO. By comparing the changes in the orchestra's sounds before and after receiving the conductor's direction (when these directions were provided singly), it would seem that the CAO conductor's verbal directions had worked more effectively than his gestural and vocal directions during the CAO's playing in shaping the sound quality. There are several possible explanations for this seemly true implication.

Seen from the nature of these three directions, verbal directions may be more direct and explicit in explaining the conductor's intentions and can be more readily recognised when players are playing. Although vocal directions may have a slight advantage in clarifying intangible things such as a particular style or feeling that words are not specific enough to convey (Tolins, 2013), they may be easily missed when the ensemble plays loudly. Unlike verbal and vocal directions, gestural directions are a form of nonverbal/visual communication. Thus, the effectiveness of this communication relies significantly on whether players have a good understanding of the conductor's movements and their "possible interpretive meanings" (Price & Byo, 2002, p. 345) or whether they know the conductor well enough to comprehend his conducting behaviours.

Moreover, players' inexperience in ensemble playing and limited capabilities for shifting focus from one thing to the other might have resulted in the possibility that players relied more heavily on the conductor's verbalised directions to adjust their playing during run-throughs. Many studies in Chapter 2.6 have suggested that attention management is integral to ensemble playing. However, this may present challenges for inexperienced players. In order to maintain their place in the music and fluency of playing, these players' primary focus is likely on reading the score rather than watching the conductor a great deal to capture the subtle changes in his gestures or paying close attention to his vocal imitation.

To some extent, the effectiveness of verbal directions may have also relied on players' attentiveness. As analysed in Chapter 5.2.2, some of the CAO conductor's verbal directions may be slightly vague, in which cases they may require players' full attention to remember what had previously been discussed to be understood. For instance, when a verbal direction such as "here we come" was provided, players may not have been able to link the direction to a previously discussed articulation issue and performed accurately in response to the direction unless they were actively engaged.

These potential factors may explain why the CAO conductor frequently adopted combined strategies during orchestra playing, as this may enhance the likelihood that players received the directions and accurately perceived the directions. In fact, during the rehearsal observations, it had gradually become clear that the joint use of verbal, vocal and gestural directions seemed to be surprisingly effective in directing the orchestra players when they were playing. Alternatively, any combination with verbal directions involved also appeared to be more effective than using vocal directions in conjunction with gestural directions. However, in the long run, the more players rely on the conductor's verbal directions, the fewer chances they would learn to watch and listen to the conductor. Weighing between the temporary efficiency of the rehearsals and the development of players' ensemble skills may be worth considering for the CAO conductor.

Finally, as an additional conductor-led strategy and also the most frequently employed strategy in NBB rehearsals, "the conductor taking a breath" appeared to provide players with timely indications for breathing and phrasing and as a result, foster the synchronisation and coherence of ensemble playing. From this, it seems reasonable to suggest that employing this strategy may have enhanced players' skills in breathing before playing and synchronisation and musical phrasing. As a recognised technique in playing brass and some other wind instruments, the significance of "breathing in" is generally acknowledged (Alsop, 2018; Sehmann, 2000). Karin Sehmann (2000) asserted that breath control is often considered the foundation and the most crucial aspect of brass playing because it essentially determines how other musical aspects are performed, such as articulations, dynamics, phrasing, musical expression, intonation and tone production. Even in choirs, there has also been evidence that "inhalation" before singing begins and between musical phrases is actively demanded because this "breathing-action" is crucial for the quality of choral sound produced (Platte et

al., 2021). In the present study, the NBB conductor's use of this strategy may be attributed to his preference and understanding of ensemble playing and the brass instrument mechanism.

Overall, the 12 shared strategies may be considered the common strategies employed in the community ensemble rehearsal. The application of an additional strategy in the NBB rehearsal, which was referred to as constantly taking loud and exaggerated breaths, suggests a possibility that some strategies may be used in one ensemble than the other due to the different instrument mechanisms and conductors' conducting styles and preferences. This result suggests that most strategies applied in the community ensemble rehearsal are the same, which are not much different from those used in professional music ensembles and performing arts lessons within a more formal music education context (Biasutti, 2013; Cavitt, 2003; Duke & Simmons, 2006; Emerson et al., 2019; Ivaldi et al., 2021; Napoles, 2014; Tolins, 2013; Weeks, 1996; Whitaker, 2011). With that being said, there might be minor differences in strategy uses in a broad ensemble context.

6.3 Discussion of Players' Conceptualisations

The interview findings are extensive and abundant; hence, they were organised into five overarching themes. These five themes cover players' conceptualisations of almost every aspect of their ensemble experience, not only the music learning experience but also the human, social, emotional and psychological aspects, and thus fully address the third research question.

The general thought on ensemble participation is encouraging. It was generally agreed that the community music ensemble encourages people to engage in musical activities regardless of their levels of competence in playing an instrument, allows them to experience a wide range of music styles and challenges them in various ways. As a group musical activity, several respondents felt that players' ensemble experiences might differ due to seating arrangements (i.e. where one sits in the ensemble), because one's morale can be potentially influenced by the people around. Some also acknowledged that there were inevitable compromises involved in such activity, as every player has different musical background and experience.

The interviewees defined their respective ensemble experiences (i.e. the CAO or the NBB) as beneficial. Most CAO interviewees claimed it has been an enjoyable music-making experience and filled their social needs to a certain extent. The NBB interviewees also mentioned that their enthusiasm for making music with others and confidence in playing the instrument had been lifted since their participation in the NBB, and they have enjoyed the fact that they can connect with others. Besides, As the NBB has a relaxed, enjoyable and encouraging training atmosphere, various musical skills could be acquired.

"Airflow control" was regarded as the most demanding but fundamental task for the NBB players, because it requires constant attention and conscious effort when playing the instruments; the amount of air being projected directly impacts the sound, which is especially embodied in dynamics and balance, pitch accuracy and intonation. The ensemble setting was believed to make air management even more challenging, because in this particular music-making environment, many other things occur simultaneously that also deserve one's attention. For the percussion player, however, a challenge they constantly face is keeping the tempo consistent regardless of dynamic changes.

For the CAO respondents, synchronisation was regarded as the top priority in ensemble playing. To achieve a synchronised sound, engaging with other parts (e.g. listening to peers' playing) is the key. This skill was thought to be useful in helping them play in sync with others and enabled them to detect potential errors in the music scores. Some senior members of the CAO proposed that the orchestra consider doing sectional practice in the future to help different parts play in sync.

Synchronisation and musical phrasing were also considered central in NBB playing, and engaging with peers' performance was believed to have a decisive impact on synchronisation. By constantly listening and paying attention to ensemble peers, the synchronisation between parts could be improved, and the accuracy of pitch and intonation. Additionally, some interviewees felt that listening to other parts was also a pleasure, and this has made their ensemble experience more complete. Such enjoyment was reflected in their body movements and was evident in the VSR materials.

Musical interpretation and expression were considered essential in musical performance in general. However, there were seldom discussed in CAO rehearsals, according to a few

interviewees. Other respondents expressed that it would be ideal if every orchestra player could have the same interpretation of the repertoire when playing as a group. Seen from the present, interviewees all have their own interpretations of the music, which may be developed based on musical notations, the conductor's advice, past musical experience, how they feel about the music at that moment, how other players express themselves, other external resources (e.g. YouTube videos or recordings) or a combination of several above aspects. For the NBB interviewees, musical expression was also thought to be a priority in a musical performance. They reported that their interpretations of the repertoire were developed via a combination of sources, including musical notation, the conductor's advice, section leaders' expressions and personal feelings.

Through watching the VSR materials, the interviewees were given the opportunity to clarify some of their skill uses in the observed rehearsals. The NBB interviewees suggested that the majority of their body movements shown in the video clips could be seen as a manifestation of using musical sensitivity and musicianship. Some may also be explained as using synchronisation and phrasing skills, breathing before playing, or playing rhythm, meter and tempo. In addition, the percussion player believed there were also uses of improvisation skills when providing rhythmic support to other NBB peers.

The CAO respondents also confirmed that there were indeed some intentional applications of musical skills, such as improvisation skills, sight reading skills, and internalisation and imagining sounds. After watching the VSR clips, they added that most of their body movements could also be seen as a manifestation of enjoying the sounds (either produced by themselves or by others), hence the use of musical sensitivity and musicianship. Alternatively, those movements may also represent certain skill-learning moments, such as learning to play rhythm, meter and tempo or synchronisation and musical phrasing. While these musical skills may have been primarily developed explicitly, in some cases, the respondents were unaware of their movements (e.g. simultaneous foot and hand tapping while listening to the conductor's singing). This implied that musical skills could have also been learned implicitly in ensemble rehearsals (occurring with no intention involved), and as the skills evolve, they might be exploited "automatically".

As much of the NBB rehearsal time was devoted to improving the general sound and tone quality, the interviewees felt that the following musical skills were also developed to varying

degrees. These skills include managing dynamics and balance, playing rhythm, meter and tempo, playing articulations, pitch accuracy and intonation, internalisation and imagining sounds, engaging with peers' performance, breathing before playing, and synchronisation and musical phrasing.

Some NBB interviewees' conceptualisations of music styles also indicated that players' understanding of music genres and the discerning taste for various musical pieces could also be developed and formed through ensemble involvement. This may suggest an enhancement in musical sensitivity and musicianship. To a certain extent, it also seems plausible to suppose that some ensemble players enjoy the moment of "having the spotlight" on them even in the group playing situation. A few respondents reported that there were also opportunities to gain instrumental and conducting skills in NBB rehearsals due to the rearrangement of ensemble structure (i.e. exchange of parts/instruments). With caution, it is inferred that the potential for acquiring musical knowledge and skills is highly promising when playing in a community ensemble whose aim is to "provide music and educational services" and "[help] players for a full age range gain a lifelong interest" (Nor'West Brass, n.d.),

Discussed based on the VSR clips, the CAO interviewees also confirmed that a range of musical skills had been developed through ensemble rehearsals, either directly or indirectly. These skills include musical improvisation skills, musical sensitivity and musicianship, articulation skills, repeating musical sections, switching couplers, playing techniques, playing rhythm, meter and tempo, managing dynamics and balance, and engaging with peers' performance. Despite this skill development, the CAO interviewees indicated that more effort could be put into developing synchronisation and players' musical sensitivity and musicianship in future rehearsals. So far, these respondents felt that much of the rehearsal time had been spent achieving the preferred dynamic levels and balance between different parts. Additionally, these players expressed that they would appreciate some practical guidance or direct training on accordion playing techniques and coupler switching.

Interviewees' conceptualisations of the strategies were mainly centred on the conductor-led strategies. The NBB respondents proposed that the conductor's instructions and directions are similar in some ways, regardless of whether the information was communicated verbally, vocally or visually. For instance, they all boost the players' morale, keep them reminded of

the crucial things and influence their musical sensitivity and musicianship. Cognitive instructions, however, were thought to be the most effective strategy because issues such as articulations were often instantly improved after the cognitive instructions were provided. Players' conceptualisations of the "last note/chord" exercise (as part of the NBB conductor's cognitive instructions) also suggest an additional role of cognitive instructions, i.e. warm-up.

The NBB interviewees also found the conductor's vocal directions (either when not playing or when playing) helpful, as they clarified the conductor's cognitive instructions and set good examples for players to imitate. For those vocal directions given during playing (i.e. singing along), some interviewees considered them an alarming indication that something was wrong, while some viewed that as a sign of the conductor enjoying hearing the sounds produced by the band. Most interviewees believed that the conductor's gestural directions (when playing) were beneficial, because those exaggerated gestures quickly drew their attention to the details in the music. For this reason, some interviewees stressed that they tend to watch the conductor from time to time when playing. Furthermore, "The conductor taking a breath" was conceptualised as a valuable strategy to improve players' synchronisation and musical sensitivity and musicianship. The conductor's specific troubleshooting measures shown in the video clips were also rated very effective in tackling various musical issues.

The CAO Interviewees shared their insights into the conductor's cognitive instructions and vocal directions when not playing, the conductor working with individuals or subgroups, and his during-playing verbal, vocal and gestural directions. For them, the CAO conductor's various ways of communication were engaging and helpful, especially with some of his cognitive instructions in which metaphors were used. For most interviewees, the conductor's metaphorical speaking softened the criticism and made his intention clear and instructions easy to understand. Besides, interviewees generally agreed with the effectiveness of the cognitive instruction and its reminder role (when provided before playing attempts), which accords with the observational data.

Interviewees also strongly preferred the CAO conductor's use of vocal directions (when not playing), especially the contrasting type of vocal imitations. They reported that sometimes the conductor's cognitive instructions could be difficult to understand, but his vocal imitations helped to get the point across. Besides, his singing also provided examples for players to mimic the desired sounds. Some interviewees commented on those moments when

the conductor worked with individual part(s). A few of these respondents considered it a helpful strategy, while some proposed that this strategy could have been utilised more often, especially when dealing with stylistic playing.

Various voices were expressed about the CAO conductor's verbal, vocal and gestural directions when playing. The interviewees' overall comments about verbal directions were positive because this kind of direction could be clearly heard even when players were deeply preoccupied with their playing. Gestural and vocal directions were believed to have influenced players' musical sensitivity and musicianship to some degree, but some interviewees favour vocal directions over gestures and vice versa. Respondents who preferred vocal directions argued that the conductor's gestural directions were not easily noticed and were nearly identical, meaning they were similar even when they were meant to indicate different dynamics, for example. However, the opposition argued that gestural directions were helpful if players had watched the conductor a great deal.

When discussing the players-initiated strategies, a sense of "survival" implied. Many NBB interviewees regarded their individual practice during rehearsal gaps (i.e. players' individual practice) as a survival strategy. They admitted that they tend to use those small gaps to learn their parts, because sometimes they have not had enough time to practise before the rehearsal. In addition, players' peer support was seen as a helpful strategy, through which many musical skills were either learned or improved to a certain degree. For the CAO interviewees, doing a quick practice in the limited rehearsal gaps (i.e. players' individual practice) is likely to make the next run-through sound better, and making notes (i.e. players' note taking) helps them keep track of the conductor's intentions as the musical details may be modified from time to time. Players' peer support was thought to be one of the sources of gaining musical knowledge and skills, and such skill acquisition may be indirect (e.g. learning to do bellow shake) and direct (e.g. learning about coupler choices) in different scenarios. However, based on the interviewees' responses, there seems to be a lack of depth and solidity in the knowledge and skills learned through peers.

Moreover, the CAO interviewees expressed that ensemble playing demands much concentration and coordination. They need to constantly switch their attention to different things, such as watching the conductor, reading the music, and glancing down at the keyboard. Sometimes, the situation may become even more complicated when a piece of

music requires coupler switching. For some respondents, switching couplers could be demanding in some cases because it requires a quick response and undivided attention to locate the coupler. To cope with such situations, some interviewees decided to stay at one coupler and not make any changes, while some chose to stop playing at a measure before the coupler mark, allowing themselves time to make the change. In one respondent's words, these are "just way[s] of surviving".

On the whole, the above findings also show that the observational data and the interview findings complement each other, as anticipated. There was much evidence in the detailed analysis (see Chapter 5). For example, the NBB percussion player's statements on his improvisation skill employment were compelling evidence that the interview data complemented observational data, because his application of improvising skills was not observed initially in the rehearsals. Likewise, the interviewees reported the possibility of learning instrumental skills and conducting techniques in the NBB rehearsals (due to the rearrangement of ensemble structure), which was unobservable in rehearsals.

By conducting the focus group interviews, our initial understanding (based on the observational data) of the roles that the conductor's cognitive instructions served in the two ensembles has been enriched. The interviewees suggested that cognitive instructions functioned not only as reminders of previously addressed issues, assessment of playing attempts, teaching musical knowledge and concepts, and correcting playing errors, but also acted as a warm-up strategy. This implication corroborates previous research findings such as Emerson et al.'s (2019) but adds the reminder and warm-up roles of the conductor's pre-playing verbalisations. Finally, in the CAO focus groups, some interviewees felt surprised when they saw some of their body movements in the video footage and claimed they were unaware of those actions. Examples like this indicate observational data also complementing interview data.

6.4 General Discussion on the Observational and Interview Findings

This study has gathered substantial data that relates to the research questions, and enriched insights into what is gained and reflected upon within community ensembles. Reflecting on this research process and the combination of observational and interview findings, the shortcomings of epistemology need to be acknowledged: "how we can possibly know certain

kinds of things that we claim to know or customarily think we know" (Pollock, 1968, p. 183). In other words, the extent to which these findings can be seen as "the truth" and what is "truth".

While this research aims to provide a comprehensive and objective account of the potential musical skill development in the community ensemble environment, it was recognised that our analysis might not necessarily reflect every detail observed in the ensemble rehearsals, but only the distinctive features and representative behaviour patterns. It was also realised that the interpretation of what had been observed was somewhat subjective, and there was much uncertainty involved in being sure which musical skills had been used and to what degree they may have been developed. To a certain degree, this also reflects the potential limitations of observational data and suggests the need for focus group interviews.

One of the limitations of observational data is that some identified skills may have been used during rehearsals, but there was no immediately observable evidence. For example, managing dynamics and balance is likely to be used if players follow the dynamic markings on their score. However, this "following" action could not be measured precisely without fully marked-up scores or a sound level meter. Additionally, it was difficult to identify where the dynamics came from in a group-playing situation. Due to these unmeasured factors, no instances (in both CAO and NBB's rehearsals) related to the manifestation of dynamic and balance skills.

Likewise, observational data also suggest that, to a great degree, the manifestation of the identified musical skills could only be reliably recognised when it has resulted in an observable action or statement by the players. For instance, the manifestation of musical phrasing skill ("Synchronisation and musical phrasing") was relatively easy to be identified as it often came with players' exaggerated breathing or certain body movements. Even so, this skill may still be hardly noticeable if players phrase "internally" (e.g. without or with subtle movements or shallow breathing).

Defining and categorising a player's behaviours into different skill sets was also challenging, because some behaviours may indicate more than one possibility. For example, foot tapping may be an indication of "Playing rhythm, meter and tempo", "Musical sensitivity and musicianship", or "Engaging with peers' performance". As players' intentions were not

observable in the rehearsals, reliance was placed on such obvious behaviours as body language and facial expression as indicators of such subtle occurrences as “engagement” or “attention”.

In this example, a general principle was developed based on the patterns of occurrences. Tapping with a sign of struggle was likely to be a manifestation of rhythmic and timekeeping skills. Tapping occurred during playing with enjoyment might present players’ musicianship. When players were resting while their peers were playing, the former’s tapping was considered engaging with others’ performance. Likewise, players’ nodding, swaying, and shaking legs may also manifest multiple musical skills, and categorising them is context dependent. Despite the possibility that players’ body movements could indicate what they are specifically concentrating on, some players might be in the habit of moving to music. Therefore, in some cases, these movements might not be completely reliable clues as to the attention being paid.

The community ensemble rehearsal is a complex setting. It provides a platform for people to apply their existing musical knowledge and show their musical competence, and many opportunities to gain or sharpen certain musical skills. Besides, it is also an environment for all participants to enjoy their shared music-making experience. These potential factors have made the rehearsal process very complicated to measure. For example, which moment signified a skill use and which was a learning occurrence; whether a musical skill was only just being gained or further enhanced in which case the skill was already in abundance for some players; and ultimately, whether the acquisition of skill was made through explicit learning or implicit learning.

Although conceptually clear definitions have been given to “explicit learning” and “implicit learning” in this research (see Chapter 2.8), these two learning mechanisms, skill advancement and skill uses in real situations are less clear cut, especially when there is neither a background check nor any music test being set up to determine an ensemble individual’s prior music learning levels. Moreover, in ensemble rehearsals, it was realised that the acquisition of new musical skills and the application of existing skills are essentially intertwined, and they are likely to occur subsequently or even simultaneously in some cases. For this reason, in the detailed analysis of observational data (Chapter 5.1 and Chapter 5.2),

the distinction has not been made between skill uses and learning occurrence, nor distinguish whether a skill was being reinforced, or acquired explicitly or implicitly.

It may be worth reiterating that the concepts of "explicit learning", "implicit learning", and "skill uses" in the present study are confined to the ensemble rehearsal within a non-formal music education setting. In such an environment, explicit learning was referred to as intentional and active learning, which may require conscious observation, understanding and memorisation of what is happening in the surroundings. Following this path, the instances related to players' note taking might be seen as players' explicit learning moments, in that the note-taking action is most likely to be active, and the notes were made intentionally for future reference.

The other consideration in this example is, however, to what extent the intention behind each note-taking action was an absolute certainty. Was it for skill development purposes, or could it be for a smoother music making experience (e.g. producing the conductor's desired sounds in the next playing attempt)? For players who participated in the focus group interviews, acquiring musical knowledge and skills, in general, was thought to be a potential aspect of ensemble participation but may not necessarily be their conscious and central focus in rehearsals. The intentionality issues relating to players' rehearsal behaviours might be worth considering for future studies.

Implicit learning, in the case of ensemble rehearsals, refers to those moments when the acquisition of musical knowledge occurs automatically, effortlessly and with no intention involved (i.e. unintentionally or non-intentionally). Such learning may occur when the relations between the conductor's instructions and the knowledge are established, influencing players' performance in the rehearsals. For example, a player may draw an idea from the conductor's cheerful singing along and swing to the music and attaches these perceived feelings to their performance without realising it. This "seemingly" effortless acquisition of musical perception might suggest implicit learning of musicianship.

Although the conductor's intentionality is slightly beyond the focus of the present research, it is necessary to state that the intentionality of the conductor's actions is entirely different from whether the players are explicitly or implicitly gaining musical skills. Return for a moment to the example provided above. The conductor may be intentionally singing along and showing

expressive body movements to arouse players' enthusiasm for music, which can however, also be a result of the conductor enjoying himself hence an unintentional action. If Johns' argument (2020) is correct, such behaviours might also be lucky acts (i.e. non-intentional). An amateur conductor might non-intentionally provide players with a learning opportunity by lifting his arm during a performance, because players may interpret this action as an indication of changing dynamic when it is luckily the right moment for dynamic changes. In these three scenarios, the intentionality of the conductor's action differs, but has no direct impact on how players interpret the action and which learning mechanism is at work.

Now proceed to the concept of skill uses. In the present research, the use/application of musical skills has been seen as players' competence in transferring existing knowledge from one musical work to another. It signifies those moments when players sense the similarities between a past and a present experience, and then their previously acquired musical knowledge may be intentionally applied or automatically exploited at the present time. Examples of the skill uses are that a player used their improvisation skills intentionally to make the music sound nicer, and that a player was seemingly in the habit of taking a deep breath before starting to play (i.e. employment of breathing before playing).

Above all, since the players' intentions and the degree of mastering each identified musical skill were unobservable phenomena in the ensemble setting, in some cases the application of musical skills, the acquisition (explicitly and implicitly) and the enhancement of musical skills might be indistinguishable without utilising brain scanning devices. From a macro point of view, players' musical competence is likely to be strengthened over time as they continue being engaged in an ensemble. This way of skill development, in essence, is an accumulative process and happens every time players use their skills and possibly each emphasis the conductor makes on the skills. This nature of skill learning was evident in our interview findings and supported by DeKeyser's (2020) skill acquisition theory.

Although the interview findings, to some degree, complement observational findings (and vice versa), the "truthfulness" of interview findings in perspective is worth considering. The VSR materials were valuable to a large extent in helping interviewees recall a particular moment in the formally observed rehearsals, but there were still times during the focus groups when some interviewees could hardly recollect the instances in the video clips. This reveals that some conceptualisations might be associated with a single instance, e.g. the

conductor worked with a subgroup for a synchronisation issue, and thus may not fully represent what the interviewees thought about this conductor-led strategy in general. Additionally, some conceptualisations might have been "afterthoughts" based on how the interviewees felt when they watched an instance in the focus group, which might have differed from how they had felt at that particular point when the instance had occurred in rehearsals.

Next, due to the interviewees' interactions featured in focus group interviews, it seemed true that an interviewee's conceptualisations might have been influenced by other individuals in the group. Finally, as the interviewees were only a small percentage of all players in the two ensembles, the conceptualisations of their ensemble experience may not be generalisable to others. The implication behind these observed factors is that players' conceptualisations of their ensemble experience might not necessarily be "true" all the time and such conceptualisations might have been "modified" and have limited degrees of generalisation.

Also due to the epistemological shortcomings, it would be untrue to claim that bias has been completely eliminated in this research in the sense-making process of the interview data. In order to minimise this possible inevitability, this thesis adopted the advice in previous studies (Southcott & Nethsinghe, 2019), employing frequent verbatim quotations in the interview data analysis, which has been found useful. In this way, the emic perspective (i.e. the insiders' views) and etic perspective (i.e. the researcher's views) were incorporated and clearly shown to the readers, who will then be able to see the ensemble players' conceptualisations of their ensemble experience and my interpretations of such experience as an observer and interviewer and form their judgements and draw conclusions.

Despite the fact that effective methods were followed in this thesis to reduce bias and enhance the credibility and transferability of the research, what need to be embraced and accepted is that, as humankind, every individual sees things differently. This was evident in the various voices expressed about community ensemble experience and the minor discrepancies between the emic and the etic perspectives. After all, "how we see the world and the people within it" are always influenced by our personal experience (Fraenkel et al., 2015, p. 446). In reviewing this research journey, there is no absolute truth in a study related to human behaviour or conceptualisations. There are multiple realities that are affected by our

unique personal experience, and that is what makes a qualitative collective case study so intriguing.

7 CONCLUSION

7.1 Summary of the Findings

This thesis explores the acquisition of musical skills in community music ensembles and players' conceptualisations of their shared music-making experience, within the non-formal music education framework. This investigation was conducted through video observations of the ensemble rehearsals and VSR-prompted focus group interviews with selected ensemble players, with two local community instrumental ensembles (the CAO and the NBB) involved. The findings show that a wide range of musical skills was used in the rehearsal settings of community ensembles, and many of those skills may have been acquired or upgraded through the application of many strategies. Additionally, some similarities have also been recognised in the players' conceptualisations of their ensemble experience.

Eleven sets of musical skills were observed to be utilised or possibly gained in the rehearsals of both ensembles. The development of these skills might have been achieved either implicitly or explicitly through 13 strategies identified in the observed rehearsals. One strategy (exaggerated inhaling) was exclusive to the NBB, and of the twelve other strategies (common to both ensembles), three were player-initiated and nine were conductor-led. Several conductor-led strategies focused on problem-solving, as were some of the player-initiated strategies; however, other conductor-led strategies served other functions, sometimes in combination, such as educational and motivational functions.

The ensemble players' conceptualisations centred on five aspects: the ensemble experience–playing and learning in a group, receiving instructions and directions from the conductor, surviving the ensemble experience, lifelong learning and development, and the social experience of ensemble participation. Most interviewees suggested that the ensemble rehearsal is a collaborative music-making activity, and it is also a demanding task, requiring great attention management and physical coordination. As a feature of the community music ensemble, unbalanced musical competence among players is somewhat inevitable.

In discussing the identified musical skills and strategies, the interviewees confirmed that many musical skills had been gained, either directly or indirectly, since participating in the ensemble. Some skills were developed gradually through long-term ensemble engagement, while others through collective learning. It was also suggested that implicit skill learning

might be involved in their rehearsal process, apart from explicit learning. For several interviewees, the purpose of using some musical skills and employing some strategies was for survival. The interrelatedness of musical skills was also indicated in the interviewees' conceptualisations, and some respondents proposed ways to improve their musical skills that may be worth considering for their conductors. All interviewed players expressed that they have benefited from participating in the ensemble they belong to in many ways, including developing musical skills, playing music in various genres and socialising with others.

7.2 Contributions to the Research Field

This fine-grained qualitative case study contributes to the field of non-formal music education research. As there has been little research into the development of musical knowledge and skills in community music ensembles (see Chapter 2), this thesis largely expands the scope of existing literature on the understanding of community music ensembles. It fills the gap by demonstrating that my method of systematic analysis of skills acquisition in community ensembles clarifies ways in which musical skills are used, may be learned or further enhanced. This certainly affirms the lifelong learning aspect of community music making (Joseph & Human, 2020).

This research partially agrees with many studies presented in Chapter 2.7 on their discussions of the conductor or instrumental teacher's real-time feedback, including the roles of "gestural feedback" (Ivaldi et al., 2021), "vocal depictions" (Tolins, 2013) and "contrast-pair" types of "verbal expressions" (Weeks, 1996); combined uses of vocal and verbal forms of feedback (Cavitt, 2003; Emerson et al., 2019; Weeks, 1996); ways to expressing criticism (Bonshor, 2017); and the teaching and learning practices in the rehearsal context predominantly being conductor led (Ivaldi et al., 2021). This research also confirms the findings of Emerson et al.'s (2019) research, which assessments and directives" are the conductor's two main communicative behaviours. However, it suggests that the conductor's problem-solving and motivational comments (including jokes) also occupy dominant roles in the setting of community ensemble rehearsals.

Additionally, this research supports the findings of previous studies on the social experience and other positive effects of community ensemble participation (Bendrups & Hoddinott, 2007; Coffman, n.d.; Goodman, 2002; Grodd & Lines, 2018; Joseph & Human, 2020; Kruse,

2007; Palmer, 2008; Southcott, 2014; Southcott & Nethsinghe, 2019; Southcott, 2009). However, this research adds to Joseph and Human's (2020) by indicating that the enhancement of a "sense of social, emotional, mental, spiritual and psychological wellbeing" is not only for those who are "moving from mid-life to retirement" but also other age groups including young adults. Other sections of the literature surveyed in Chapter 2 may seem less closely aligned with the findings of this research, but they have provided background knowledge for many aspects discussed and insights into what musical skills have long been the focus in the domain of formal music education.

By offering more profound insights, this study reinforces the nature of community music ensembles: the interactive and collaborative mechanism of music making, the non-formal and collective learning environment, and the communal, volunteer and differential quality of the participants. It indicates that inclusion and acceptance of players' current abilities is a core component of the community music ensemble. This means that the community ensemble rehearsal is more of a music-making environment and less of an educational-oriented learning setting. The efforts and considerable rehearsal time put into enhancing various musical aspects were mainly for an improved music performance.

The community music ensemble is at times conductor-dominated, yet at other times a truly collective learning environment. As evidenced in the findings, musical skills that could be acquired under peers' support were limited, and much of the learning seemed to have occurred through the conductor-led strategies. There was also evidence that the group dynamics in ensemble rehearsals hinge on the conductor's leadership style. However, it was also clear that in these community music ensembles, players' knowledge may contribute to the conductor's decision-making, and the relationship between them involves a sense of collective learning. In some ways, the conductor is also a learner. They need to learn to work with their players, learn about the repertoire and maybe learn about a new instrument, and through these collaborative efforts, the quality of the music performance is improved.

Despite the complex nature of community music ensembles, this study reveals the manifestation of musical skills–many interrelated–in the two community ensembles to be remarkably similar. Likewise, the strategies employed by the conductors and the players also revealed themselves to be strikingly similar. However, the degree to which those skills were developed vary among players, which might be associated with players' prior music

education and engagement length in the ensembles. On another level, these differences certainly suggest that a homogenising approach to leadership could favour some players rather than others. That being said, it would be extremely demanding for a conductor to honour every ensemble individual's requests, provided the weekly rehearsal is only two hours. As the leader and instructor of the ensemble, directing players from various musical backgrounds with different levels of music education is a challenging task in itself.

Furthermore, this study indicates that the acquisition of musical skills is essentially a cumulative process. As many senior ensemble players stated, the ensemble skills (e.g. "Engaging with peers' performance") and some more complex musical skills (e.g. "Internalisation and imagining sounds") were gained through years of ensemble participation, which did not happen overnight. Some other players also mentioned that they have gradually noticed their improvements in many different ways since the ensemble engagement. This further confirms DeKeyser's (2020) skill acquisition theory.

The questions of whether the learning process is implicit or explicit is extremely challenging in this type of qualitative study and was not the central focus of this thesis. However, there was much evidence from the focus group interviews to show that the two learning mechanisms may be intertwined in the setting of community ensemble rehearsals. Many players indicated the extent to which they might or might not be aware of their actions shown in the video clips. They pointed out that some learning actions were performed deliberately, such as counting bar numbers when other parts were playing to avoid losing track of the music. On the other hand, it seems that some actions might have occurred automatically, effortlessly, and without the intention to learn specific knowledge or skills (e.g. breathing with the conductor). There were also instances in which players could not be sure what their state of mind was–whether it involved intention or not, nor identify how they had gained some of their advanced skills. This suggests that learning occurs in both explicit and implicit ways.

In addition to detailing the acquisition of musical knowledge and skills, this thesis reveals a "survival" aspect of community ensemble performance, which seem to be largely neglected in similar research in the field. The word "survival" indicates the difficulties and struggles in playing in community ensembles, particularly for those new to such a collaborative musical activity and/or to the instrument. As explained in Chapter 5.3, in many ensemble players'

conceptualisations, some uses of musical skills and strategies were for the purpose of survival–making the rehearsal process smoother. For example, skills such as "Engaging with peers' performance" and "Internalisation and imagining sounds" were seen as great tactics for keeping track of the music, improving pitch accuracy and intonation, and facilitating synchronisation with other parts. Strategies including "Players' individual practice" and "Players' note taking" also enabled players to learn their parts and keep track of the conductor's requirements.

Despite the employment of these survival tactics, there were other challenges in ensemble playing, such as attention management, doing musical repeats, interpreting music, and coupler choices and changing couplers without losing place in the music. Many of these difficulties might have been caused by the unfamiliarity of the instrument and the music, which, to a certain extent, could be addressed by the conductor or the ensemble peers with a wider range of instrument expertise. In the current situation, although some support had already been provided in these regards, it seemed to be insufficient or not very effective for some players. With that being said, to some degree, the ensemble's success also relies on members practising and reinforcing skills outside of rehearsal time, because there are so many skills involved in the rehearsals, and they cannot all be addressed simultaneously during the limited hours. To a point, those struggles might reflect the reality of many community-based music ensembles; that is, most practice occurs in rehearsals.

Finally, this thesis suggests that the acquisition of musical knowledge and skills through community ensemble participation is almost like an "afterthought", i.e. it is not their primary focus. Many players in the present research did not seem to have a particular demand for expanding their skill set and musical competence. Their general attitudes towards the community ensemble participation seemed to be doing what they could to participate fully in the ensemble activities while enjoying the process. Such pleasure may vary across individuals, but is mainly derived from the shared music-making experience, the potential to socialise and form connections with one another, the personal fulfilment of being able to play an instrument or the preferred music works/genres, and perhaps "the sense of belonging"–putting themselves in a familiar regular rehearsal situation.

This, to some degree, could perhaps explain why people of all ages, colours, faiths and religions join a community music ensemble at the risk of sounding "amateurish" and being

judged by the audience. Making music together is one of the great and distinctive human activities; harmonising with others, making friends, learning new skills, having fun, what could be more important? In a sense, community music making may help create and anchor communities in our current modern society–large, networked, with more distant and detached human relations, in that it promotes the act of coming together in one space with one's physical self, an instrument, and a group of other people, binding individuals to a collective greater than themselves.

7.3 Retrospective Thoughts and Orientations for Further Research

As a starting point for understanding musical skill acquisition in community music ensembles, the data collection process in this research was not without challenges. Due to the Covid-19 pandemic and its outbreak in New Zealand in 2020, the whole country went into lockdown, and the ensembles could not rehearse for several months. For this research, this meant that the data could not be gathered. After the first lockdown was lifted, and the ensemble activities gradually got back on track, the attendance rate for the ensemble rehearsals was somewhat reduced for a while, which might have resulted in the data being not as complete as expected. Besides, during the first phase of data gathering (observing rehearsals), the recording devices were not able to catch everything that players said to each other; however, the decision of not having every player wear microphones in rehearsals was appropriate for their privacy and in turn, keeping the rehearsal environment as close to its natural state as possible.

In this thesis, some bias might exist due to epistemological shortcomings but was significantly minimised. Throughout transcribing, processing and analysing data, I have intentionally approached the data as an outsider to the CAO and endeavoured to apply identical standards to classifying the data gathered from both ensembles, rather than allow my perceptions of the CAO rehearsals to have any precedence. Despite the inevitable challenges to data collection, a coherent and credible data analysis has been attempted. The frequent use of verbatim quotations in presenting the findings is intended to give an unmediated voice to our participants. Ultimately, as case study research into human behaviour, the degree to which the findings could be transferred and generalised is limited, and this is decided by the nature of the case study methodology.

As the findings of this thesis are not representative of all New Zealand's community ensembles, nor were they intended to be, future research might consider a longitudinal study by expanding the methods employed in this study. For example, a larger sample of community ensembles could be recruited to evaluate the similarity and differences in the members' learning outcomes under various instrument mechanisms, conducting styles and teaching focus. A fruitful inquiry could also be made into investigating the amateur musicians in a community ensemble over an extended period (e.g. one year) to assess their progress in developing musical abilities. By performing some laboratory experiments, it might be possible to differentiate knowledge and skills acquired through implicit learning from explicit learning mechanisms.

Building on the present study, one might be interested in including the recruitment of ensemble conductors as participants. A one-on-one interview may be conducted to understand the conductor's conceptualisations of the ensemble rehearsals, such as the challenges they experience in leading a community ensemble. The rehearsal video footage involving players' questions and perhaps some unexpected incidents could be used as VSR materials to initiate conversations with the conductor. By conducting closer observations of ensemble rehearsals (e.g. down to each ensemble section or even individuals), one might also find out in what ways the section leader (e.g. the concertmaster in orchestras or the first euphonium in brass bands) has contributed to the shaping of the musical productions. Perhaps, rather than focusing on the rehearsal-educational environment, it is worth exploring the manifestation of musical skills in ensemble live performances (e.g. a public concert) and players' other realisation of such musical activities.

In conclusion, this thesis presents the multifaceted nature of community music ensembles and establishes that concentration, emotional, physical and coordination demands are embedded in the ensemble rehearsals. Within this casual music-making and non-formal educational context, many musical skills can be potentially developed, and various conductor-led and player-initiated strategies come into existence accordingly. Ensemble players' conceptualisations of their experience vary, in terms of the ensemble playing, conductor's instructions and directions, survival tactics, learning and social experience.

While this study has enriched our understanding of ensemble participants–their intentions, musical background and experience, joy, fulfilment, struggles and minor dissatisfactions- it

has also recognised how challenging the role of community ensemble conductors is. The conductor's task requires working with a group of people of all ages with uneven musical abilities, shaping the musical production to the full extent within limited hours, ensuring the rehearsal environment is relaxed and pleasant, and the teaching language is artistic and accessible. In the rehearsal process, although the teaching and learning of musical knowledge and skills might not have been the central focus for both the conductor and the players, it has certainly been a potential benefit of community ensemble participation which the "insiders" have mostly overlooked.

As a classically trained accordionist, I never had the opportunity to be part of a community music ensemble when I was in China. In my time, the accordion has always been placed in an awkward position as it was never part of the symphony orchestra and was seldom desirable by pop groups. For this reason, I was always on my own being an accordion soloist until coming to New Zealand, where I found that community music ensembles are everywhere, ranging from brass bands, big bands (Jazz), and pipe bands to symphony orchestras, accordion orchestras and choirs. It was a wonderful surprise when I discovered that accordionists could gather together as a cohesive whole. I found "a home"–the CAO–where I have thoroughly enjoyed the experience of making music together with others, learning to work with people from various musical backgrounds, and playing a wide range of music genres (no longer restricted to classical pieces). Moreover, serving the community by giving free concerts, performing at various communal events, making friends and forming connections with people. This experience has been invaluable, certainly giving me a sense of belonging in a foreign land.

APPENDICES

Appendix A: Information Sheet and Consent Form for the Ensemble Manager

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12th, Feb 2019
ERHEC Ref: 2018/41

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments
A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch
Information Sheet for the Ensemble Manager

My name is Wenting Yang. I am a music PhD candidate at the School of Music, University of Canterbury. My PhD research is a qualitative and collective case study exploring aural and listening skills in amateur instrumental ensembles settings. This study will include two ensembles, but no comparison will be made between them.

I would like to invite the (Christchurch Accordion Orchestra/Nor'West Brass Band) to participate in this project. Your ensemble has been approached to take part in this study because aural and listening skills are frequently used during ensemble rehearsals. I have located your contact details through (you/my primary supervisor Glenda Keam).

This research has two phases, video observation of ensemble rehearsals and focus group interviews. In the first phase, three rehearsals will be videoed and observed by me only. The first rehearsal will be a pilot video observation conducted for planning purposes. This pilot observation will help me to ensure the research tools are appropriate and to develop an observation guide for the next two formal video observation sessions. It is anticipated that all ensemble people who are fourteen years old and above will attend these rehearsals. This participation is voluntary, and each of them will be provided with an information sheet and consent form which thoroughly explains the process of this project and his/her participation. Each person will be able to talk to me individually at any point if he/she wishes to raise concerns or questions about the study.

If your ensemble chooses to take part in this study, the involvement of your ensemble people (aged fourteen and above) in the first phase will be kept to a minimum, and they will not be asked to commit extra time. In other words, they will come to the rehearsals practising some music pieces with other ensemble players as usual while the rehearsals being video-recorded. I will observe players' verbal and non-verbal interaction with other ensemble players and the conductor, as well as players' interpretation of music.

With respect to players who are under fourteen years of age, an assent form will be provided to them. They will then be notified that the ensemble is participating in this project, but they will not be directly involved. They can still come to the video-recorded rehearsals while being placed on the outside of the camera's visual zone as a way to protect their privacy and confidentiality. Although their instruments' sound and the conversations with other ensemble people will be captured, this information will be omitted from my data collection.

Parents of those who are under eighteen years old will also receive an information sheet and consent form. They will be informed of this research and the risks of the involvement and participation. They will be responsible for discussing these with their child based on his/her age group.

Once the first phase is completed, I will watch the original video recordings of rehearsals and identify potential participants for the second phase. The selection criteria are not based on players' instrumental techniques, musical capabilities, performing skills or my preferences, but rather on the types of aural and listening skills manifested during the recorded rehearsals. For example, players listen to their neighbours to produce the same sound, or players listen to the conductor's singing and try to imitate it, or players put their interpretation on the music pieces while they are playing. As a result, those who actively involve themselves in listening activities will be invited to participate in the second phase of the research.

The second phase includes two focus group interviews. The potential participants will be individually provided with a sealed envelope which contains another information sheet and consent form. This participation is also voluntary, and eventually, a list of six to eight interviewees will be made. I will then create new video clips by extracting the content related to these interviewees' listening experience from the original video recordings. These new video clips will subsequently be used in the focus group interviews to help interviewees recall their performance and initiate discussion.

These interviewees will then be divided into two small groups, and each group (three to four interviewees) will participate in a sixty-minute video-recorded focus group interview session. During the interview, interviewees will be asked to watch the new video clips with me and to answer some questions related to their listening experience in playing in the ensemble. Questions will include topics such as their musical background, their understanding of aural and listening skills and their experience of using aural and listening skills in ensemble rehearsals. Afterwards, I will transcribe the interviews and send the transcripts to the interviewees via email for checking the accuracy of the transcription. Interviewees will need to spend an hour reading the transcript and provide feedback to me via email within two weeks if they wish to do so.

As a follow-up to this investigation, some focus group interviewees may be asked to clarify or elaborate on their answers collected from the interviews. They might also be asked to answer some new questions that I develop as a result of analysing the transcripts. These questions could take them five to twenty minutes to answer via email or in person at their convenience. They will also be given the opportunity to follow up with me individually if they wish to raise concerns or questions about the study.

In the performance of the tasks and application of the procedures, there are social risks for the participants. These risks may include fear of being judged, loss of confidence and interest in playing with an ensemble, and alterations in relationships among ensemble players including embarrassment or loss of respect for others.

I understand that some players may not wish to be involved in this research, so they should not feel obliged to participate. If they decide not to participate in the research, it is suggested they attend the rehearsals while being placed in a location where they can still hear the instructions from the conductor but without being in the visual zone of the camera. Although the sound of their instruments and their conversations with other ensemble people will be captured, this information will be omitted from my data collection.

During the recruitment of the focus group interview participants, some players may feel unwelcome if they failed to be selected. In fact, the recruitment criteria of focus group interviewees are based on the research needs and not on their musical talents. The selection criteria were mentioned earlier in this sheet (please refer to the seventh paragraph on page one), and that may clarify the reasons behind the exclusion.

Players not selected for interviews may have concerns about the access to original video recordings of rehearsals and the use of new video clips in the focus group interviews because their performance and images might be caught on video. To reduce any possible risks caused by this action, the following measures will be taken. First, the original video recordings of rehearsals will not be seen by anyone except the supervisory team and me. We will not make any judgement on their performance in rehearsal, musical capabilities or personal experience and we will ensure that nobody else can access these videos. Second, by using a video-editing programme, the new video clips will only show the focus group interviewees clearly. I will ensure that all non-interviewees will be blurred visually, and their voices will be silenced in the video clips. Non-interviewees' instrument sound can be muffled when they are playing a solo line. However, it will be difficult to mute their performance while other players are playing the same tune at the same time. In this case, it is difficult to identify their individual line especially when their images have been visually blurred.

Third, the content of focus group interviews is confidential, and all focus group interviewees must comply with the non-disclosure rules. This means that during the interview, interviewees will be encouraged to talk about their listening experience but be discouraged from discussing any non-interviewees. After the interview has been completed, interviewees should not discuss the content of the interviews with each other or with anyone else. The interview content may include but not be limited to what they have viewed in the video clips and other interviewees' identities. If they are found to violate the rules, they will be given a warning for the first time; and for the second time, their participation in the focus group interviews will be terminated, and their data will be removed. These rules are also designed as a means to protect the privacy and confidentiality of non-interviewees.

Interviewees may also have concerns about the use of focus group interview video recordings. The purpose of videoing the focus group interviews is to help me review and transcribe the interview contents. I can assure that only the supervisory team and I have access to these videos.

Participation is voluntary, and your ensemble members have the right to withdraw at any stage without penalty. They may ask for their raw data to be returned or destroyed before the data is analysed. If they withdraw, I will remove information relating to them, which may include their performance in the rehearsal video recordings and new video clips, written description of their behaviour during rehearsals, and images and conversation in the focus group interviews. However, it will become increasingly difficult to remove data as the research proceeds. Once the analysis of raw data has begun (August 1st, 2019), information will not be able to be removed.

The results of the project may be published in a journal article or presented at a conference, but your ensemble players who participate in this research may be assured of the complete confidentiality of data gathered in this investigation: their identity will not be made public without their prior consent. To ensure anonymity and confidentiality, pseudonyms will be used as a means to protect participants' identities at all stages from data collection to thesis publication. No one will have authorised access to the data including all video recordings apart from me and my supervisors. All the data will be securely stored in my password-protected facilities (i.e. my laptop and USB drives) and will also be backed up on the UC server and locked storage at the University of Canterbury for ten years following the study. Afterwards, the data will be destroyed. Please note that my supervisors will have access to the data throughout the study, and my primary supervisor can access the data during that ten years following the study. A thesis is a public document and will be available through the UC Library.

Please indicate to the researcher on the consent form if you would like to receive a copy of the summary of the results of the project.

The project is being carried out as a requirement for the music PhD programme by Wenting Yang under the supervision of Glenda Keam and Stuart Wise, who can be contacted at glenda.keam@canterbury.ac.nz and stuart.wise@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

This project has been reviewed and approved by the University of Canterbury Educational Research Human Ethics Committee, and participants should address any complaints to The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

If you agree to your ensemble participating in the study, you are asked to complete the consent form and return it to me via email (wenting.yang@pg.canterbury.ac.nz) within five days.

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CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments
A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch
Consent form for the Ensemble Manager

- ☐ I have been given a full explanation of this project and have had the opportunity to ask questions.
- ☐ I understand what is required of my ensemble people and me if I agree to take part in the research.
- ☐ I understand that participation is voluntary, and my ensemble people may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information they have provided should this remain practically achievable.
- ☐ I understand that any information or opinions provided by my ensemble people will be kept confidential to the researcher and the supervisory team (Glenda Keam and Stuart Wise) and that any published or reported results will not identify the participants. I understand that a thesis is a public document and will be available through the UC Library.
- ☐ I understand that all data collected for the study will be kept in the researcher's password-protected laptop and USB drives. The data will also be backed up on the UC server for ten years following the study, and only the primary supervisor will have access to the data. Afterwards, the data will be destroyed.
- ☐ I understand the risks associated with taking part and how they will be managed.
- ☐ I understand that I can contact the researcher (Wenting Yang: wenting.yang@pg.canterbury.ac.nz) or supervisors (Glenda Keam: glenda.keam@canterbury.ac.nz or Stuart Wise: stuart.wise@canterbury.ac.nz) for further information. If I have any complaints, I can contact the Chair of the University of Canterbury Educational Research Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I would like a summary of the results of the project.
- ☐ By signing below, I agree to my ensemble participating in this research project.

Name:_____ Signed:_____ Date:_____

Email address *(for report of findings, if applicable)*:

_____

Please complete the consent form and return to the researcher via email (wenting.yang@pg.canterbury.ac.nz) within five days.

Appendix B: Information Sheet and Consent Form for Observation Adult Participants

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12th, Feb 2019
ERHEC Ref: 2018/41

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments

A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch

Information Sheet for Observation Adult Participants

My name is Wenting Yang. I am a music PhD candidate at the School of Music, University of Canterbury. My PhD research is a qualitative and collective case study exploring aural and listening skills in amateur instrumental ensembles settings. This study will include two ensembles, but no comparison will be made between them.

You have been approached to take part in this study because aural and listening skills are frequently used during your ensemble rehearsals. I have located your contact details through your ensemble manager.

This research has two phases, video observation of ensemble rehearsals and focus group interviews. In the first phase, three rehearsals will be videoed and observed by me only. The first rehearsal will be a pilot video observation conducted for planning purposes. This pilot observation will help me to ensure the research tools are appropriate and to develop an observation guide for the next two formal video observation sessions. It is anticipated that all ensemble players who are fourteen years old and above will attend these rehearsals. This participation is voluntary, and each player will be provided with an information sheet and consent form which thoroughly explains the process of this project and his/her participation. Each player will be able to talk to me individually at any point if he/she wishes to raise concerns or questions about the study.

If you choose to take part in the first phase, your involvement in this project will be kept to a minimum, and you will not be asked to commit extra time. In other words, you will come to the rehearsals practising some music pieces with other ensemble players as usual while the rehearsals being video-recorded. I will observe your verbal and non-verbal interaction with other ensemble players and the conductor, as well as your interpretation of music.

Once the first phase is completed, I will watch the original video recordings of rehearsals and identify potential participants for the second phase. The selection criteria are not based on players' instrumental techniques, musical capabilities, performing skills or my preferences, but rather on the types of aural and listening skills manifested during the recorded rehearsals. For example, players listen to their neighbours to produce the same sound, or players listen to the conductor's singing and try to imitate it, or players put their interpretation on the music pieces while they are playing. As a result, those who actively involve themselves in listening activities will be invited to participate in the second phase of the research. You may be invited.

The second phase includes two focus group interviews. The potential participants will be individually provided with a sealed envelope which contains another information sheet and consent form. This

participation is also voluntary, and eventually, a list of six to eight interviewees will be made. I will then create new video clips by extracting the content related to these interviewees' listening experience from the original video recordings. These new video clips will subsequently be used in the focus group interviews to help interviewees recall their performance and initiate discussion.

If you are recruited as one of the interviewees, you and other interviewees will be divided into two small groups, and each group (three to four interviewees) will participate in a sixty-minute video-recorded focus group interview session. During the interview, you will be asked to watch the new video clips with me and to answer some questions related to your listening experience in playing in the ensemble. Questions will include topics such as your musical background, your understanding of aural and listening skills and your experience of using aural and listening skills in ensemble rehearsals. Afterwards, I will transcribe the interviews and send a transcript to you via email for checking the accuracy of the transcription. You will need to spend an hour reading the transcript and provide feedback to me via email within two weeks if you wish to do so.

As a follow-up to this investigation, you may be asked to clarify or elaborate on your answers collected from the interviews. You might also be asked to answer some new questions that I develop as a result of analysing the transcripts. These questions could take you five to twenty minutes to answer via email or in person at your convenience. You will also be given the opportunity to follow up with me individually if you wish to raise concerns or questions about the study.

In the performance of the tasks and application of the procedures, there are social risks for the participants. These risks may include fear of being judged, loss of confidence and interest in playing with an ensemble, and alterations in relationships among ensemble players including embarrassment or loss of respect for others.

I understand that you may not wish to be involved in this research, so you should not feel obliged to participate. If you decide not to participate in the research, it is suggested you attend the rehearsals while being placed in a location where you can still hear the instructions from the conductor but without being in the visual zone of the camera. Although your instrument's sound and your conversations with other ensemble people will be captured, this information will be omitted from my data collection.

During the recruitment of the focus group interview participants, you may feel unwelcome if you failed to be selected. In fact, the recruitment criteria of focus group interviewees are based on the research needs and not on your musical talents. The selection criteria were mentioned earlier in this sheet (please refer to the fifth paragraph on page one), and that may clarify the reasons behind the exclusion.

You may have concerns about the access to original video recordings of rehearsals and the use of new video clips in the focus group interviews because your performance and images might be caught on video. To reduce any possible risks caused by this action, the following measures will be taken. First, the original video recordings of rehearsals will not be seen by anyone except the supervisory team and me. We will not make any judgement on your performance in rehearsal, musical capabilities or personal experience and we will ensure that nobody else can access these videos. Second, by using a video-editing programme, the new video clips will only show the focus group interviewees clearly. If you are not recruited in the focus group interviews, I will ensure that your images will be blurred visually, and your voice will be silenced in the video clips. Your instruments' sound can be muffled when you are playing a solo line. However, it will be difficult to mute your performance while other players are playing the same tune at the same time. In this case, it is difficult to identify your individual line especially when your images have been visually blurred.

Third, the content of focus group interviews is confidential, and you must comply with the non-disclosure rules if you are one of the interviewees. This means that during the interview, you will be encouraged to talk about your listening experience but be discouraged from discussing any non-interviewees. After the interview has been completed, you should not discuss the content of the interviews with other interviewees or with anyone else. The interview content may include but not be limited to what you have viewed in the video clips and other interviewees' identities. If you are found to violate the rules, you will be given a warning for the first time; and for the second time, your participation in the focus group interview will be terminated, and your data will be removed. These rules will also protect your privacy and confidentiality as a non-interviewee if you are excluded from the focus group interviews.

You may also have concerns about the use of focus group interview video recordings. The purpose of videoing the focus group interviews is to help me review and transcribe the interview contents. I can assure that only the supervisory team and I have access to these videos.

Participation is voluntary, and you have the right to withdraw at any stage without penalty. You may ask for your raw data to be returned or destroyed before the data is analysed. If you withdraw, I will remove information relating to you, which may include your performance in the rehearsal video recordings and new video clips, written description of your behaviour during rehearsals, and images and conversation in the focus group interviews. However, it will become increasingly difficult to remove data as the research proceeds. Once the analysis of raw data has begun (August 1st, 2019), information will not be able to be removed.

The results of the project may be published in a journal article or presented at a conference, but you may be assured of the complete confidentiality of data gathered in this investigation: your identity will not be made public without your prior consent. To ensure anonymity and confidentiality, pseudonyms will be used as a means to protect your identity at all stages from data collection to thesis publication. No one will have authorised access to the data including all video recordings apart from me and my supervisors. All the data will be securely stored in my password-protected facilities (i.e. my laptop and USB drives) and will also be backed up on the UC server and locked storage at the University of Canterbury for ten years following the study. Afterwards, the data will be destroyed. Please note that my supervisors will have access to the data throughout the study, and my primary supervisor can access the data during that ten years following the study. A thesis is a public document and will be available through the UC Library.

Please indicate to the researcher on the consent form if you would like to receive a copy of the summary of the results of the project.

The project is being carried out as a requirement for the music PhD programme by Wenting Yang under the supervision of Glenda Keam and Stuart Wise, who can be contacted at glenda.keam@canterbury.ac.nz and stuart.wise@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

This project has been reviewed and approved by the University of Canterbury Educational Research Human Ethics Committee, and participants should address any complaints to The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

If you agree to participate in the study, you are asked to complete the consent form and return it to me via email (wenting.yang@pg.canterbury.ac.nz) within five days.

Department: School of Music
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UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments
A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch
Consent Form for Observation Adult Participants

- ☐ I have been given a full explanation of this project and have had the opportunity to ask questions.
- ☐ I understand what is required of me if I agree to take part in the research.
- ☐ I understand that participation is voluntary, and I may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information I have provided should this remain practically achievable.
- ☐ I understand that any information or opinions I provide will be kept confidential to the researcher and the supervisory team (Glenda Keam and Stuart Wise) and that any published or reported results will not identify the participants. I understand that a thesis is a public document and will be available through the UC Library.
- ☐ I understand that all data collected for the study will be kept in the researcher's password-protected laptop and USB drives. The data will also be backed up on the UC server for ten years following the study, and only the primary supervisor will have access to the data. Afterwards, the data will be destroyed.
- ☐ I understand the risks associated with taking part and how they will be managed.
- ☐ I understand that I can contact the researcher (Wenting Yang: wenting.yang@pg.canterbury.ac.nz) or supervisors (Glenda Keam: glenda.keam@canterbury.ac.nz or Stuart Wise: stuart.wise@canterbury.ac.nz) for further information. If I have any complaints, I can contact the Chair of the University of Canterbury Educational Research Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I would like a summary of the results of the project.
- ☐ By signing below, I agree to participate in this research project.

Name:_____ Signed:_____ Date:_____

Email address *(for report of findings, if applicable)*:

_____

Please complete the consent form and return to the researcher via email (wenting.yang@pg.canterbury.ac.nz) within five days.

Appendix C: Information Sheet and Consent Form for Observation Teenager Participants

Department: School of Music
Telephone: +64 3 369 3035
Email: wenting.yang@pg.canterbury.ac.nz
12th, Feb 2019
ERHEC Ref: 2018/41

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments
A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch
Information Sheet for Observation Teenager Participants

My name is Wenting Yang. I am a music PhD candidate at the School of Music, University of Canterbury. My PhD research will explore aural and listening skills in amateur instrumental ensembles settings. This study will include two ensembles, but no comparison will be made between them.

You have been approached to take part in this study because aural and listening skills are frequently used during your ensemble rehearsals. I have located your contact details through your ensemble manager. Your parents will also be informed of this study as another information sheet and consent form will be sent to them. They will discuss this study with you before you make a decision on your participation.

This research has two phases, video observation of ensemble rehearsals and focus group interviews. In the first phase, three rehearsals will be videoed and observed by me only. The first rehearsal will be a pilot video observation which is conducted for planning the next two video observations of rehearsals. It is anticipated that all ensemble players who are fourteen years old and above will attend these rehearsals. This participation is voluntary, and each player will be provided with an information sheet and consent form which thoroughly explains the process of this project and his/her participation. Each player will be able to talk to me individually at any point if he/she wishes to raise concerns or questions about the study.

If you choose to take part in the first phase, your involvement in this project will be kept to a minimum, and you will not be asked to commit extra time. In other words, you will come to the rehearsals practising some music pieces with other ensemble players as usual while the rehearsals being video-recorded. I will observe your verbal and non-verbal interaction with other ensemble players and the conductor, as well as your interpretation of music.

Once the first phase is completed, I will watch the original video recordings of rehearsals and identify potential participants for the second phase. The selection criteria are not based on players' instrumental techniques, musical capabilities, performing skills or my preferences, but rather on the types of aural and listening skills manifested during the recorded rehearsals. For example, players listen to their neighbours to produce the same sound, or players listen to the conductor's singing and try to imitate it, or players put their interpretation on the music pieces while they are playing. As a result, those who actively involve themselves in listening activities will be invited to participate in the second phase of the research. You may be invited.

The second phase includes two focus group interviews. The potential participants will be individually provided with a sealed envelope which contains another information sheet and consent form. This

participation is also voluntary, and eventually, a list of six to eight interviewees will be made. I will then create new video clips by extracting the content related to these interviewees' listening experience from the original video recordings. These new video clips will subsequently be used in the focus group interviews to help interviewees recall their performance and get a discussion going.

If you are recruited as one of the interviewees, you and other interviewees will be divided into two small groups, and each group (three to four interviewees) will participate in a sixty-minute video-recorded focus group interview session. During the interview, you will be asked to watch the new video clips with me and to answer some questions related to your listening experience in playing in the ensemble. Questions will include topics such as your musical background, your understanding of aural and listening skills and your experience of using aural and listening skills in ensemble rehearsals. Afterwards, I will transcribe the interviews and send a transcript to you via email for checking the accuracy of the transcription. You will need to spend an hour reading the transcript and provide feedback to me via email within two weeks if you wish to do so.

As a follow-up to this investigation, you may be asked to clarify or elaborate on your answers collected from the interviews. You might also be asked to answer some new questions that I develop as a result of analysing the transcripts. These questions could take you five to twenty minutes to answer via email or in person at your convenience. You will also be given the opportunity to follow up with me individually if you wish to raise concerns or questions about the study.

In the course of implementing this research, there are social risks for the participants. These risks may include fear of being judged, loss of confidence and interest in playing with an ensemble, and changes in relationships among ensemble players including embarrassment or loss of respect for others. Your parents will discuss these risks with you, and you may want to ask them any questions about this research as well.

I understand that you may not wish to be involved in this research, so you should not feel obliged to participate. If you decide not to participate in the research, it is suggested you attend the rehearsals while being placed in a location where you can still hear the instructions from the conductor but without being in the visual zone of the camera. Although your instrument's sound and your conversations with other ensemble people will be captured, this information will be left out of my research.

During the recruitment of the focus group interview participants, you may feel unwelcome if you failed to be selected. In fact, the recruitment criteria of focus group interviewees are based on the research needs and not on your musical talents. The selection criteria were mentioned earlier in this sheet (please refer to the fifth paragraph on page one), and that may clarify the reasons behind the exclusion.

You may have concerns about the access to original video recordings of rehearsals and the use of new video clips in the focus group interviews because your performance and images might be caught on video. To reduce any possible risks caused by this action, the following measures will be taken. First, the original video recordings of rehearsals will not be seen by anyone except the supervisory team and me. We will not make any judgement on your performance in rehearsal, musical capabilities or personal experience and we will ensure that nobody else can access these videos. Second, by using a video-editing programme, the new video clips will only show the focus group interviewees clearly. If you are not recruited in the focus group interviews, I will ensure that your images will be blurred visually, and your voice will be silenced in the video clips. Your instruments' sound can be muffled when you are playing a solo line. However, it will be difficult to mute your performance while other players are playing the same tune at the same time. In this case, it is difficult to identify your individual line especially when your images have been visually blurred.

Third, the content of focus group interviews is confidential, and you must comply with the non-disclosure rules if you are one of the interviewees. This means that during the interview, you will be encouraged to talk about your listening experience but be discouraged from discussing any non-interviewees. After the interview has been completed, you should not discuss the content of the interviews with other interviewees or with anyone else. The interview content may include but not be limited to what you have viewed in the video clips and other interviewees' identities. If you are found to violate the rules, you will be given a warning for the first time; and for the second time, your participation in the focus group interview will be terminated, and your data will be removed. These rules will also protect your privacy and confidentiality as a non-interviewee if you are excluded from the focus group interviews.

You may also have concerns about the use of focus group interview video recordings. The purpose of videoing the focus group interviews is to help me review and transcribe the interview contents. I can assure that only the supervisory team and I have access to these videos.

Participation is voluntary, and you have the right to withdraw (stop participating) at any stage without penalty. You may ask for your raw data to be returned or destroyed before the data is analysed. If you withdraw, I will remove information relating to you, which may include your performance in the rehearsal video recordings and new video clips, written description of your behaviour during rehearsals, and images and conversation in the focus group interviews. However, it will become increasingly difficult to remove data as the research proceeds. Once the analysis of raw data has begun (August 1st, 2019), information will not be able to be removed.

The results of the project may be published in a journal article or presented at a conference, but you may be assured of the complete confidentiality of data gathered in this investigation: your identity will not be made public without your prior consent. To ensure anonymity and confidentiality, pseudonyms (fake names) will be used as a means to protect your identity at all stages from data collection to thesis publication. No one will have authorised access to the data including all video recordings apart from me and my supervisors. All the data will be securely stored in my password-protected facilities (i.e. my laptop and USB drives) and will also be backed up on the UC server and locked storage at the University of Canterbury for ten years following the study. Afterwards, the data will be destroyed. Please note that my supervisors will have access to the data throughout the study, and my primary supervisor can access the data during that ten years following the study. A thesis is a public document and will be available through the UC Library.

Please indicate to the researcher on the consent form if you would like to receive a copy of the summary of the results of the project.

The project is being carried out as a requirement for the music PhD programme by Wenting Yang under the supervision of Glenda Keam and Stuart Wise, who can be contacted at glenda.keam@canterbury.ac.nz and stuart.wise@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

This project has been reviewed and approved by the University of Canterbury Educational Research Human Ethics Committee, and participants should address any complaints to The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

If you agree to participate in the study, you are asked to complete the consent form and return it to me via email (wenting.yang@pg.canterbury.ac.nz) within five days.

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Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments
A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch
Consent Form for Observation Teenager Participants

- ☐ I have been given a full explanation of this project and have had the opportunity to ask questions.
- ☐ I understand what is required of me if I agree to take part in the research.
- ☐ I understand that participation is voluntary, and I may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information I have provided should this remain practically achievable.
- ☐ I understand that any information or opinions I provide will be kept confidential to the researcher and the supervisory team (Glenda Keam and Stuart Wise) and that any published or reported results will not identify the participants. I understand that a thesis is a public document and will be available through the UC Library.
- ☐ I understand that all data collected for the study will be kept in the researcher's password-protected laptop and USB drives. The data will also be backed up on the UC server for ten years following the study, and only the primary supervisor will have access to the data. Afterwards, the data will be destroyed.
- ☐ I understand the risks associated with taking part and how they will be managed.
- ☐ I understand that I can contact the researcher (Wenting Yang: wenting.yang@pg.canterbury.ac.nz) or supervisors (Glenda Keam: glenda.keam@canterbury.ac.nz or Stuart Wise: stuart.wise@canterbury.ac.nz) for further information. If I have any complaints, I can contact the Chair of the University of Canterbury Educational Research Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I would like a summary of the results of the project.
- ☐ By signing below, I agree to participate in this research project.

Name:_____ Signed:_____ Date:_____

Email address *(for report of findings, if applicable)*:

_____

Please complete the consent form and return to the researcher via email (wenting.yang@pg.canterbury.ac.nz) within five days.

Appendix D: Assent Form for Children

Children's Assent Form

(Below 14 years old)

The project that Wenting wants to do at our Nor'west brass band has been explained to me. I know three rehearsals will be video-recorded, and other band players will participate in this project.

As a way to protect me, I don't have to be a part of it. I will be placed in a location where I can hear the instructions from our conductor but without being in the visual zone of the camera. My voice and my instrument's sound will be captured, but they will not be used in this project.

If I have any questions, I can ask my parents or the conductor.

My name: _____

Please give this back to your conductor now.

Appendix E: Information Sheet and Consent Form for Parents/Caregivers

Department: School of Music
Telephone: +64 3 369 3035
Email: wenting.yang@pg.canterbury.ac.nz
12th, Feb 2019
ERHEC Ref: 2018/41

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments
A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch
Information Sheet for Parents/Caregivers

My name is Wenting Yang. I am a music PhD candidate at the School of Music, University of Canterbury. My PhD research is a qualitative and collective case study exploring aural and listening skills in amateur instrumental ensembles settings. This study will include two ensembles, but no comparison will be made between them.

I would like to invite your child to participate in this project. Your child has been approached to take part in this study because aural and listening skills are frequently used during his/her ensemble rehearsals. I have located your contact details through the ensemble manager.

Please note: if your child is under fourteen years of age, he/she will not take part in the research. Your child can still come to the rehearsals during the implementation of this project, and he/she will be placed on the outside of the camera's visual zone as a way to protect his/her privacy and confidentiality. Although his/her instrument's sound and the conversations with other ensemble people will still be captured, this information will be excluded from my research. With respect to your young child, an assent form will be provided to him/her to notify that the ensemble is participating in the researcher's study, but he/she will not be directly involved. You will be responsible for discussing this research with your child and explain the risks of his/her involvement or participation based on his/her age group.

This research has two phases, video observation of ensemble rehearsals and focus group interviews. In the first phase, three rehearsals will be videoed and observed by me only. The first rehearsal will be a pilot video observation conducted for planning purposes. This pilot observation will help me to ensure the research tools are appropriate and to develop an observation guide for the next two formal video observation sessions. It is anticipated that all ensemble players who are fourteen years old and above will attend these rehearsals. This participation is voluntary, and each player will be provided with an information sheet and consent form which thoroughly explains the process of this project and his/her participation. Each player will be able to talk to me individually at any point if he/she wishes to raise concerns or questions about the study.

If your child chooses to take part in the first phase, his/her involvement in this project will be kept to a minimum, and he/she will not be asked to commit extra time. In other words, your child will come to the rehearsals practising some music pieces with other ensemble players as usual while the rehearsals being video-recorded. I will observe your child's verbal and non-verbal interaction with other ensemble players and the conductor, as well as his/her interpretation of music.

Once the first phase is completed, I will watch the original video recordings of rehearsals and identify potential participants for the second phase. The selection criteria are not based on players' instrumental techniques, musical capabilities, performing skills or my preferences, but rather on the types of aural and listening skills manifested during the recorded rehearsals. For example, players listen to their neighbours to produce the same sound, or players listen to the conductor's singing and try to imitate it, or players put their interpretation on the music pieces while they are playing. As a result, those who actively involve themselves in listening activities will be invited to participate in the second phase of the research. Your child may be invited.

The second phase includes two focus group interviews. The potential participants will be individually provided with a sealed envelope which contains another information sheet and consent form. This participation is also voluntary, and eventually, a list of six to eight interviewees will be made. I will then create new video clips by extracting the content related to these interviewees' listening experience from the original video recordings. These new video clips will subsequently be used in the focus group interviews to help interviewees recall their performance and initiate discussion.

If you child is recruited as one of the interviewees, he/she and other interviewees will be divided into two small groups, and each group (three to four interviewees) will participate in a sixty-minute video-recorded focus group interview session. During the interview, your child will be asked to watch the new video clips with me and to answer some questions related to his/her listening experience in playing in the ensemble. Questions will include topics such as his/her musical background, his/her understanding of aural and listening skills and his/her experience of using aural and listening skills in ensemble rehearsals. Afterwards, I will transcribe the interviews and send a transcript to your child via email for checking the accuracy of the transcription. Your child will need to spend an hour reading the transcript and provide feedback to me via email within two weeks if he/she wishes to do so.

As a follow-up to this investigation, your child may be asked to clarify or elaborate on his/her answers collected from the interviews. He/she might also be asked to answer some new questions that I develop as a result of analysing the transcripts. These questions could take him/her five to twenty minutes to answer via email or in person at his/her convenience. Your child will also be given the opportunity to follow up with me individually if he/she wishes to raise concerns or questions about the study.

In the performance of the tasks and application of the procedures, there are social risks for the participants. These risks may include fear of being judged, loss of confidence and interest in playing with an ensemble, and alterations in relationships among ensemble players including embarrassment or loss of respect for others.

I understand that you may not wish your child to be involved in this research, so he/she should not feel obliged to participate. If your child decides not to participate in the research, it is suggested he/she attends the rehearsals while being placed in a location where he/she can still hear the instructions from the conductor but without being in the visual zone of the camera. Although his/her instrument's sound and his/her conversations with other ensemble people will be captured, this information will be omitted from my data collection.

During the recruitment of the focus group interview participants, your child may feel unwelcome if he/she failed to be selected. In fact, the recruitment criteria of focus group interviewees are based on the research needs and not on your child's musical talents. The selection criteria were mentioned earlier in this sheet (please refer to the sixth paragraph on page one), and that may clarify the reasons behind the exclusion.

You or your child may have concerns about the access to original video recordings of rehearsals and the use of new video clips in the focus group interviews because your child's performance and images might be caught on video. To reduce any possible risks caused by this action, the following measures will be taken. First, the original video recordings of rehearsals will not be seen by anyone except the supervisory team and me. We will not make any judgement on your child's performance in rehearsal, musical capabilities or personal experience and we will ensure that nobody else can access these videos. Second, by using a video-editing programme, the new video clips will only show the focus group interviewees clearly. If your child is not recruited in the focus group interviews, I will ensure that his/her images will be blurred visually, and his/her voice will be silenced in the video clips. His/her instruments' sound can be muffled when he/she is playing a solo line. However, it will be difficult to mute his/her performance while other players are playing the same tune at the same time. In this case, it is difficult to identify your child's individual line especially when his/her images have been visually blurred.

Third, the content of focus group interviews is confidential, and your child must comply with the non-disclosure rules if he/she is one of the interviewees. This means that during the interview, your child will be encouraged to talk about his/her listening experience but be discouraged from discussing any non-interviewees. After the interview has been completed, your child should not discuss the content of the interviews with other interviewees or with anyone else. The interview content may include but not be limited to what he/she has viewed in the video clips and other interviewees' identities. If your child is found to violate the rules, he/she will be given a warning for the first time; and for the second time, his/her participation in the focus group interview will be terminated, and his/her data will be removed. These rules will also protect your child's privacy and confidentiality as a non-interviewee if he/she is excluded from the focus group interviews.

You or your child may also have concerns about the use of focus group interview video recordings. The purpose of videoing the focus group interviews is to help me review and transcribe the interview contents. I can assure that only the supervisory team and I have access to these videos.

Participation is voluntary, and your child has the right to withdraw at any stage without penalty. He/she may ask for his/her raw data to be returned or destroyed before the data is analysed. If he/she withdraws, I will remove information relating to him/her, which may include his/her performance in the rehearsal video recordings and new video clips, written description of his/her behaviour during rehearsals, and images and conversation in the focus group interviews. However, it will become increasingly difficult to remove data as the research proceeds. Once the analysis of raw data has begun (August 1st, 2019), information will not be able to be removed.

The results of the project may be published in a journal article or presented at a conference, but your child may be assured of the complete confidentiality of data gathered in this investigation: his/her identity will not be made public without his/her prior consent. To ensure anonymity and confidentiality, pseudonyms will be used as a means to protect his/her identity at all stages from data collection to thesis publication. No one will have authorised access to the data including all video recordings apart from me and my supervisors. All the data will be securely stored in my password-protected facilities (i.e. my laptop and USB drives) and will also be backed up on the UC

server and locked storage at the University of Canterbury for ten years following the study. Afterwards, the data will be destroyed. Please note that my supervisors will have access to the data throughout the study, and my primary supervisor can access the data during that ten years following the study. A thesis is a public document and will be available through the UC Library.

Please indicate to the researcher on the consent form if you would like to receive a copy of the summary of the results of the project.

The project is being carried out as a requirement for the music PhD programme by Wenting Yang under the supervision of Glenda Keam and Stuart Wise, who can be contacted at glenda.keam@canterbury.ac.nz and stuart.wise@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

This project has been reviewed and approved by the University of Canterbury Educational Research Human Ethics Committee, and participants should address any complaints to The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

If you agree to your child participating in the study, you are asked to complete the consent form and return it to me via email (wenting.yang@pg.canterbury.ac.nz) within five days.

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Telephone: +64 3 369 3035
Email: wenting.yang@pg.canterbury.ac.nz

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments
A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch
Consent form for Parents/Caregivers

- ☐ I have been given a full explanation of this project and have had the opportunity to ask questions.
- ☐ I understand what is required of my child if he/she agrees to take part in the research.
- ☐ I understand that participation is voluntary, and my child may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information he/she has provided should this remain practically achievable.
- ☐ I understand that any information or opinions provided by my child will be kept confidential to the researcher and the supervisory team (Glenda Keam and Stuart Wise) and that any published or reported results will not identify the participants. I understand that a thesis is a public document and will be available through the UC Library.
- ☐ I understand that all data collected for the study will be kept in the researcher's password-protected laptop and USB drives. The data will also be backed up on the UC server for ten years following the study, and only the primary supervisor will have access to the data. Afterwards, the data will be destroyed.
- ☐ I understand the risks associated with taking part and how they will be managed. I will discuss this research with my child and explain the risks of his/her participation.
- ☐ I understand that I can contact the researcher (Wenting Yang: wenting.yang@pg.canterbury.ac.nz) or supervisors (Glenda Keam: glenda.keam@canterbury.ac.nz or Stuart Wise: stuart.wise@canterbury.ac.nz) for further information. If I have any complaints, I can contact the Chair of the University of Canterbury Educational Research Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I would like a summary of the results of the project.
- ☐ By signing below, I agree to my child participating in this research project.

Name:_____ Signed:_____ Date:_____

Email address *(for report of findings, if applicable)*:

_____

Please complete the consent form and return to the researcher via email (wenting.yang@pg.canterbury.ac.nz) within five days.

Appendix F: Information Sheet and Consent Form for Focus Group Adult Participants

Department: School of Music
Telephone: +64 3 369 3035
Email: wenting.yang@pg.canterbury.ac.nz
12th, Feb 2019
ERHEC Ref: 2018/41

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments

A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch

Information Sheet for Focus Group Adult Participants

My name is Wenting Yang. I am a music PhD candidate at the School of Music, University of Canterbury. My PhD research is a qualitative and collective case study exploring aural and listening skills in amateur instrumental ensembles settings. This study will include two ensembles, but no comparison will be made between them.

You have been approached to take part in the second phase of the research-the focus group interviews because you have been identified by me as one of the potential interviewees. You were actively involved in listening activities during the first phase of the research-three video observation rehearsals, and I would like to invite you to a group chat. I have located your contact details through your ensemble manager.

If you choose to take part in this focus group interviews, your involvement in this project will be kept to a minimum, and the time required for this participation will be elaborated in detail. You and other interviewees will first be divided into two small groups, and each group (three to four interviewees) will participate in a sixty-minute video-recorded focus group interview session. During the interview, I will play a video clip for you, and you will be reminded about your performance during the video-recorded rehearsals. You will then be asked to answer some questions related to your listening experience in playing in the ensemble. Questions will include topics such as your musical background, your understanding of aural and listening skills and your experience of using aural and listening skills in ensemble rehearsals. Afterwards, I will transcribe the interviews and send a transcript to you via email for checking the accuracy of the transcription. You will need to spend an hour reading the transcript and provide feedback to me via email within two weeks if you wish to do so.

As a follow-up to this investigation, you may be asked to clarify or elaborate on your answers collected from the interviews. You might also be asked to answer some new questions that I develop as a result of analysing the transcripts. These questions could take you five to twenty minutes to answer via email or in person at your convenience. You will also be given the opportunity to follow up with me individually if you wish to raise concerns or questions about the study.

In the performance of the tasks and application of the procedures, there are social risks for the focus group interviewees. These risks may include fear of being judged, loss of confidence and interest in playing with an ensemble, and changes in relationships among ensemble players including embarrassment or loss of respect for others.

I understand that you may not wish to be involved in the focus group interviews, so you should not feel obliged to participate. This participation is voluntary, and you have a right to decide whether you want to participate in the interviews. You may also have concerns about the use of focus group interview video recordings. The purpose of videoing the focus group interviews is to help me review and transcribe the interview contents. I can assure that only the supervisory team and I have access to these videos.

Furthermore, you may have concerns about the access to original video recordings of rehearsals and the use of new video clips in the focus group interviews because your performance and images might be caught on video. To reduce any possible risks caused by this action, the following measures will be taken. First, the original video recordings of rehearsals will not be seen by anyone except the supervisory team and me. We will not make any judgement on your performance in rehearsal, musical capabilities or personal experience and we will ensure that nobody else can access these videos. Second, by using a video-editing programme, the new video clips will only show the focus group interviewees clearly. If you are not recruited in the focus group interviews, I will ensure that your images will be blurred visually, and your voice will be silenced in the video clips. Your instruments' sound can be muffled when you are playing a solo line. However, it will be difficult to mute your performance while other players are playing the same tune at the same time. In this case, it is difficult to identify your individual line especially when your images have been visually blurred.

Third, the content of focus group interviews is confidential, and you must comply with the non-disclosure rules if you are one of the interviewees. This means that during the interview, you will be encouraged to talk about your listening experience but be discouraged from discussing any non-interviewees. After the interview has been completed, you should not discuss the content of the interviews with other interviewees or with anyone else. The interview content may include but not be limited to what you have viewed in the video clips and other interviewees' identities. If you are found to violate the rules, you will be given a warning for the first time; and for the second time, your participation in the focus group interview will be terminated, and your data will be removed. These rules will also protect your privacy and confidentiality as a non-interviewee if you are excluded from the focus group interviews.

Participation is voluntary, and you have the right to withdraw at any stage without penalty. You may ask for your raw data to be returned or destroyed before the data is analysed. If you withdraw, I will remove information relating to you, which may include your performance in the rehearsal video recordings and the new video clips, written description of your behaviour during rehearsals, and images and conversation in the focus group interviews. However, it will become increasingly difficult to remove data as the research proceeds. Once the analysis of raw data has begun (August 1st, 2019), information will not be able to be removed.

The results of the project may be published in a journal article or presented at a conference, but you may be assured of the complete confidentiality of data gathered in this investigation: your identity will not be made public without your prior consent. To ensure anonymity and confidentiality, pseudonyms will be used as a means to protect your identity at all stages from data collection to thesis publication. No one will have authorised access to the data including all video recordings apart from me and my supervisors. All the data will be securely stored in my password-protected facilities (i.e. my laptop and USB drives) and will also be backed up on the UC server and locked storage at the University of Canterbury for ten years following the study. Afterwards, the data will be destroyed. Please note that my supervisors will have access to the data throughout the study, and my primary supervisor can access the data during that ten years following the study. A thesis is a public document and will be available through the UC Library.

Please indicate to the researcher on the consent form if you would like to receive a copy of the summary of the results of the project.

The project is being carried out as a requirement for the music PhD programme by Wenting Yang under the supervision of Glenda Keam and Stuart Wise, who can be contacted at glenda.keam@canterbury.ac.nz and stuart.wise@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

This project has been reviewed and approved by the University of Canterbury Educational Research Human Ethics Committee, and participants should address any complaints to The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

If you agree to participate in the focus group interviews, you are asked to complete the consent form and return it to me via email (wenting.yang@pg.canterbury.ac.nz) within five days.

Department: School of Music
Telephone: +64 3 369 3035
Email: wenting.yang@pg.canterbury.ac.nz

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments
A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch
Consent Form for Focus Group Adult Participants

- ☐ I have been given a full explanation of this project and have had the opportunity to ask questions.
- ☐ I understand what is required of me if I agree to take part in the focus group interviews.
- ☐ I understand that participation is voluntary, and I may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information I have provided should this remain practically achievable.
- ☐ I understand that any information or opinions I provide will be kept confidential to the researcher and the supervisory team (Glenda Keam and Stuart Wise) and that any published or reported results will not identify the participants. I understand that a thesis is a public document and will be available through the UC Library.
- ☐ I understand that all data collected for the study will be kept in the researcher's password-protected laptop and USB drives. The data will also be backed up on the UC server for ten years following the study, and only the primary supervisor will have access to the data. Afterwards, the data will be destroyed.
- ☐ I understand the risks associated with taking part and how they will be managed.
- ☐ I will not discuss the content of the focus group interview with anyone after the interview is finished.
- ☐ I understand that I can contact the researcher (Wenting Yang: wenting.yang@pg.canterbury.ac.nz) or supervisors (Glenda Keam: glenda.keam@canterbury.ac.nz or Stuart Wise: stuart.wise@canterbury.ac.nz) for further information. If I have any complaints, I can contact the Chair of the University of Canterbury Educational Research Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I would like a summary of the results of the project.
- ☐ By signing below, I agree to participate in the focus group interviews.

Name:_____ Signed:_____ Date:_____

Email address *(for report of findings, if applicable)*:

_____

Please complete the consent form and return to the researcher via email (wenting.yang@pg.canterbury.ac.nz) within five days.

Appendix G: Information Sheet and Consent Form for Focus Group Teenager Participants

Department: School of Music
Telephone: +64 3 369 3035
Email: wenting.yang@pg.canterbury.ac.nz
12th, Feb 2019
ERHEC Ref: 2018/41

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments

A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch

Information Sheet for Focus Group Teenager Participants

My name is Wenting Yang. I am a music PhD candidate at the School of Music, University of Canterbury. My PhD research will explore aural and listening skills in amateur instrumental ensembles settings. This study will include two ensembles, but no comparison will be made between them.

You have been approached to take part in the second phase of the research-the focus group interviews because you have been identified by me as one of the potential interviewees. You were actively involved in listening activities during the first phase of the research-three video observation rehearsals, and I would like to invite you to a group chat. I have located your contact details through your ensemble manager. Your parents were also informed of these interviews as another information sheet and consent form has been sent to them. They will discuss the focus group interviews with you before you make a decision on your participation.

If you choose to take part in this focus group interviews, your involvement in this project will be kept to a minimum, and the time required for this participation will be elaborated in detail. You and other interviewees will first be divided into two small groups, and each group (three to four interviewees) will participate in a sixty-minute video-recorded focus group interview session. During the interview, I will play a video clip for you, and you will be reminded about your performance during the video-recorded rehearsals. You will then be asked to answer some questions related to your listening experience in playing in the ensemble. Questions will include topics such as your musical background, your understanding of aural and listening skills and your experience of using aural and listening skills in ensemble rehearsals. Afterwards, I will transcribe the interviews and send a transcript to you via email for checking the accuracy of the transcription. You will need to spend an hour reading the transcript and provide feedback to me via email within two weeks if you wish to do so.

As a follow-up to this investigation, you may be asked to clarify or elaborate on your answers collected from the interviews. You might also be asked to answer some new questions that I develop as a result of analysing the transcripts. These questions could take you five to twenty minutes to answer via email or in person at your convenience. You will also be given the opportunity to follow up with me individually if you wish to raise concerns or questions about the study.

In the course of implementing this research, there are social risks for the focus group interviewees. These risks may include fear of being judged, loss of confidence and interest in playing with an ensemble, and changes in relationships among ensemble players including embarrassment or loss of respect for others. Your parents will discuss these risks with you, and you may want to ask them any questions about this interview as well.

I understand that you may not wish to be involved in the focus group interviews, so you should not feel obliged to participate. This participation is voluntary, and you have a right to decide whether you want to participate in the interviews. You may also have concerns about the use of focus group interview video recordings. The purpose of videoing the focus group interviews is to help me review and transcribe the interview contents. I can assure that only the supervisory team and I have access to these videos.

Furthermore, you may have concerns about the access to original video recordings of rehearsals and the use of new video clips in the focus group interviews because your performance and images might be caught on video. To reduce any possible risks caused by this action, the following measures will be taken. First, the original video recordings of rehearsals will not be seen by anyone except the supervisory team and me. We will not make any judgement on your performance in rehearsal, musical capabilities or personal experience and we will ensure that nobody else can access these videos. Second, by using a video-editing programme, the new video clips will only show the focus group interviewees clearly. If you are not recruited in the focus group interviews, I will ensure that your images will be blurred visually, and your voice will be silenced in the video clips. Your instruments' sound can be muffled when you are playing a solo line. However, it will be difficult to mute your performance while other players are playing the same tune at the same time. In this case, it is difficult to identify your individual line especially when your images have been visually blurred.

Third, the content of focus group interviews is confidential, and you must comply with the non-disclosure rules if you are one of the interviewees. This means that during the interview, you will be encouraged to talk about your listening experience but be discouraged from discussing any non-interviewees. After the interview has been completed, you should not discuss the content of the interviews with other interviewees or with anyone else. The interview content may include but not be limited to what you have viewed in the video clips and other interviewees' identities. If you are found to violate the rules, you will be given a warning for the first time; and for the second time, your participation in the focus group interview will be terminated, and your data will be removed. These rules will also protect your privacy and confidentiality as a non-interviewee if you are excluded from the focus group interviews.

Participation is voluntary, and you have the right to withdraw (stop participating) at any stage without penalty. You may ask for your raw data to be returned or destroyed before the data is analysed. If you withdraw, I will remove information relating to you, which may include your performance in the rehearsal video recordings and the new video clips, written description of your behaviour during rehearsals, and images and conversation in the focus group interviews. However, it will become increasingly difficult to remove data as the research proceeds. Once the analysis of raw data has begun (August 1st, 2019), information will not be able to be removed.

The results of the project may be published in a journal article or presented at a conference, but you may be assured of the complete confidentiality of data gathered in this investigation: your identity will not be made public without your prior consent. To ensure anonymity and confidentiality, pseudonyms (fake names) will be used as a means to protect your identity at all stages from data collection to thesis publication. No one will have authorised access to the data including all video recordings apart from me and my supervisors. All the data will be securely stored in my password-protected facilities (i.e. my laptop and USB drives) and will also be backed up on the UC server and locked storage at the University of Canterbury for ten years following the study. Afterwards, the data will be destroyed. Please note that my supervisors will have access to the data throughout the study, and my primary supervisor can access the data during that ten years following the study. A thesis is a public document and will be available through the UC Library.

Please indicate to the researcher on the consent form if you would like to receive a copy of the summary of the results of the project.

The project is being carried out as a requirement for the music PhD programme by Wenting Yang under the supervision of Glenda Keam and Stuart Wise, who can be contacted at glenda.keam@canterbury.ac.nz and stuart.wise@canterbury.ac.nz. They will be pleased to discuss any concerns you may have about participation in the project.

This project has been reviewed and approved by the University of Canterbury Educational Research Human Ethics Committee, and participants should address any complaints to The Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

If you agree to participate in the focus group interviews, you are asked to complete the consent form and return it to me via email (wenting.yang@pg.canterbury.ac.nz) within five days.

Department: School of Music
Telephone: +64 3 369 3035
Email: wenting.yang@pg.canterbury.ac.nz

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Advancement in aural skills within ensemble environments
A qualitative case study of two contrasting amateur instrumental ensembles in Christchurch
Consent Form for Focus Group Teenager Participants

- ☐ I have been given a full explanation of this project and have had the opportunity to ask questions.
- ☐ I understand what is required of me if I agree to take part in the focus group interviews.
- ☐ I understand that participation is voluntary, and I may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information I have provided should this remain practically achievable.
- ☐ I understand that any information or opinions I provide will be kept confidential to the researcher and the supervisory team (Glenda Keam and Stuart Wise) and that any published or reported results will not identify the participants. I understand that a thesis is a public document and will be available through the UC Library.
- ☐ I understand that all data collected for the study will be kept in the researcher's password-protected laptop and USB drives. The data will also be backed up on the UC server for ten years following the study, and only the primary supervisor will have access to the data. Afterwards, the data will be destroyed.
- ☐ I understand the risks associated with taking part and how they will be managed.
- ☐ I will not discuss the content of the focus group interview with anyone after the interview is finished.
- ☐ I understand that I can contact the researcher (Wenting Yang: wenting.yang@pg.canterbury.ac.nz) or supervisors (Glenda Keam: glenda.keam@canterbury.ac.nz or Stuart Wise: stuart.wise@canterbury.ac.nz) for further information. If I have any complaints, I can contact the Chair of the University of Canterbury Educational Research Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- ☐ I would like a summary of the results of the project.
- ☐ By signing below, I agree to participate in the focus group interviews.

Name:_____ Signed:_____ Date:_____

Email address *(for report of findings, if applicable)*:

_____

Please complete the consent form and return to the researcher via email (wenting.yang@pg.canterbury.ac.nz) within five days.

Appendix H: Ethical Approval

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson
Telephone: +64 03 369 4588, Extn 94588
Email: human-ethics@canterbury.ac.nz

Ref: 2018/41/ERHEC

18 February 2019

Wenting Yang
School of Music
UNIVERSITY OF CANTERBURY

Dear Wenting

Thank you for providing the revised documents in support of your application to the Educational Research Human Ethics Committee. I am very pleased to inform you that your research proposal "Advancement in Aural Skills Within Ensemble Environments - A Qualitative Case Study of Two Contrasting Amateur Instrumental Ensembles in Christchurch" has been granted ethical approval.

Please note that this approval is subject to the incorporation of the amendments you have provided in your emails of 21st November 2018 and 15th February 2019.

Should circumstances relevant to this current application change you are required to reapply for ethical approval.

If you have any questions regarding this approval, please let me know.

We wish you well for your research.

Yours sincerely

pp R. Robinson

Dr Patrick Shepherd
Chair
Educational Research Human Ethics Committee

Please note that ethical approval relates only to the ethical elements of the relationship between the researcher, research participants and other stakeholders. The granting of approval by the Educational Research Human Ethics Committee should not be interpreted as comment on the methodology, legality, value or any other matters relating to this research.

F E S

Appendix I: Interview Questions for CAO Focus Group 1

Introduction

Thank you all for coming to the interview today. My name is Wenting. I'm doing this interview to explore different aspects of your ensemble music-making experience, identify the potential music learning moments, and discuss the strategies used for improving certain musical skills and understanding of music. The discussion also presents an opportunity for you to reflect on your music learning experience, which you may find helpful for your future ensemble engagement. Before the interview begins, I'd like to remind you again that your participation is anonymous, and no records of the interview will be kept with your names on. All recording equipment on site includes a camera there and a small audio device here on the table. If you have no objections or questions, we can get started.

Opening Question

Tell us who you are, and what you like about the accordion?

Introductory Question

What is it like playing in an accordion orchestra, e.g. comparing to playing the accordion by yourself?

Transition Question

Think back a CAO rehearsal, what music aspects does the orchestra usually work on during that 2 hours practice?

Key Questions

1. In this first clip, you may notice the conductor's verbal instructions often accompanied by his imitation of the ideal sound effects and the actual sound that you produced. How does this help you understand the conductor's aims?

2. After watching the second clip, could you tell me what the effect of the conductor's use of metaphor in his rehearsal instructions is?

3. In the first clip, Fiona & Freya, you may notice your facial expression when strange noise occurs or when some parts could not keep up with the speed in the performance. In the second clip, Sage, you may notice your facial expression and comments on speed and strange notes of others. Do you always pay attention to others or the overall sound of the orchestra, and do you have thoughts about what's going on when you do that?

4. Fiona & Freya, you may notice you suggest the conductor there might be a misprint in your parts at bar 4, and Sage, you may notice you also suggest another misprint at bar 7. What makes you think that?

5. Fiona, in your clip, you may see yourself practising fingering on your lap during a break. When you are doing this, what are you thinking about or imagining? Freya, in your clip, you may notice you are the only person in the band who plays with both hands, and I know sometimes the bassline is not written on your part. How do you manage to improvise the bassline to go with the melody? Sage, in your clip, you may see yourself tapping 4 beats in a bar while beating tango rhythmic patterns. How do you manage to count two types of rhythms at the same time?

6. In this clip, you may notice the conductor often sings along during performance, comments and reminds you of dynamic changes, accents and repeat with the involvement of hand gestures and expressive body movement. How does that affect your performance?

7. In this clip, you may notice the conductor asks you to put a bit of bounce into "Camptown Twist", and a bit more expression into "Alexander's Ragtime Band". What are your thoughts about musical expression? As a performer, what do you rely on when interpreting music?

8. In this clip, you may notice you do body movements (e.g. swaying or feet tapping) when you are playing. To what extent are you aware of this, and do you have thoughts about what's going on when you do that? (Please pay attention to your own movement)

9. In this clip, you may notice you also tapping feet when other parts practise while you are resting. Do you have thoughts about what's going on when you do that?

10. In this clip, you may notice the conductor interrupting the performance, asking you to start over again and play together. What are your thoughts about synchronisation in ensemble playing?

11. In this clip, you may notice the orchestra plays in sync without the conductor. How do you manage to do that?

12. In this clip, you may see yourself looking at your instrument sometimes during rehearsals, e.g. to change couplers. What's involved in switching your focus between playing, score reading and watching the conductor? (Please pay attention to yourself)

13. In the first clip, you may see all of you doing the bellow shake in "Fine and Dandy". In the second clip, Sage, you may see yourself doing bellow drum in "Yo Soy Maria". What are your thoughts about doing such extended performing techniques?

14. In this clip, Fiona, you may notice the conductor asks you to hop on the 4th part to assist them with practice. How is it for you when he asks you to do that?

(Summary)

Ending Question
Is there anything else you would like to share about your ensemble music-making experience?

Appendix J: Interview Questions for CAO Focus Group 2

Introduction

Thank you all for coming to the interview today. My name is Wenting. I'm doing this interview to explore different aspects of your ensemble music-making experience, identify the potential music learning moments, and discuss the strategies used for improving certain musical skills and understanding of music. The discussion also presents an opportunity for you to reflect on your music learning experience, which you may find helpful for your future ensemble engagement. Before the interview begins, I'd like to remind you again that your participation is anonymous, and no records of the interview will be kept with your names on. All recording equipment on site includes a camera there and a small audio device here on the table. If you have no objections or questions, we can get started.

Opening Question

Tell us who you are, and what you like about the accordion?

Introductory Question

What is it like playing in an accordion orchestra, e.g. comparing to playing the accordion by yourself?

Transition Question

Think back a CAO rehearsal, what music aspects does the orchestra usually work on during that 2 hours practice?

Key Questions

1. In this first clip, you may notice the conductor reminds you about the dynamic changes and articulations (e.g. accents) before the rehearsal begins. How is it for you when he does that?

2. In this clip, you may notice the conductor's verbal instructions often accompanied by his imitation of the ideal sound effects and the actual sound that you produced. How does this help you understand the conductor's aims?

3. After watching this clip, could you tell me what the effect of the conductor's use of metaphor in his rehearsal instructions is?

4. In this clip, you may notice the conductor often sings along during performance, comments and reminds you of dynamic changes, accents and repeat with the involvement of hand gestures and expressive body movement. How does that affect your performance?

5. In this clip, you may notice the conductor asks you to put a bit of bounce into "Camptown Twist", and a bit more expression into "Alexander's Ragtime Band". What are your thoughts about musical expression? As a performer, what do you rely on when interpreting music?

6. In these clips, you may notice you do body movements (e.g. swaying, feet tapping and nodding) when you are playing. To what extent are you aware of this, and do you have thoughts about what's going on when you do that?

7. In this clip, Sarah and Tessa, you may notice you also do body movements (e.g. swaying, feet tapping and nodding) when other parts are playing. Do you have thoughts about what's going on when you do that?

8. In this clip, Taylor and Tessa, you may see yourself doing the bellow sound effect (bellow shake) in "Fine and Dandy". What are your thoughts about doing such extended performing techniques?

9. Sarah, in your clip, you may see yourself practising fingering in the air during breaks. When you are doing this, what are you thinking about or imagining? Tessa, in your clip, you may see yourself practising quietly when the conductor is giving feedback. When you are doing this, what are you thinking about or imagining?

10. In this clip, you may see Taylor initiating a conversation about couplers. How do you know which coupler to use in other situations? And Taylor and Tessa, do you have thoughts about what was going on at that moment?

11. In this clip, you may see yourself looking at your instrument sometimes during rehearsals, e.g. to change couplers. What's involved in switching your focus between playing, score reading and watching the conductor?

12. In this clip, you may notice the conductor interrupting the performance, asking you to start over again and play together. What are your thoughts about synchronisation in ensemble playing?

13. In this clip, you may notice the orchestra plays in sync without the conductor. How do you manage to do that?

(Summary)

Ending Question
Is there anything else you would like to share about your ensemble music-making experience?

Appendix K: Interview Questions for NBB Focus Group 1

Introduction
Thank you all for coming to the interview today. My name is Wenting. I'm doing this interview to explore different aspects of your ensemble music-making experience, identify the potential music learning moments, and discuss the strategies used for improving certain musical skills and understanding of music. The discussion also presents an opportunity for you to reflect on your music learning experience, which you may find helpful for your future ensemble engagement. Before the interview begins, I'd like to remind you again that your participation is anonymous, and no records of the interview will be kept with your names on. All recording equipment on site includes a camera there and a small audio device here on the table. If you have no objections or questions, we can get started.

Opening Question
Tell us who you are, and what role you play in the Nor'West Brass?

Introductory Question
What is it like playing in a brass band, e.g. compared to playing the brass by yourself?

Transition Question
Think back a Nor'West Brass rehearsal, what music aspects does the band usually work on during that 2 hours practice?

Key Questions

1. In this first clip, you may notice the conductor emphasises moving together and suggests many ways to keep the band in sync. What are your thoughts about synchronisation in ensemble playing and these strategies?

2. In this clip, you may notice the conductor reminds you to pay attention to your dynamics as you play, because your volume gets quieter as the melody line goes lower. To what extent are you aware of this, and do you have any thoughts about this issue?

3. In this clip, you may notice the conductor reminds you to pay attention to your pitch when changing dynamics, because you tend to blow sharp when the dynamic is getting louder, and vice versa. To what extent are you aware of this, and do you have any thoughts about this issue?

4. In this clip, you may notice the conductor asks you to play the singing bit instead of singing, as a way to get the pitch. What are your thoughts about this strategy?

5. In this clip, you may notice the conductor asks you to do a buzzing exercise that makes you think about air and how to use air. What are your thoughts about this strategy, and what's involved when buzzing a familiar tune (e.g. do you imagine the tune)?

6. Peter, in your clip, you may see yourself playing in the air during a break. When you are doing this, what are you thinking about or imagining? Carl, in your clip, you may see yourself humming the tunes of some pieces during breaks. When you are doing this, what are you thinking about or imagining?

7. In this clip, you may notice the conductor asks you to think 4/4 when playing 12/8. To what extent do you think this strategy helped you get the rhythm?

8. In this clip, you may notice the conductor's verbal instructions accompanied by his imitation of the ideal sound effects and the actual sound that you produced. How does this help you understand the conductor's aims?

9. In this clip, you may notice the conductor often breathes, cues you in and reminds you of the small details in the music (e.g. dynamics, articulations, phrasing) with the involvement of hand gestures and expressive body movement. Sometimes he also sings along during performance. How do these actions affect your performance, and how do you keep an eye on the conductor while playing?

10. In this clip, you may notice the conductor commends the band for an expressive performance. What are your thoughts about musical expression? As a performer, what do you rely on when interpreting music?

11. In these clips, Peter and Luca, you may notice you do body movements (e.g. breathing, swaying, feet tapping) when you are playing. To what extent are you aware of this, and do you have thoughts about what's going on when you do that?

12. In these clips, you may notice you all do body movements (e.g. swaying, feet tapping, nodding, counting) when other parts are playing. Do you have thoughts about what's going on when you do that?

13. Carl, in your clip, you may notice the conductor commends you for listening and adjusting the tuning. What do you rely on to adjust your tuning, e.g. listening to your peers who play the same part as you? Peter, in your clip, you may notice the conductor tells you to play the rhythms to accompany other parts doing individual practice. How do you feel about yourself taking on a supportive role like this?

(Summary)

Ending Question
Is there anything else you would like to share about your ensemble music-making experience?

Appendix L: Interview Questions for NBB Focus Group 2

Introduction
Thank you all for coming to the interview today. My name is Wenting. I'm doing this interview to explore different aspects of your ensemble music-making experience, identify the potential music learning moments, and discuss the strategies used for improving certain musical skills and understanding of music. The discussion also presents an opportunity for you to reflect on your music learning experience, which you may find helpful for your future ensemble engagement. Before the interview begins, I'd like to remind you again that your participation is anonymous, and no records of the interview will be kept with your names on. All recording equipment on site includes a camera there and a small audio device here on the table. If you have no objections or questions, we can get started.

Opening Question
Tell us who you are, and what role you play in the Nor'West Brass?

Introductory Question
What is it like playing in a brass band, e.g. compared to playing the brass by yourself?

Transition Question
Think back a Nor'West Brass rehearsal, what music aspects does the band usually work on during that 2 hours practice?

Key Questions

1. In this first clip, you may notice the conductor emphasises moving together and suggests many ways to keep the band in sync. What are your thoughts about synchronisation in ensemble playing and these strategies?

2. In this clip, you may notice the conductor reminds you to pay attention to your dynamics as you play, because your volume gets quieter as the melody line goes lower. To what extent are you aware of this, and do you have any thoughts about this issue?

3. In this clip, you may notice the conductor reminds you to pay attention to your pitch when changing dynamics, because you tend to blow sharp when the dynamic is getting louder, and vice versa. To what extent are you aware of this, and do you have any thoughts about this issue?

4. In this clip, you may notice the conductor asks you to play the singing bit instead of singing, as a way to get the pitch. What are your thoughts about this strategy?

5. In this clip, you may notice the conductor asks you to do a buzzing exercise that makes you think about air and how to use air. What are your thoughts about this strategy, and what's involved when buzzing a familiar tune?

6. In this clip, you may notice the conductor asks you to think 4/4 when playing 12/8. To what extent do you think this strategy helped you get the rhythm?

7. In this clip, you may notice the conductor's verbal instructions and feedback often accompanied by his imitation of the ideal sound effects and the actual sound that you produced. How does this help you understand the conductor's aims?

8. In this clip, you may notice the conductor often breathes, cues you in and reminds you of the small details in the music (e.g. dynamics, articulations, style/vibes) with the involvement of hand gestures and expressive body movement. Sometimes he also sings along during performance. How do these actions affect your performance, and how do you keep an eye on the conductor while playing?

9. In this clip, you may notice the conductor commends the band for an expressive performance. What are your thoughts about musical expression? As a performer, what do you rely on when interpreting music?

10. Henry and Hank, you may notice your body movements (e.g. breathing, swaying, feet tapping) when you are playing. To what extent are you aware of this, and do you have thoughts about what's going on when you do that?

11. In these clips, you may notice you all do body movements (e.g. swaying, feet tapping, nodding, counting) when other parts are playing. Do you have thoughts about what's going on when you do that?

12. Henry, in your clip, you may see yourself sight-whistling the tune. When you are doing this, what are you thinking about or imagining?

13. Could you guys tell me more about the "last note/chord exercise", like the purpose of doing it?

(Summary)

Ending Question
Is there anything else you would like to share about your ensemble music-making experience?

Appendix M: CAO Focus Group Interview Coding-Emergent Themes Into Overarching Themes

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning & development	The social experience of ensemble participation
#1-About Accordion					
Childhood memories & experiences				√	
Fiendishly challenging than playing some other instruments				√	
Playing with both hands adds flavour to music				√	
Portability & shared music-making experience					√
Versatile sounds				√	
#2-Playing in Accordion Ensembles					
Challenge the ways that I used to learn music				√	
Easier than playing solo	√				
Fun to jam with other instruments					√
Listen to others	√				
Meet social needs					√
Play different parts	√				
Play various music styles	√			√	
Work with others	√				
#3-Music Aspects Involved in CAO Rehearsals					
Dynamics & Balance	√				
Synchronisation	√				
#Ending					
Ensembles should be where we enjoy making music together and form connections with others	√				√
Having a good neighbour can lift your game	√				√

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning & development	The social experience of ensemble participation
Having players with varying levels limits music choices and outcomes	√				
I'd want more varieties and new music	√				
Lucky to have an accordion orchestra in Chch with a conductor	√				
Playing in CAO is enjoyable	√				√
Strong focus on dynamics due to conductor's brass background	√				
Synchronisation used to be the focus with previous conductor	√				
Conductor's Cognitive Instructions and Vocal Directions (when not playing)					
Conductor's so into dynamics while I'm struggling with the basics		√			
Prepare us to come in		√			
Various ways of explaining are engaging and helpful	√	√			
Conductor's Use of Metaphor					
Considerate communication		√			√
Draw players attention and get them to focus		√		√	
Interesting		√			√
Make instructions clearer		√			
Conductor's Vocal Directions (when not playing)					
'Brass style' singing and explaining things		√			
Draw players' attention to details for sync reasons	√	√			
Interesting		√			√
Set benchmarks that players can imitate	√	√			
Vocal directions clarify cognitive instructions	√	√			
Conductor's Vocal, Verbal, Gestural Directions (when playing)					

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning & development	The social experience of ensemble participation
Draw players attention and keep them engaging		√			√
Effectiveness of gestural directions	√	√			
Effectiveness of verbal directions		√			√
Effectiveness of vocal directions		√			
Enable the knowledge to sink in during rehearsals		√			
Every conductor communicates ideas differently	√	√			
Note taking & inconsistency in directions		√	√		
Prefer conductor to work with parts individually using gestural directions	√	√			
Singing & gestures convey emotion and conductor's interpretation	√	√			
Coordination among Multiple Actions					
Concentration needed for changing couplers			√		
Concentration needed for watching conductor and reading music			√		
Eye movements & Listening			√		
I change couplers but I lose my place in the music or attention on conductor			√		
I don't change couplers so as to retain my place in the music			√		
Listening to peers to catch up with the group			√		
Looking at keyboard is unnecessary			√		
Couplers & Peer Support					
3rd is mostly Bandoneon			√		
Always ask which couplers to use if not sure			√		
I don't change if I don't have enough time or if I don't like the sounds			√		

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning & development	The social experience of ensemble participation
I have to guess because not all scores have coupler marks			√		
I'm confused when orchestra changes couplers not following score marks			√		
If I play 3rd, I choose Bassoon or Bandoneon			√		
It doesn't sound right when I do what I was told			√		
My accordion doesn't have the couplers			√		
Players need guidance for choosing couplers			√		
Received coupler suggestions from peers	√			√	
Engaging with Peers' Performance					
A skill developed via long-term CAO engagement	√			√	
Learn to keep a neutral face in performance	√				
Learn to listen and play together	√			√	
Listen to peers and notice discords	√				
Listen to peers and notice rhythms out of sync	√				
Not everyone listens and watches	√				
Imagining Sounds					
How my brain processes info			√		
Imagine how my part fits in with others	√		√		
Keep myself occupied and engaging			√		
Practise during gaps involving imagining sounds			√		
Practise during gaps no imagining sounds			√		
Improvisation Skills					
A skill developed via long-term CAO engagement	√			√	

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning & development	The social experience of ensemble participation
A skill gained when start learning accordion				√	
Need chords for better sound	√				
Not able to improvise the bassline	√		√		
Prefer to play what's written in ensemble settings for Synchronisation reasons	√				
Use of music theory-keys & chords	√		√		
Learning Rhythms					
Implicit learning of tango rhythms	√				
Musical Expression & Interpretation					
A combination of elements	√	√	√		
Conductor's expression instructions are confusing		√			
Conductor's unfamiliarity with some pieces	√				
Expression is not for me because my part doesn't have melody	√				
Expression is seldom discussed	√				
Follow peers	√		√		
Follow recordings			√		
Interpretations should be the same in ensemble settings	√				
It's boring to listen to without expression	√				
Playing solo has more freedom to add personal interpretation	√				
Rely on conductor's Interpretation	√				
Rely on notation	√				
Rely on personal interpretation	√			√	
Player's Body Movements (when not playing)					

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning & development	The social experience of ensemble participation
Nodding to keep time	√		√		
Tapping feet as enjoying music and sound produced by others	√				√
Counting, tapping and swaying as learning a music style	√			√	
Players' Body Movements (when playing)					
Body movements as expression & enjoyment	√				√
Counting to keep time			√		
Don't need to tap feet-a sense of timing develops as getting familiar with music				√	
Showing body movements is not good	√				
Tapping feet to keep time	√		√		
Watching conductor's beat to keep time	√		√		
Playing Techniques					
Bellow effects as accordion features & add colour to music	√			√	
Play tremolo instead of doing bellow shake			√		
Players need tuition for bellow shake	√		√		
Players need tuition for playing gliss	√				
Self-taught bellow shake via imitation	√		√		
Synchronisation					
Need to spend more time working on sync	√	√			
Playing together is important in ensemble settings	√				
Sectional practice was adopted for sync reasons with previous conductor	√				
Special care needs to be taken when in low dynamic sections	√	√			
Stop immediately and practise when out of sync		√			

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning & development	The social experience of ensemble participation
Sync is hard to achieve when players are in different levels	√				
Sync is hard to achieve when there're different parts	√				
Watching conductor and playing with others are ensemble skills	√				
Synchronisation without conductor					
Follow bass (conductor's tubas) to be in sync	√		√		
Follow bass accordion who is responsible for keeping time	√				
Having a player to count is not helpful	√				
Imagining music keeps me in sync			√		
Knowing music well helps be in sync	√		√		
Listen to others to keep together	√		√		
Simple pieces are easier to achieve sync when no conductor	√				
Troubleshooting & Peer Support					
Playing another part is interesting and enjoyable	√				√
Sight-playing gives an opportunity to hear another part	√				

Appendix N: NBB Focus Group Interview Coding-Emergent Themes Into Overarching Themes

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning and development	The social experience of ensemble participation
#1-Current Roles in The Band					
Cornets					
Drums & Percussion					
Euphonium					
Float players (Horn) & Ensemble manager					
Horn					
Tuba					
#2-Playing in Brass Ensembles					
Brass band sounds better comparing to playing alone and other ensembles	√				
Challenges of playing harder music and working with others	√			√	
Different intonation between playing alone and band	√				
Less freedom with tempo in band	√				
Listening to others makes me aware if I'm out of sync or tune	√				
Play more comparing to non-brass bands	√				
Play various music styles	√			√	
Playing in NBB is enjoyable	√				√
#3-Music Aspects Involved in NBB Rehearsals					
Articulations	√				
Breathing & Phrasing in hymns	√				
Dynamics & Balance	√				
Sound and tone quality	√				
Styles & Feelings	√				

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning and development	The social experience of ensemble participation
Synchronisation	√				
#Ending					
Conductor's doings as repetition of reminding us of the basics		√			
NBB has good training atmosphere	√			√	√
Socialise outside of the band					√
#Music styles and preferences					
Depend on how pieces are arranged	√				
Different styles suit different brass	√				
Test pieces-everyone has a part to play	√				
Conductor's Breathing and Phrasing (when playing)					
Breathing to aid synchronisation		√			
Signify when and where players should phrase		√			
Conductor's Cognitive Instructions & Vocal Directions (when not playing)					
Constant reminders help players keep balance and form habits		√		√	
Exaggerated reminders to arouse players' enthusiasm		√			√
Exaggerated reminders to draw players' attention to details		√		√	
Imitations clarify instructions and set benchmarks for players		√			
Musicianship acquisition via cognitive instructions		√		√	
Conductor's Gestural Directions (when playing)					
Exaggerated gestures to arouse players' enthusiasm		√			√
Exaggerated gestures to draw players attention and aid synchronisation		√			
Indications of what conductor wants and how things go		√			

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning and development	The social experience of ensemble participation
Watching conductor	√	√	√		
Conductor's Vocal Directions (when playing)					
Conductor singing as enjoying the music		√			
Players sitting further back get less information-not everyone gets the same experience		√			
Set benchmarks for players		√			
Singing along indicates something's wrong		√			
Dynamics & Balance					
Airflow control	√			√	
Be consistent with tempo no matter how dynamic changes	√			√	
Engaging with Peers' Performance					
Buzzing as listening to peers to follow			√		
Listen to peers and adjust tuning accordingly	√		√		
Listen to peers and tune to relative pitch	√				
Listen to peers as enjoying music	√				√
Listen to peers to keep my place in music	√		√		
Imagining Sounds					
Buzzing as pitching and airflow exercise		√			
Buzzing can be challenging		√	√		
Buzzing instantly improves tone, tempo and pitch		√			
Buzzing lifts players' confidence		√			√
Buzzing makes players think rather than relying on instruments		√			
Buzzing scales is easy		√			

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning and development	The social experience of ensemble participation
Buzzing to hear the tune in head		√			
Humming as engaging with peers' performance			√		
Humming as enjoying music					√
Humming to hear the tune in head			√		
Practise during gaps involving imagining sounds			√		
Practise during gaps no imagining sounds			√		
Musical Expression & Interpretation					
A combination of elements	√			√	
Breathing together creates atmosphere	√	√			
Conductor's interpretation & Interpreting conductor's instructions and directions	√	√			
Limitations of percussion	√				
Listen to peers	√				
Make each note special	√				
Musical expression is important	√				
Notation directions	√				
Personal interpretation	√			√	
Pitch & Intonation					
Airflow control exercise-pitch & dynamic		√			
Concentration on airflow control when doing dynamic changes	√	√		√	
Exercise-playing the first or last note	√				
One rotten apple spoils the barrel	√				
Playing to get the pitch in head before singing		√			

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning and development	The social experience of ensemble participation
Playing what's written to sing helps non-singers		√			
Relying on valves to get me close to right pitch	√	√			
Players' Body Movements (when not playing)					
Body movements as enjoying music	√				√
Body movements to aid synchronisation	√		√		
Body movements to help peers keep time	√				
Body movements to keep time	√		√		
Body movements as listening to peers	√				
Players' Body Movements (when playing)					
Body movements to keep time	√		√		
Breathing as so focused on the moment	√				
Distracting body movements	√				
Swaying as enjoying music	√				√
Swaying to aid synchronisation	√				
Rhythm & Meter					
Conceptualise meter		√			
Synchronisation					
Breathing together to aid synchronisation		√			
Not everyone thinks about subdividing	√				
Playing as written can be hard to accommodate because it involves air management		√			
Playing as written should be a given		√			
Some sync strategies become second nature but some need to be reminded	√	√			

Subcodes	The ensemble experience - playing and learning in a group	Receiving instructions and directions from the conductor	Surviving the ensemble experience	Lifelong learning and development	The social experience of ensemble participation
Subdivision has always been stressed		√			
Subdivision to aid synchronisation		√			
Sync is crucial	√				
Watching and listening to each other-thinking as a group	√	√			
Troubleshooting & Peer Support					
Accompany the band without being told to	√				
Fun to help the band	√				√
Improvise percussion line	√			√	
Percussion takes on a time-keeping role	√				

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