An exploration of the adoption of Inquiry-Based Learning within the teaching of musicality within the Chinese primary music classroom under the auspices of the Chinese national music curriculum

Rufei Ji

Thesis submitted for the degree of Doctor of Philosophy in Education

Newcastle University School of Education, Communication and Language Sciences

October 2023

Abstract

Since the beginning of the 21st Century, China has explicitly asserted the centrality of the concept of quality within its compulsory education system, and in parallel, of aesthetics in all arts-related subject education. Simultaneously, Inquiry-Based Learning has been introduced into the Chinese curriculum on the basis that it provides a student-centred approach that aims to develop children's potential in learning, including within it, elements of creativity as well as cognition, incorporating Musicality, a central concept of this thesis. Research suggests that young children bring rich musical experiences with them into primary school, and so teaching should begin by exploring what pupils can do and consequently extending their understanding and practice through inquiry. Yet there is scarce research into teachers' pedagogic practice that explores musicality in this way within the primary music curriculum and particularly within a setting in which external curriculum reform is a significant structural factor impacting teachers' practices. This study explores the possibilities of adopting Inquiry-Based Learning as an approach to primary school music learning and in which musicality is a key concept, under the Chinese Music National Curriculum. The research design utilised a combination of action research and grounded theory methodologies. Data were collected from in-class observations and after-class interviews with 2 participating teachers, and 2 different year groups. In addition, an evaluation sheet was provided to students for them to reflect on their experiences.

The findings indicated that the implementation of the Inquiry-Based Learning approach allowed time and space for students to develop their musicality in the various activities, that included chorus, storytelling, musical performance, and critical questions about music. During the research, teachers could visibly see the process of such developments and, accordingly, make relevant adjustments in teaching, particularly in the adoption of inquiring and imaginative questioning. However, the results also revealed other challenges, including students' learning status, teachers' assessments of themselves and other external factors, arising both from the implementation of the pedagogy, and their reflections upon it. Under the constraints of time and curriculum content, the Inquiry-Based Learning approach had to

be balanced with existing teaching methods to achieve the fundamental requirements of the National Curriculum.

This study argues that the adoption of Inquiry-Based Learning in Chinese primary music education may develop musicality by 'visualising music' in children's musical learning activities. It also dynamically links to the philosophical, pedagogical, and practical aspects of teacher education in response to curriculum reform for the compulsory primary education stage. The results suggested that further research should explore pedagogical design and praxis in countries undergoing curriculum reform within the context of music education, as well as of course exposing the possibilities of implementing Inquiry-Based Learning in music to wider international audiences and to greater and increasing scrutiny.

Keywords: Primary Music Education, Musicality, Inquiry-Based Learning, National Curriculum, Teacher Education/Pedagogical Practices.

Dedication

To my parents, thank you for always supporting me with love, patience and for always being by my side.

To Caroline, thank you for our very first fateful encounter and for being supportive at all times.

To myself, thank you for the interest in deeply learning music and the courage to complete this thesis.

Acknowledgement

First and foremost, thanks to my parents, who offered me the chance to start learning the piano in my teens. My deepest gratitude goes to them for accompanying me during my learning journeys. I would not have started this PhD journey without their encouragement.

A special thanks goes to Professor David Leat. Without him I would not have met my lovely supervisor and completed this study. Thanks go to Hanneke Jones for helping me study at the university for my master's degree, motivating my interest in Inquiry-Based Learning, being my second supervisor, and supporting me all the time.

I also thank the people who were involved and supported my fieldwork: Principal Feng, the four music teachers at the primary school in which the research was carried out, and, of course, pupils in the Year 4 and Year 5 groups, even though their names cannot be mentioned here. I am also grateful to YuanTing Xu for her support in helping me make this research possible.

Thanks go to my two close friends in China: Wu and Ji. Although we have been far from each other, thank you both for being with me when I needed you throughout the journey. I am also grateful to some of my PhD colleagues and my friend Maggie Zeng. Thank you all for your caring and kindness. It truly encouraged me to overcome difficulties at certain points.

My deepest and sincerest gratitude to my supervisor, Professor Caroline Walker-Gleaves. Without her and her expertise, I could not have completed this thesis. Through her profound and remarkable encouragement and inspiration over these last four years, I have felt fully supported, loved, and cared for in both academic and daily life. I would like therefore to express my gratitude to her from the bottom of my heart.

Table of Content

Abstract i
Dedication iii
Acknowledgement iv
Table of Content v
List of Tables ix
List of Figures x
Chapter 1. Introduction 1
1.1 The Background, Rationale and the Scope of This Study 1
1.2 Key Terms and Concepts in this Study 3
1.3 Objectives and research questions 6
1.4 The Significance and Contribution of this Thesis 8
1.5 The Outline of This Thesis 10
Chapter 2. Literature Review 12
2.1 Education: What is Education for? 13
2.1.1 The concept of 'Quality Education' in the Chinese compulsory education since the 21st Century *14*
2.1.2 Nine-Year compulsory education and compulsory education law *19*
2.1.3 The Chinese National Curriculum and its reforms *22*
2.2 Music studies within education: An International Review 29
2.2.1 History of music and music education *29*
2.2.2 A comparison of curricula in international contexts *32*
2.2.3 A comparison of pedagogical practices in the international primary school music education *35*
2.2.4 A comparison of music teacher education in international terms *42*
2.3 Teaching Music in Chinese Primary Schools 45
2.3.1 Music in classroom teaching in China *46*
2.3.2 The music National Curriculum in China *48*
2.3.3 Chinese parents' impacts on music learning inside and outside of school *53*
2.3.4 Being an official music teacher in Chinese primary schools *54*
2.4 Implementing the IBL Approach in Chinese Primary School 60
2.4.1 How has IBL developed in China? *60*
2.4.2 Inquiry-Based Learning approach taught in musical contexts *67*
2.4.3 Inquiry Based Learning, musicality, and the Chinese primary music teacher *70*
2.5 Conclusion 77
Chapter 3. Methodology 79
3.1 Research context 79
3.1.1 Teaching musicality in music National Curriculum *79*
3.1.2 Research design of the pilot phase and main phase *82*
3.1.3 The research philosophy *84*
3.2 Participants 89

3.3 The Pilot Study 91
3.3.1 Methods and Procedures 92
3.3.2 Results 93
3.3.3 Discussion and problems 97
3.4 The Phases and Practical Stages of the Research 98
3.4.1 The preparatory phase 100
3.4.2 The action phase 100
3.4.3 The participant-evaluation phase 103
3.5 Data Collection Techniques and Sources 104
3.5.1 Observation 106
3.5.2 Interview 107
3.5.3 Other documents 109
3.6 Data Analysis 109
3.6.1 Coding 109
3.6.2 Constant comparison 110
3.6.3 Memo-writing 110
3.7 Researcher's role and beliefs 111
3.8 Limitations of the research 112
3.9 Reliability, Validity and Transferability 113
3.10 Ethical Considerations 115
Chapter 4. Findings 116
4.1 Analysis of the 2011 version of the National Curriculum 117
4.1.1 Initial coding 117
4.1.2 Focused coding 121
4.1.3 Summary of this section 129
4.2 Analysis of the stage of 'Plan': Coding in the Teaching Plan and Teacher's Guidebooks 130
4.2.1 An example of a designed lesson 131
4.2.2 Initial coding 131
4.2.3 Focus coding 133
4.2.4 Summary of this section 134
4.3 Analysis of the stage of 'Action': Coding in the observation 135
4.3.1 Overall structure of a lesson 135
4.3.2 Initial coding 137
4.3.3 Focus coding 139
4.3.4 Summary of this section 146
4.4 Analysis of the stage of 'Reflection': Coding in the interview 146
4.4.1 Initial coding 147
4.4.2 Focus coding 150
4.5 Theoretical Codes 155
4.5.1 Sub-question 1: How can Inquiry-Based Learning be applied and adopted in the Chinese primary music classroom? 156

4.5.2 Sub-question 2: How does this pedagogical approach impact teachers' ability to teach musicality within the primary Curriculum? 159
4.5.3 Sub-Question 3: What are the relative impacts of this approach in enhancing musicality in childhood education? 162
4.5.4 Sub-question 4: What are the challenges in the implementation of this pedagogy in the Chinese primary music classroom? 164
4.5.5 The 'Theory': 'How might teachers adopt Inquiry-Based Learning as a pedagogical method within the teaching of musicality within the Chinese primary music classroom under the auspices of the National Curriculum?' 173
4.5.6 Summary of this chapter 175
Chapter 5. Discussion 176
5.1 Teaching Musicality in the Music Education 176
5.1.1 Musicality as a domain-specific skill 176
5.1.2 Teaching musicality in the school music education 179
5.1.3 Musicality in the 2022 version of the Chinese music National Curriculum 186
5.2 The Implementation of the IBL Approach in Teaching Musicality in Chinese Primary School 189
5.2.1 Why should IBL be in the Chinese primary music classroom? 189
5.2.2 Preparation for actual teaching 193
5.2.3 'Conditions' of implementing this approach- constraints or challenges . 197
5.2.4 Summary of the section 207
5.3 Teaching in the 21st Century - A 'Student-centred' Classroom 208
5.3.1 Beliefs about teaching music and students' musicality 208
5.3.2 Aligning teacher education and school teaching 212
5.4 Answers to the Four Sub-Questions 218
5.4.1 Details and requirements of the implementing the IBL approach in the Chinese primary music classroom 218
5.4.2 Impacts on teachers' ability to teach musicality and pupils' development of the musicality in the school education 222
5.4.3 Challenges and affordances in implementing this pedagogical approach in the Chinese primary music classroom 226
5.5 Further Implications 232
5.5.1 Considerations of possibilities of implementing such pedagogy in similar contexts or subjects 232
5.5.2 Implications for the future Chinese music education aligned with teacher education program 234
5.5.3 Implication for other musical studies 235
5.6 Reflections on the 'Generated Theory' in Practice 236
5.7 Summary of this Chapter 238
6.1 Recap the Research Design in this Study 241
6.2 Summary of the Main Research Findings 242

6.2.1 An idealized teaching mode of Implementing the IBL approach in teaching musicality under the auspices of the Chinese National Curriculum 242
6.2.2 Details in teaching that pedagogy in school music education in the classroom settings 243
6.2.3 The development of teachers' pedagogical practices in the teaching and learning process 244
6.2.4 Potential musicality in childhood in the teaching and learning process. 245
6.2.5 Important challenges and constraints in actual teaching 245
6.3 Overall Contribution to Knowledge, Limitation of the Study, and Possible Implication for Further Research 246
References 247
Appendix A: Participant Information Sheet 292
Appendix B: Declaration of Informed Consent 294
Appendix C: Details in the Segment Objectives 295
Appendix D: An Example of a Lesson Plan (Chinese version) 300
Appendix E: An Example of a Lesson Plan (English version) 302
Appendix F: Content in the Textbook for the Example 304
Appendix G: Some Examples of Student's Work in the Lessons 305
Appendix H: List of the Initial Coding in Learning Objective (Track Version.) 306
Appendix I: Comparison between Initial Coding in the Learning Objectives and Details of segment objective in the National Curriculum 309
Appendix J: List of Initial Coding in the Observation (Track Version.) 313
Appendix K: An Example of the Observation Sheet 317

List of Tables

Table 3.1-1: Targets for each stage from the Music National Curriculum (2011) 79

Table 3.1-2: Details of the Research Design 83

Table 3.2-1: Basic information for Participants 91

Table 3.3-1: Template for the observation record sheet 93

Table 3.3-2: Observation Sheet for the Pilot Session 94

Table 3.3-3: Structure of This Lesson 95

Table 3.4-1: Timeline of activities in this study 99

Table 3.4-2: Teaching Plan for Year 4 101

Table 3.4-3: Teaching Plan for Year 5 102

Table 3.5-1: The Final Template of the Observation Sheet 107

Table 4-1: The Connection of Research Question, Methods, and Data 117

Table 4.1-1:List of Initial Codes in the National Curriculum 120

Table 4.1-2:List of Initial Codes in the National Curriculum (Continuous) 121

Table 4.1-3: Changes in the Initial Codes 122

Table 4.1-4: Initial Coding in the Segment Objective 127

Table 4.2-1: List of Initial Codes in the Learning Objectives 132

Table 4.2-2: Categories in Focus Codes in the Learning Objectives 133

Table 4.3-1: The Structure of Course Design 136

Table 4.3-2: List of Initial Codes in the Observation 138

Table 4.3-3: List of Initial Codes in the Observation (Contious) 139

Table 4.4-1: Initial Codes in the Interview Transcripts 147

Table 4.4-2: Initial Codes in the Interview Transcripts (Continuous) 148

Table 4.4-3: Initial Codes in the Interview Transcripts (Continuous) 149

Table 4.4-4: Initial Codes in the Interview Transcripts (Continuous) 150

List of Figures

Figure 1.2-1: The Conceptual Map of This Thesis 3

Figure 1.3-1: Representation of the Whole Thesis 7

Figure 2-1:The Main Concept for the Chinese Compulsory Education in the 21st Century 12

Figure 2.1-1: The Concept Map of Teaching and Learning Process in Quality Education 18

Figure 2.2-1: Conceptual Framework of this Thesis 41

Figure 2.3-1: Three Key Components in the Chinese Music National Curriculum 50

Figure 3.1-1: An Example of the Cover and Content of a Year 4 Music Textbook (Semester 2, Stave Version.) 80

Figure 3.1-2: Characteristic and Corresponding Activities 81

Figure 3.1-3: An Example of the Music Classroom 82

Figure 3.1-4: The Research Cycle of this Project 88

Figure 4-1: The Relationship Between Concepts in Documents and Specific Teaching Contents 116

Figure 4.1-1: The Initial Framework of the Music National Curriculum 119

Figure 4.1-2: Aural Art 123

Figure 4.1-3: 'Musicality in the National Curriculum' 124

Figure 4.1-4: 'Pedagogical Practices' 125

Figure 4.1-5: 'Teachers as Organisers and Facilitators' 126

Figure 4.1-6: Three Layers of the Concept of Musicality in This Study 129

Figure 4.2-1: The Relationship between Four Focus Codes in the 'Plan' Stage 134

Figure 4.3-1: Various Teaching Sessions 141

Figure 4.3-2: Issues in Singing and In-Class Solutions 142

Figure 4.3-3: Feeling Empathising When Listening to Music 143

Figure 4.3-4: Strategies and Tips 144

Figure 4.3-5: Issues in the General Teaching Process 145

Figure 4.3-6: Unexpected Findings 146

Figure 4.4-1: Teacher's Self-Reflection and Self- Assessment.....151
Figure 4.4-2: Conditions of Applying the IBL in Design 152
Figure 4.4-3: Teacher's Abilities 153
Figure 4.4-4: The Developments of Musicality in Childhood-Part 1 154
Figure 4.4-5: The Developments of Musicality in Childhood-Part 2 154
Figure 4.4-6: Challenges in Pedagogical Practice.....155
Figure 4.5-1: Details in the Challenge 'Content' 165
Figure 4.5-2: Details in the Challenge 'Time' 166
Figure 4.5-3: Details in the Challenge 'Balancing'.....168
Figure 4.5-4: Details in the Challenge 'Learning Status' 170
Figure 4.5-5: Details in the Challenge 'Teachers Themselves' 171
Figure 4.5-6: Details in the Challenge 'External Factors' 172
Figure 4.5-1: The Structure of the Theory.....174
Figure 5.1-1: Three Levels of Musicality.....177
Figure 5.1-2: Outline in 2011 Version of Chinese Music National Curriculum 187
Figure 5.1-3: Outline in 2022 Version of Chinese Music National Curriculum 188
Figure 5.2-1: Balancing the Constraints and Challenges in the Implementation of the IBL Approach in Classroom.....198
Figure 5.2-2: The Balancing in Teaching from a Teacher's Perspective 199
Figure 5.3-1: The Flow of Implementing the Curriculum Reform in the Whole Education System 212
Figure 5.3-2: Different Elements in the Implementation of the Curriculum Reform..217

Chapter 1. Introduction

In this chapter, I will introduce the starting point of the research, the rationale, and the scope of the topic. Then, I will define various key terms to capture the conceptual map of this research. This conceptual map will then link to the research goals and purpose to elicit the main research question and sub-questions in research. Finally, an outline of this thesis will be presented.

1.1 The Background, Rationale and the Scope of This Study

This study was inspired by my previous experience teaching music in the Chinese primary music classroom. There were often conflicts and challenges that I met in actual teaching: large class sizes and individual learning needs and interests rarely met; a filled timetable and mandatory preparation time combined with fixed, complex teaching content; expectations of teachers' professional development and as a result, professional burnout. From a teacher's perspective, these are some of the most significant issues that need to be solved or improved in the school educational setting more generally, but they are particularly acute issues, for music, as a specialist subject. The complex mix of theory and practical, the balance of pedagogical content knowledge and pedagogical content instrumental expertise, and the tensions between professional beliefs about music and curriculum requirements, all conspire to make music almost unique in the challenges placed upon teachers. However, there are also long-term practical problems in the training and deployment of teachers of music, in countries worldwide. In the Chinese educational context, each subject has been traditionally taught by specialist teachers, while in other countries, such as the UK, Australia, or Finland, music subject is taught by generalist teachers or in combination with specialist teachers (Chung, 2022a, 2022b; Sepp et al., 2015). Yet, at the same time, research demonstrates that there is a lack of professional and specialist pedagogical parity for music teachers; such teachers are sometimes not considered as highly professionalized as other subject teachers by the public or even their colleagues. This might be for reasons as diverse as orientation towards more practical pedagogy when compared with subjects with a large theoretical basis, and also, views amongst some teachers that music teachers are largely vocational preparation teachers

and even then, disagreements about a subject that to many, has no clear economic value in society (Allen et al., 2022; Grimsby, 2022).

Teachers are believed to be and often defined as the curriculum agents; their teaching actions can directly influence students' understanding of the curriculum and construction of knowledge (Barrett, 2020). Besides that, positive interaction between teachers and students, students and peers can contribute to developing 21st Century learners through learning activities (McArthur, 2002). Some group collaborations in music learning, specifically music performance, can be used to teach social skills in building respectful and trustful social connections (Váradi, 2022). The central object of education is students; but educators, teachers and even parents have the power to determine what should be learnt valuably inside and outside school (McArthur, 2002). Therefore, the teaching quality inside schools is sufficiently important to be investigated.

However, amidst all of this, is the fact that music learning and aspects of music education are not static. Research (Yang & Welch, 2022) over the last decade has illustrated the realization that children enter school with quite complex ideas about elements of music understanding and experience, and have to a greater or lesser degree, skills and abilities in music, including creativity and musicality. Yet there is scarce research that balances the fledgling musicality abilities of children, with pedagogies that will appropriately challenge and develop them further. Considering the already complex curriculum and learning situations that most music teachers find themselves in, this arguable and consequent marginalisation puts the music subject and music teachers in a paradoxical situation. Music teachers, on the one hand, are uncomfortably compromised with their colleagues and school leaders with the reality of teaching for goals and outputs, while on the other hand, they are seeking professional help from all involved parties, including policies, teacher education, and of course, parents regarding the status of music education (Spruce et al., 2021).

Therefore, the original idea that was formulated concerning this study related to issues of improving the quality of music teaching and learning in the school educational setting, and related directly to that, the extent to which teachers could develop and possibly improve their teaching quality and strategies that build upon children's musical abilities and skills including musicality.

Although this research is conducted within Chinese primary education, it does not mean the complex concepts and pedagogy can only be applied to the same context as exists within China. The rich details of research design and fieldwork are aimed at further research critically exploring, forming, and expanding the designed pedagogy as a long-term program in combining with the National Curriculum in school education for both Chinese and international primary music education contexts.

1.2 Key Terms and Concepts in this Study

Based on the rationale and scope of this study, there are five main context-driven terms defined, and some relevant terms are also explained below for further understanding of the Chinese compulsory education system. These five main terms are also addressed as the main concepts for understanding the conceptual map of the whole study. See the diagram below for the conceptual map:

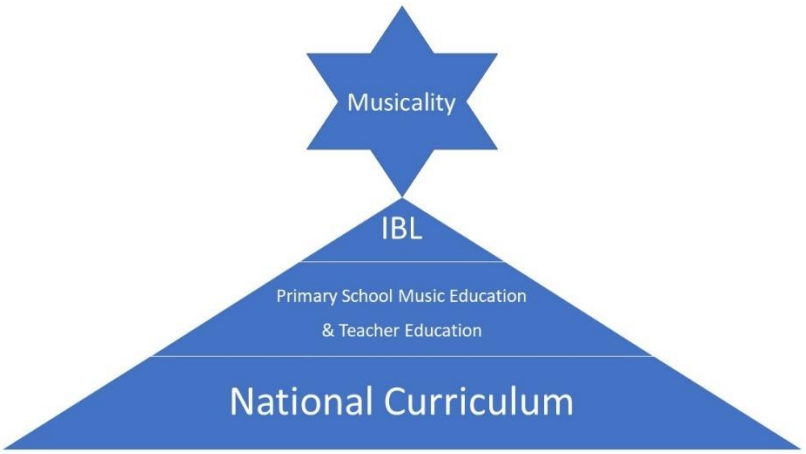


Figure 1.2-1: The Conceptual Map of This Thesis

National Curriculum: is specifically referred to as the official curriculum document published by the Chinese Ministry of Education. Since the establishment of the Chinese Compulsory Education System, the National Curriculum document has been modified as 2001, 2011 and 2022 versions for all subjects taught in the Chinese primary schools. Unlike other terms utilised in academic research, such as curricular or curriculum study, the National Curriculum means the foundation document in the Chinese educational setting in this thesis. This official government document primarily guides the design of textbooks, relevant activities and expected teaching goals in school education. In other words, the National Curriculum functions variously as a 'Teacher Code of Conduct' in the actual teaching context. Therefore, the concept of a National Curriculum is placed at the bottom of the conceptual map since it is the wide and deep foundation for everything that follows within the study.

Musicality: is placed on top of the conceptual map as it is the central concept for investigation within this thesis. Musicality is the most frequent term that emerges in each section of the National Curriculum. The term musicality is firstly and generally understood as 'Aesthetics' (Shen Mei) in its original document, however, this term cannot be accurately translated into aesthetics as it contains multiple dimensions of meanings in its content, according to the definitions of musicality from the literature. In this thesis, musicality is a domain-specific skill that comprises the aesthetics, sensitivity, and creativity aspects. Those three aspects can be developed through various music activities by individuals or in combination.

Primary School Music Education: is the platform to practice the ability of musicality under the guidance of the National Curriculum. It is important to point out that primary music education refers to the Chinese compulsory school education, where students from 6 to 12 years old are in Chinese public or government schools. Private schools are excluded from the research context because those schools are usually guided by their school curriculum or aligned with other national curricula, as some of them are so-called 'international schools'. In simple terms, this research focuses on Chinese public primary schools although the discussion considers the

application of similar pedagogy in educational settings under the guidance of the National Curriculum.

Teacher Education: is understood as the pre-stage of training in-service teachers before they enter their careers in schools. This study does not concern itself with this stage of teacher preparation in the fieldwork in this study; however, the results of this study revealed that the quality of teacher education is strongly associated with school education as an essential identity transition for these in-service teachers as they progress from being student-teachers to schoolteachers. Issues reported by school educators and in-service teachers should are critical for the attention paid to teacher educators. Additionally, a particular identity confusion of 'teacher or musician' is critical to be discussed as it impacts both teacher and school music education. Therefore, the concept of 'Teacher Education' is aligned with 'Primary School Music Education', aiming to be placed as a key conduit for the promotion of the quality of teaching for musicality.

Inquiry-Based Learning: (shortened as 'IBL' in the following chapters) is originally generated from John Dewey's philosophical education theory and is commonly referred to as 'Community of Enquiry' (Lipman, 2003). The pedagogical approach of IBL was first experienced in science education to emphasise students' thinking and experimental skills in scientific explorations (Sun et al., 2022). This approach is believed to have general benefits in learning high-order thinking skills in the 21st Century and then started to expand and be examined in other educational settings and other subjects' learning (Costes-Onishi & Kwek, 2022). There is limited research conducted and focused primarily on the development of music education in implementing the IBL approach, especially at the earlier education levels. Therefore, the IBL approach is intended to be adopted as the vehicle to deliver the content knowledge and convert it into abilities and skills in Chinese primary music education. In this way, the thesis makes an original contribution in relation to the pedagogical practice of an inquiry-based strategy.

In summary, the conceptual map can be seen as a template and also as a filter that from the conceptually grounded National Curriculum, there are not only the in-service teachers but also teacher educators and pre-services in universities involved in the whole developmental process for students to improve musicality through the engagement of the IBL approach that this piece of work has designed.

1.3 Objectives and research questions

This study was designed to explore the flexibility and creativity of Chinese primary music teachers who are teaching musicality within the Chinese National Curriculum in the 21st Century. Grounded theory research has been adopted as the fundamental framework in conducting this research. This study focuses on two primary school music teachers and two different year groups from East China.

This study has two research purposes:

- To investigate the impact of adopting an Inquiry-Based Learning approach within the Chinese Primary Music Curriculum, upon Chinese Primary Teachers' pedagogic learning and development within music, and particularly in relation to the concept of 'musicality'.
- To explore challenges encountered within music in the Chinese primary classroom with specific relevance to the concept of 'musicality', comprising aesthetic, sensitivity, and creativity.

The proposed central research question is as follows:

'How might teachers adopt Inquiry-Based Learning as a pedagogical method within the teaching of musicality within the Chinese primary music classroom under the auspices of the National Curriculum?'

From this central question, the four following research questions emerge:

1. How can Inquiry-Based Learning be applied and adopted in the Chinese Primary Music Classroom?
2. How does this pedagogical approach impact teachers' ability to teach musicality within the Primary Curriculum?
3. What are the relative impacts of this approach in enhancing musicality in Childhood Education?
4. What are the challenges and affordances in implementing this pedagogical approach in the Chinese primary music classroom?

The diagram below represents the concepts and connections in the whole study.

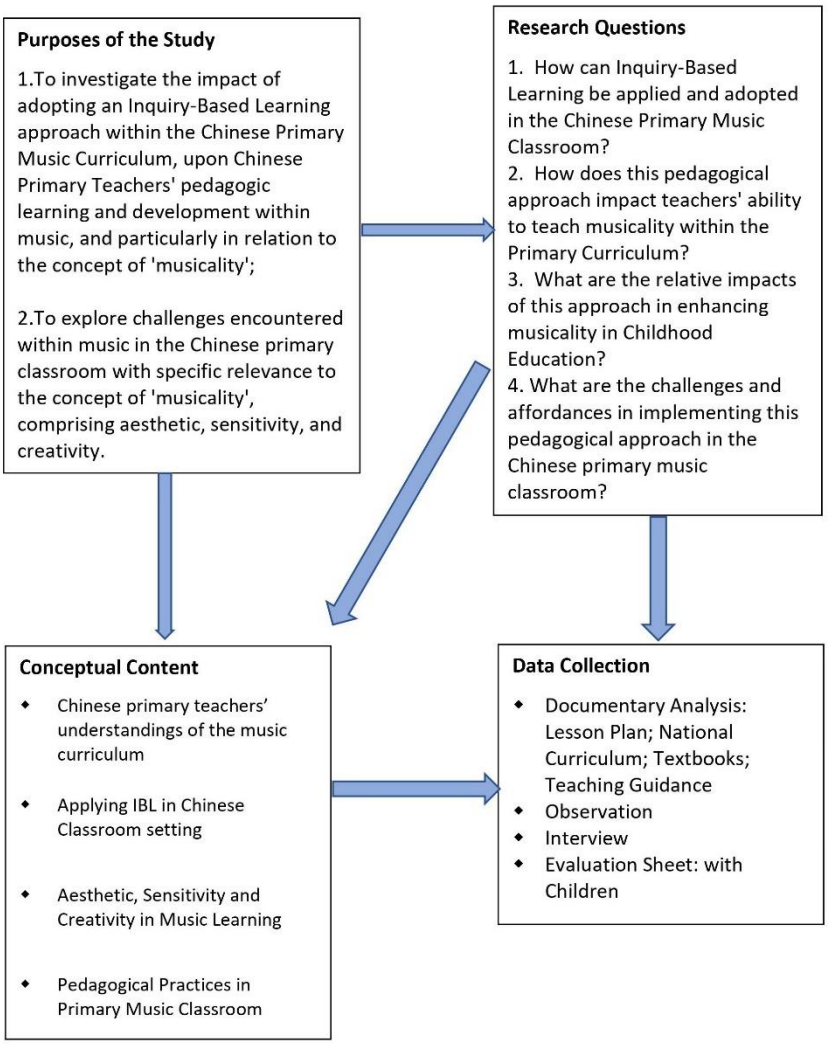


Figure 1.3-1: Representation of the Whole Thesis

1.4 The Significance and Contribution of this Thesis

Since the Chinese government promoted arts education and made significant National Curriculum modifications with changes to legislation, guidelines, school leadership and differential teacher training over the last decade, research has emerged to suggest an overall picture of dissatisfaction both with the quality of teacher development, and with the guidance to assist teachers in making sense of these changes in the classroom. Yiran (2021) for example, suggests that despite structural changes in the curriculum to emphasize the acquisition of knowledge of music as well as the development of musical perception, the necessary timetabling, the prejudice about the status of music, and the lack of development of appropriate programmes to be able to develop progression of musical ideas, have all conspired to the growth of 'territorially different environments of music education' (Yiran, 2021, p. 45,). Yiran (ibid) also asserts that students and pupils frequently regard music only as a hobby and not worthy of serious academic study.

In other studies, the paradox concerning the rise of popularisation of musical competitions and popular music culture, emerges as a driver of outputs rather than a deeply held belief in learning growth and musicianship from the earliest stages within schools. Kanca et al. (2021) have argued that there are multiple problems with music education in China, which are manifested in the utilitarianism of learning objectives, the lack of teachers, and the single method of teaching and its closed content. Such concerns were raised previously by Fu (2019) and by Xu & Ma (2007) who both stated that not only are outward performance metrics viewed as a sign of competence in music, rather than inward reflective and practice and perception of skill. Furthermore, Fu (2019) also asserts that since cultural and artistic performance preferences are class indicators, corresponding to an individual's position in society, specific outwardly visible outcomes, such as success in exams, has become increasingly a marker of high-quality music education and achievement.

The use of both action research and grounded theory within this thesis provides at one and the same time an exploratory and systematic understanding of what is happening when

teachers in primary music classrooms try and enact the curriculum and introduce inquiry learning. To a certain extent the study can be taken to be a response to two particular pieces of research: first, the work of Zhang (2011, 2017), who argues that the current state of music education in China lacks an affective dimension and needs wholescale 'adoption innovation' to make it attractive to both pupils and music teachers alike. The second paper that I explicitly acknowledge is the study by Zhou (2012) in which three major findings were and are relevant to my study: first, Zhou found that a systematic lack of adequate academic and research support prevented teachers from developing reflective instructional practices that were essential to convert curriculum-designated content – as contained in music textbooks – into tailored teaching resources that better suit individual pupil and school needs. Furthermore, the study found that even though music lessons were scheduled and planned, they suffered from repeated and frequent interruptions due to all manner of reasons: other teachers' preferences, parents' interference in timetabling, school prioritization of some subjects over others. Finally, Zhou's study exposed an issue repeated in Zhang's later work: the lack of prestige and attention afforded to music communicated itself clearly to pupils, who found that music lowered motivation levels, perceived it to be the least important school subject that they studied.

My study thus takes all these findings and consequent gaps as starting points for introducing IBL as such an innovation and one that emphasizes the aesthetics of musicality as an affective pedagogical approach. This study is more than a teacher's attempt at curriculum or pedagogic change however; it is the attempt of a music teacher (me) to try and introduce and support a curriculum and pedagogic innovation to focus on what matters within music education: practice, practise, and affect. My experience of working as a music teacher has left me with both a sense of frustration and loss as to what could be achieved but currently is not: but in this study I will have to be an impartial spectator and do my very best to obscure myself in the content of the research. The story of this thesis begins with an examination of music education and its purposes and philosophies. As the literature unfolds, it becomes narrower and

eventually reveals the issues and questions that lead ultimately to the question that stands as the heart of this thesis:

'How might teachers adopt Inquiry-Based Learning as a pedagogical method within the teaching of musicality within the Chinese primary music classroom under the auspices of the National Curriculum?'

1.5 The Outline of This Thesis

The following five chapters are addressed individual aspects of this thesis. As discussed above, Chapter One is the introduction of the whole study, introducing the background information, the rationale, and the scope of the topic. Specific terms and concepts are also explained to build the conceptual map of the entire study, followed by the research purposes and questions.

In Chapter Two, the Literature Review addresses the study's theoretical and conceptual aspects in more detail. It comprises four parts, from a broad view of general education in the 21st Century to narrowing down to music education worldwide. It then focuses on music education in China and, most importantly, the implementation of IBL in Chinese primary music education.

Chapter Three Methodology provides details on the research design, methods in collecting and analysing the data, and ethical considerations and limitations of this study. It is then followed by Chapter Four Findings, which presents the process of coding, procedure, and the main findings of the 'emerged theory' based on the data to answer the main research question and four sub-research questions.

Chapter Five Discussion comprises a detailed discussion of the importance of teaching musicality as a domain-specific skill in music education, for 21st Century learners. This chapter then explores in-depth the possibilities of implementing the IBL approach in the Chinese primary music classroom. Accessary social skills can be learnt from such a student-centred

learning environment. Finally, this chapter suggests further research in investigating such pedagogy in similar or other relevant educational contexts and implies the critical links associated with teacher education and curriculum reform for compulsory education in parallel.

Chapter Six Conclusion is the final chapter, it recaps the theoretical concepts in discussion and then gives explication as to conducting this research as an overview of this thesis.

Chapter 2. Literature Review

This chapter, located in the sphere of music education as the thesis topic, is divided into four sections. A range of literature is explored first through the concepts of Compulsory Education in the 21st Century with special emphasis on the Chinese curriculum; second, an International Review of Music Education is carried out and the presentation of musicality within that; then, Research in Music School Education and Teacher Education in China with a concentration on musicality are explored critically, and finally, the adoption of IBL in Chinese classrooms is presented.

Section 2.1 is entitled 'Education: What is Education for?'. It starts the discussion by exploring the main concept of 'Quality Education' in general education since this is the 21st Century imperative within Chinese education. Then, it is narrowed down to a more detailed concept of how the Chinese National Curriculum was reformed and I critically reflect on its purposes and imperatives. Most importantly, this section provides an insight into the concept of quality education, 21st Century skills and how these concepts are integrated with different subject contents, particularly in forming the main concept of musicality within music education.

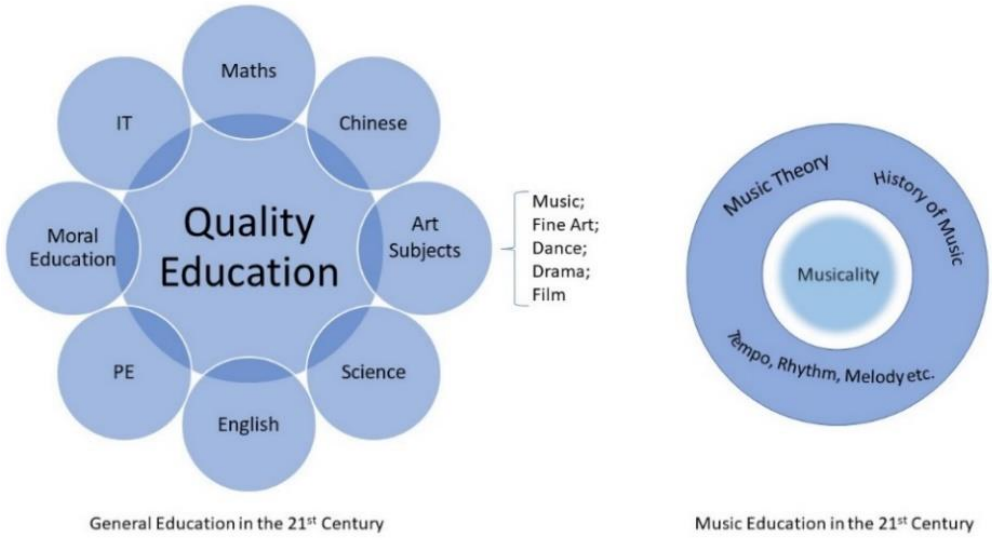


Figure 2-1:The Main Concept for the Chinese Compulsory Education in the 21st Century

As this thesis is focused on music education, there are four aspects of analysis that compare the differences and similarities between international contexts in section 2.2. I begin with the history and development of music education in general terms. Comparisons between curriculum design and pedagogical practices demonstrate issues in curriculum implementation. The key purpose of this section is to address the status of music education at the compulsory education stage and elucidate its meaning about what may be taught in music classrooms, in the discussion of pedagogical practices in the international music primary education. In parallel, the National Curriculum designed for compulsory education also impacts teacher education's philosophical and pedagogical practice. Therefore, music teacher education will be discussed critically in an international context throughout.

The same concepts are also discussed within the Chinese music education context in section 2.3. Arising out of both curriculum studies, a significant point is discussed in this chapter about the concept of musicality in the educational setting, compared to its meaning in general. Then, a conceptual framework is conducted to understand the meaning of musicality based on the National Curriculum for Chinese primary music education. In addition, parents' views are explored in school music education and outside-school musical tutorials in China. Then, the procedure and criteria of being an official music teacher in the Chinese primary schools is reviewed in relation to music teachers' subject knowledge and their beliefs in school music education.

The last section explores the meaning of IBL and how it has been developed in China. Through the literature review, the examples of utilizing the IBL approach are presented and considered in relation to the possibilities and values of adopting the IBL as an intervention in Chinese primary music classroom learning.

2.1 Education: What is Education for?

In this section, I will briefly discuss the concept of 'Quality Education' in Chinese compulsory education in the 21st Century. This section will also emphasise why taking a teacher's

perspective in my research is critical to my study. Then, I will introduce China's nine-year compulsory education system and the compulsory education law. I will also explain the education system with its three features about how it protects and equates children's rights to education. Furthermore, the history and development of the National Curriculum and its reform will be addressed in the following section to reflect the changes in Chinese educational reform. By giving a general picture of the compulsory education system in China, it is to address the purpose of compulsory education in China.

2.1.1 The concept of 'Quality Education' in the Chinese compulsory education since the 21st Century

Education has been viewed as a tool to facilitate people to reach their essential and social requirements to live in this global world (Zhao et al., 2019). Most countries have established their education statutes and laws to uphold citizens' rights to education and promote the development of basic education (Liu, 2004). Pupils aged 6 to 15 are called 'school-age' children in China and are required to enroll on elementary school and secondary school by the 'Law on Compulsory Education in the People's Republic of China' (Tsui, 1997; Zhou, 2012). Other developing countries, such as India, have built their compulsory education system based on ensuring free compulsory education rights for all children (Mondal, 2017).

Since the 21st Century, the term 'Quality Education' has been frequently mentioned in the Chinese educational policies and relevant curriculum documents. Globally, studies addressing quality education are more likely to be synonymous with the term '21st Century Skills'. The concept of 21st Century skills is based on the question: What will education be like for today's children in the future? (Howells, 2018). Defining such skills in a single sentence is complex, but the major arguments are that it generally includes the development of communication, problem-solving and life skills (Chris, 2009). Those skills are generally developed from the student-centred, experienced-based approach, which has been widely applied in scientific subjects first (Nuangchalerm, 2014). Saavedra & Opfer (2012) take mathematics and science

as an example of how students might develop subject-related methods for dealing with problems and making decisions. Similarly, Ni et al.'s (2011) research on the impact of curriculum reform on mathematics learning in mainland China is important for both subject development and relevant logical skills improvement. Participants were from 60 classrooms in 20 schools, in which 34 classrooms had a reformed curriculum, compared to the rest with a non-reformed curriculum (Ni et al., 2011). The research questions concerned mathematical skills and life skills in mathematics. They stated that the new curriculum would not weaken students' essential learning of subject knowledge; instead, it could develop the advantages of mathematics learning in different lifelong skills.

In the long term, and across a range of countries, such skills tend to be integrated with subject concepts; students build up their abilities to be independent and well-prepared for their future lives. In this case, students are clear and active about what and how they learned (Saavedra & Opfer, 2012). For example, in many contrasting countries' education systems, and certainly within China, questioning strategies in scientific subjects have effectively replaced passive theoretical knowledge transformation. Teachers essentially realised that their positions changed as a facilitator through this type of learning.

There is an interesting metaphor in China that says that the teacher works as a gardener and that they cultivate the flower with water and beautiful pruning (Zhang et al., 2018). However, it is also important for the flower itself to absorb the 'nutrient' – the knowledge. In other words, they might take more responsibility for their learning by questioning and enquiring. Students can then self-review and reflect on what they have learnt during the classroom. Referring to the theory of knowledge and learning, constructivists view the classroom as a micro-society, and students construct their own learning strategies in the process (Webster, 2016). There is no doubt that those 21st Century skills are a benefit for students in school learning across most subjects, including music. However, the meanings of music as a subject or learning musical skills for future life can rarely be seen by the public, apart from its aural enjoyment. School music education at the compulsory education stage, which is intended to

be one of the most crucial elements of a quality education, is routinely ignored by studies on music education in the 21st Century. In other words, research on Chinese school music education of practicing such skills with empirical examples is limited. Thus, it has not formed a practical theory or mode of teaching in Chinese primary music education.

The assessment of learning generally functions as the final step to evaluate students' learning outcomes and justify the next learning plan round in the teaching and learning process. It is common to assess student learning in the form of paper-examination in most subjects at the compulsory stage. However, research believes that it is difficult to evaluate those 21st Century skills using only written examinations (Yin, 2020). It holds the idea that single, one-side assessment standards were not valid for those high-level skills (ibid.). Those high order thinking skills, or other social communicative skills are hardly reflected on students' paperwork. Other educational developments, such as aesthetics, culture and values, and national and global identities, might not be addressed through traditional assessments. Simultaneously, it is a dynamic and long-term progression for the student to be an active learner as they are not usually familiar with the idea of quality education and thus do not have a meta-level understanding of what counts as important skills. Such improvements can be consequently postponed in showing in students' learning outcomes in their paper examination or daily lives and learning behaviours. Such a notion is important in this study since in many studies of Chinese education reform over the last decade (Yang & Welch, 2022), there is a belief amongst students that theoretically based external examination outcomes are the most significant form of validation of a school subject. Music of course, being both theoretical and practical, automatically suffers from erroneous beliefs about its rigour.

The issue of skills and knowledge also depends on how society views education and what the social expectations are, for its future global citizens (Zhao et al., 2019), and this refers to the question of what education is and looks like in the 21st Century. Therefore, students and teachers need to work in parallel when adopting the IBL approach to develop those high order thinking skills in general education (Saavedra & Opfer, 2012). At the beginning of this approach,

teachers remain in an important position in teaching those skills. The essential point here is that teachers are the first agents that can observe and record students' changes in learning and correspondingly modify their teaching pedagogies (Barrett, 2020). The first step is to select what and how to teach those skills integrated with specific subject concepts.

Research has shown that both teachers and pupils need to work in tandem even though teachers take charge of creating a classroom environment for learning 21st Century skills (Zhang et al., 2022), but that may also be a challenge for teachers working in this generation of learners (Scott, 2011). Within this learning culture, teachers have been defined as learners, facilitators, and of course, researchers and inquirers. Teachers are also the role model for their students in the process of learning. Therefore, teachers are increasingly aware of the need to develop their identities as 21st Century teachers and prioritise this identity shift when training as student teachers (Zhang et al., 2018). Kim et al. (2019) state that it is more important that teachers practice those skills in internships or training, so that they would be familiar with how to teach, assess and improve the student's learning in actual teaching. Also, those 21st Century skills require the consideration of students' individual learning needs, and teachers are clearly in a position of great importance in identifying those specific needs (Soulé & Warrick, 2015).

At this point, teaching and learning have become a two-way process carried out and achieved by both the student and the teacher. See the diagram below to explain this relationship.

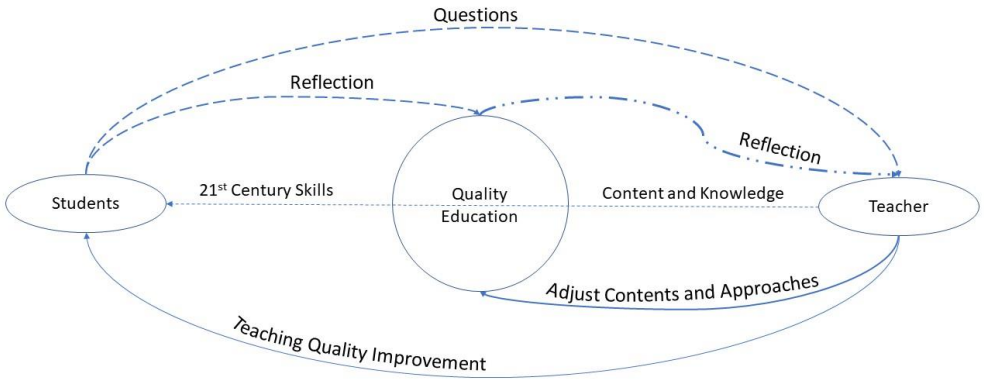


Figure 2.1-1: The Concept Map of Teaching and Learning Process in Quality Education

Education is the central hub that connects students and teachers. The concept of quality education in general education is like the layer of filter paper on a coffee pot. The filter leaves behind skills and qualities that will accompany a person throughout their life, even though the specific content or knowledge might be forgotten over time. Students are engaged with their questions, while teachers also take those questions as the students' reflections to assess the quality of the teaching and learning. Being such a teacher is also a dynamic progression that requires teacher self-reflection, evaluations, and improvements (Nichols et al., 2016). The teaching and learning process is still mainly controlled by the teachers as they train their students to be active learners. In this case, teachers are sharing the right to control the classroom with students, and students' actions and reflections can largely decide strategies that the teacher would use in the classroom or in future teaching. Brown (2008, p. 30-31) comments that such strategies could be the best design in teaching as 'the students are the ones that are being taught'.

The content taught in school and strategies used in teaching will be significant to the quality of learning. Therefore, it is important to explore how teachers plan, act, and reflect on teaching those 21st Century skills within their pedagogical practices. The following section

introduces the historical development of Chinese compulsory education and explores in-depth why teaching in this context is researched in this thesis.

2.1.2 Nine-Year compulsory education and compulsory education law

The Chinese fundamental education system, which is so-called as 'nine-year compulsory education', generally operates for six years for primary schools and three years for secondary schools. While in some regions, such as Shanghai, run a 5-year primary school and 4-year secondary school. There is no examination requirement for students to enter secondary school after their primary school graduation. The same curriculum follows both state schools and private schools. In the meantime, private schools have more flexibility to design their school curriculum and offer extra activities. Children commonly enroll with the primary school in their household registration (*HuKou* system).

China published its Compulsory Education Law in the fourth session of the Six National People's Congress in 1986 and implemented it on July 1, 1986. This education law was modified three times, with the latest 2018 version being used now. This education law and other policies supported three main features: compulsory, free charge, and unified teaching standards in the compulsory education system.

A. Compulsory Education

Since the 1980s, compulsory education has existed as the most important feature of raising the level of universal primary education and has been an important goal for policymakers and educators. The education law states that the nine-year compulsory education is for children at those ages to guarantee a comprehensive education(*Compulsory Education Law*, 2006; Lin & Zhang, 2006). It is illegal for companies to employ school-age children (Fang et al., 2012). Local governments and community supervision of parents or other guardians to protect the legal rights of school-age children (*Compulsory Education Law*, 2006).

The annual government reports stated that the enrolment rate for primary school was reached at 98.5% in 2008, while the dropout rate reduced from 2004 to 2009 (Yanqing, 2012). Liang & Dong (2019) concluded that the enrollment rate for secondary school was 68.4% in 1985 and 94.9% in 2000. The National Bureau of Statistics of China shows that the average years of education increased from 5.2 years in 1982 to 9.26 years in 2018 when the illiteracy rate decreased from 22.8% to 4.9%. (The 10th Day Statistic Open Day, 2019). After implementing compulsory education, China developed basic education nationally and increased the literacy rate by the governors (Fang et al., 2012).

B. Education Free of charge

Within this Chinese context, the compulsory education law declares that tuition is free for children in compulsory education. The benefit of free compulsory education was of value to the parents of children who are in rural areas when their families could hardly afford their educational fees. In 1985, half of the children were unable to enroll in secondary schools in those rural areas (Chuanyou, 2006). When a workforce's educational attainment affected its economic income, the public realised that education was a benefit and were more willing to be educated. People of school age in the early 1980s were turned into labourers in the agricultural industry, in which the enrolment rate was relatively low (Zhang et al., 2002). Only delivering basic skill knowledge was the primary aim and the elementary function of education. Education in that period focused on training workers for market demand; schools at that stage were named 'worker/peasant-run schools' (Ong, 1970). However, the increase in work opportunities, better working conditions and unnecessary working hours reduced by efficient working patterns were the primary reasons for people in rural areas to become aware of the importance of education (Li, 2003; Zhang et al., 2002). Also, schools did not charge students for disguised products or services, for instance, after-school classes, special classes, extra charges for teaching or review materials, forced subscription to newspapers and magazines or promotion of insurance ('Interpretation of Education Charge Policy', 2003).

Although the compulsory education law was set up with the above two features, the operation of compulsory education in China still faces inequality between rural and urban areas. Students typically have at least seven subjects in their primary school schedules. This includes core subjects such as Chinese, Mathematics and English, while non-core subjects, such as Arts, Music, Science, PE, and moral education (Li et al., 2008). Comparatively, schools in rural areas were facing the issue of lacking teachers. Teachers in rural schools must take charge of other subjects that are not consistent with their majors (Wang & Li, 2009). Those teachers might not be able to reach the syllabus due to the low quality of teaching standards (Wang & Li, 2009) and leave a whole district with differential abilities of teachers and different attainments of pupils and students. The unification of teaching standards has therefore become a perennial and critical element of studies within teacher development across all subject areas, including music.

C. The Adoption of a Unified Teaching Standard

The law states that the educational content and curriculum are set up nationally (Compulsory Education Law, 2006). Teaching criteria should be unified as one standard in the whole country. The textbook design was guided by the curriculum standard, which local governments could choose alternatively in different regions. The function of the National Curriculum and the use of textbooks will be discussed in more detail in the next section with the curriculum reforms.

The inequality of compulsory education was mainly caused by natural conditions and financial development between urban and rural areas in China since the early 1980s (Fang et al., 2012). Learning conditions, teachers' qualities and various teaching materials in Eastern China are better than schools in Western China (Sun & Xie, 2008). Buildings in some regions were not even qualified to accommodate students (Zhou, 2012). It is difficult to recruit enough teachers in rural areas without adequate living conditions and teaching facilities. New teachers are rarely recruited in rural areas, especially when the workload is not proportional to their salaries, and it is difficult for them to get promotions.

Decentralisation is an essential educational reform that is important alongside this feature. Most Chinese scholars reached a consensus that decentralisation in the Chinese education system was the shift from the central government to the local (Feng, 2006; Litao, 2010; Shangquan, 2007). Generally, it increased the power of local authorities. However, the overemphasis on the responsibilities of local government caused financial issues in weak areas. Therefore, the central government established a specific policy called 'Two free and one subsidy' to further support children from poverty families. In detail, the two free refer to free textbooks and no extra school expenses, while the one subsidy means students will be given living supplements. The qualified student could therefore receive living costs from the government since 2005 (Ministry of Education, 2005). Around 350,000 students in the Midwest were able to continue education after one year of implementing this policy (The State Council of PRC, 2006).

In summary, these three representative features demonstrate that Chinese compulsory education aims to provide all children with an equal opportunity to be educated with no regional differences but that there are still structural issues that remain in relation to the actuality of such a policy and its practice.

2.1.3 The Chinese National Curriculum and its reforms

The National Curriculum is the central guidance for implementing compulsory education in China and has been set up since the compulsory education law. Within the documents, it is clearly stated the educational purposes and goals of each subject. It is designed for each subject to compose teaching purposes and goals. According to the objectives, requirements and content, experts compiled textbooks as the teaching content used in schools. The Ministry of Education (MoE) stated that 'students should have patriotism and collectivism, form their values through education' (Outline of Basic Education Curriculum Reform (Trial), 2001). The formulation of the curriculum standard would be based on characteristics of various courses, combined with specific content and strengthen moral education's pertinence, effectiveness

and initiative (Outline of Basic Education Curriculum Reform (Trial), 2001). Historically, the documentation was modified twice in 2001 and 2011, after the 21st Century. In 2022, the latest National Curriculum was published for all subjects that are taught in schools.

Discussions on the National Curriculum reform for several decades were around the concept of quality education and how this in turn translated to specific outcomes and visibly measurable achievement (Yang & Welch, 2023). 'Quality education' was translated from '*Suzhi Jiaoyu'* in Chinese, corresponding to the '*Yingshi Jiaoyu'* (Traditional Exam-orientation Education) (Dello-Iacovo, 2009). Through the implementation of basic education for several years, the main goal of being educated has shifted from full implementation of basic education in the country to quality education. (Wang & Li, 2009; Xiaowei, 2012). Ryan et al. (2009) summarised several critical features of the curriculum reform. The concept within subjects was modified to meet the social requirements and personal demands, along with the local learning contexts of students. The flexibility of choosing textbooks and relevant materials was a benefit to both regional and school levels. Communications and cooperation between countries about educational theories and some projects bring the importance of teacher training to the forefront of the minds of Chinese educators. Scholars believed that reforms in the new Century were concentrated on improving the quality of education in teaching methods, contexts or educational demands on the global stage (Lai, 2010). As a result, moving the centre of learning to students and caring about their experiences has become the first task of curriculum reform (Li & Ni, 2012).

An important aspect of quality education is personalisation in teaching within China. Confucius and Confucian theory play a critical role in the Chinese education theoretical framework. Confucius emphasised the value and uniqueness of individuals and illustrated that teachers would 'teach by aptitude'. The educational demand for adoption of Confucian principles has led to the whole country being transferred to training the attainment of a citizen within a national development strategy (Jin & Li, 2011). Even under the uniform teaching standards,

this target for individuals was based upon the development of personal aptitudes, abilities and life skills (Li & Ni, 2012).

The long-term meaning of quality education in China is therefore the preparation for people's future lives, a Confucian concept, so that a legacy of education remains long after the acquisition of knowledge or skill has stopped or even been forgotten. In contrast, people build up their unique characteristics internally and implicitly through education (Zhou & Zhou, 2019). This type of learning happens between teachers' and the students' interactions, mainly based on students' questions, and by the experience of perceiving, mainly based upon explicit realisation of, and reflection on feeling and emotion. Therefore, such teaching would not only focus on delivering knowledge but also form an active learning attitude and effective learning strategy individually (Shim, 2008). As Zhong (2006, p. 374) stated, the most apparent change in the education documents undergoing this change, was that the teaching paradigm turned into 'Inquiry-centred teaching', in which students were encouraged to take the main responsibilities of their learning activities and become active agents in their development as lifelong learners. As a new approach to Chinese education, the question then becomes how teacher beliefs and consequent behaviours may influence the learning that takes place.

Referring to Figure 2-1 (p. 12), the curriculum reform does not mean only the curriculum document that was revised. Instead, the whole education system was reformed by all elements. It initially represents the focus of Chinese compulsory education was moved from an equal, basic education system to a more comprehensive education in this new era. The syllabus serves as the vehicle for teaching, for most subjects do not add much new content but rather more detailed requirements for existing knowledge. Three vital components of 'knowledge and skills', 'process and methods' and 'emotions, attitudes and values' in the curriculum standards are to demonstrate the syllabus in each subject. It will be discussed in detail within musical concepts in section 2.3.2 (p. 48-53).

Although the reform provides an ideological view of quality education, several issues were exposed in the implementation of the curriculum standards. Those issues mainly appear to be the inconsistency of curriculum in design, practice, and assessment. This inconsistency is particularly revealed by the link of the curriculum practice in both school education and teacher education in the actual education settings.

The first theoretical and practical gap that is one element standing behind this current research, appeared in the distinction between curriculum design and fundamental theories set up in quality education (Zhong, 2006). Learning objectives and goals designed in the National Curriculum were unclear and less structured so more difficult for teachers to implement in class. Broad definitions of those philosophical terms utilized in the National Curriculum would increase the teacher's workload to put those terms into the subject teaching content (Guan & Meng, 2007). The expected learning outcomes were hard to achieve in the short term, particularly for high-level thinking abilities within children. Besides that, scholars mentioned that rural students' learning needs were not considered in the curriculum design as education in rural areas remains the goal of providing equal education opportunities, which added to the inequality of Chinese education (Zhou, 2012). Those facts have limited the implementation of curriculum standards in the whole country to reach the universalization of quality education (Feng, 2006).

Chinese in-service teachers reported their difficulties in the implementation of the new curriculum standards (Huang & Xu, 2015). There is an overemphasis on teachers' duties of taking full charge of learning at the early stage of implementing the concept of Quality Education. The main issue here is that the relevant training on how to integrate 21st Century skills within subject contents was not set up consistently within the education system. This leaves in-service teachers in a position of uncertainty and lack of clarity to accept any changes required in the curriculum reform and to adjust their teaching methods immediately. Research has been carried out on implementing the curriculum in different subjects with teaching quality, attitudes and learning outcomes (Li & Ni, 2012; Ni et al., 2011; Riley, 2013). Although

the teachers attempt to transfer the learning centre from the teacher to the students, a lack of guidance for this new approach would practically reduce a student's ability to essential knowledge learning (Li & Ni, 2012).

Besides, teachers have actively correlated those difficulties with issues in teacher education more generally (Ma et al., 2009). Implementing the National Curriculum with those 21st Century skills requires supportive training (Feng, 2006). The problem of a lack of teacher training to apply the National Curriculum has caused a decrease in teaching quality within China (Zhong, 2006). Researchers have pointed out a gap between preservice and in-service teachers due to less professional training in pedagogical practices (Xu, 2009). In-service teachers have stated that those new terminologies were initiated in the new curriculum documents, such as 'Inquiry Learning' (Zhou, 2014, p. 516). They also lack good sources and guidance on the lesson plan (Ma et al., 2009). As a result, the emphasis on good quality support for guidance is an issue that comes into focus within this study, as it questions exactly what support would constitute good support, and what explicit changes would be necessary therefore in planning and longer-term teacher developmental programmes.

Student-teachers typically have a short-term internship in the local school during their final year (Han, 2012). Observing lessons and designing the class plan are the primary tasks within the two-month period. They will only be given one or two lessons in practice. On the other hand, there are three different types of in-service teacher training. 'Open Class' is the most common one to utilize in Chinese schools between teachers, subjects and schools (Liang, 2011). Open class means that the teacher is required to demonstrate a lesson observed by administrators and other teachers (*ibid.*). Educators believe that it is a competitive approach to improve teaching by evaluating others' performance and self-reflecting (*ibid.*). However, such an approach has not generated systematic techniques by which teachers may learn how and when such copied pedagogic practices might work and so this constitutes another area in which research is scarce.

Additional training, such as lectures and workshops, is given occasionally (Han, 2012). Those lectures are usually held by scholars or university professionals less familiar with primary or secondary school teaching. Teachers are less satisfied with professional training that is somewhat limited to their understanding of the educational reforms and their conceptual changes. They have argued that understanding new concepts in the curriculum and relevant pedagogical practices should be considered as the first notion of in-service training (Xu, 2009).

It is argued by several researchers that teacher education reform follows the same ideology of reforms for the compulsory education stage (Ma et al., 2009; Paine & Fang, 2006). The curriculum reform could be viewed as action research of class teaching from teacher's perspectives (Feng, 2006; Zhong, 2006). School teachers' reflections are not only needed for in-classroom teaching and learning but also for student-teachers in training. As mentioned before, the key components of the curriculum standard in 2011 were focused on providing students with an innovative learning environment. The teacher was also expected to work as a researcher to guide life-skills learning (Jin & Li, 2011). Without the consistency of teacher-education reform, implementing the curriculum with those high-level requirements in the class setting is still idealized for the class teacher and requires more in-depth understanding of how such innovatory projects may be introduced whilst also acknowledging such requirements for schools and classes. This is an issue that will be investigated in this current research.

In the meantime, the traditional exam orientation conflicted with the quality education that appeared in the curriculum implementation. Debates on the traditional evaluation system of paper-test orientation were being re-considered since the mention of 'quality education' in the curriculum reform. Research has exposed the fact that the examination system was an equal way for students entering higher education (Kirkpatrick & Zang, 2011). However, the rigid examination system was an obstacle to modifying IBL, and examinations are the most powerful force guiding pedagogical practices (*ibid.*). As mentioned in section 2.1, Education

on a global stage has concentrated on those 21st Century skills, which Chinese educators also paid attention to.

Significantly, traditional assessment values conflicted with evaluating thinking skills but can hardly be replaced considering the large population, different ethnic groups and each region's economic developments (Ryan et al., 2009). Concerning the concept of Quality Education, a paper test result should not be the only criterion for students' learning outcomes. Rather than focusing on scores, various types of assessments should be designed to reflect the dynamic teaching and learning process (Lee et al., 2013).

It is suggested that the mode of implementing the new curriculum should be considered more carefully, especially in consideration of the unique features of music and its creative and aesthetic elements, something that this thesis partly intends to do. From teachers' perspectives, their understanding of the curriculum intension and pedagogical practices in a certain subject would affect the curriculum implementation (Lee et al., 2013). Teachers are supposed to self-reflect on their facilitators' role in pedagogical practices (Guo, 2012). Teachers with in-serving training stated that they had realised the importance of inquiry skills in student-centred learning. As Shim (2008) has argued, the evaluation of teaching by teachers themselves is an important part of the assessment system that should be considered when utilizing this new approach in class, but in this respect as in other associated aspects, there is a research gap, that this current research intends to fill.

The influence of implementing the new curriculum in non-core subjects, such as music, has been discussed by Riley (2013), particularly in rural areas in China. Riley (2013) argued that traditional teaching strategies are still taught in teacher education, and preservice programs of the new curriculum are missing. Therefore, the research was carried out from 2009 to 2010, the period in which teachers were given instructions for teaching under the new curriculum in research period two. It is important to mention that teachers in such rural areas did not expect music majors. Consequently, teachers reported that the increase of music learning

interests with the extra support of teaching guidance partially assisted in the work for positive music teaching and learning by students.

The above section discussed the brief history and developments in the Chinese education system. In section 2.3, more details about those issues in curriculum implementation will be discussed with music teaching and learning in Chinese primary schools.

2.2 Music studies within education: An International Review

In this section, I will address the function of music in education worldwide and relevant elements of music education, including the history of music education, comparison of curricula, pedagogical practices, and teacher education. It is also important to understand the concept of musicality in general and, specifically, how it has been taught in school educational settings.

2.2.1 History of music and music education

Because of the ubiquity and everyday experience and enjoyment of music, most people have an acquaintance with music that based upon listening and to a lesser extent, performing (Webster, 2002). Music is believed to be capable of storing memory and transferring information (North et al., 2016). It can be reproduced in the learning process that students, through this process, could resonate and communicate with their peers, teachers and even music composers (Cathy, 1998). Music has been designed internationally as a tool to boost national values and develop musical knowledge (Han & Leung, 2017). There is significant research in Western countries that shows that music is a benefit to many other subjects. The common idea of music learning in early childhood is to enhance language learning, mathematics and cognitive development (Barry, 2008; Delport & Cloete, 2015; Hallam, 2010b; Swaminathan & Schellenberg, 2016). In consideration of the positive impacts on children's learning, music has been placed in the curriculum as a compulsory subject in a variety of

countries including the UK, New Zealand, the US and Sweden (Bassett, 2010; Mills, 2007; Zandén & Ferm Thorgersen, 2015).

The theory of multiple intelligences, developed by Gardner, states that every human being possesses different 'intelligences' to varying degrees and these manifests themselves in all aspects of life (Barry, 2008). Although subject to a great deal of conceptual critique by teachers, educators, and psychologists alike (Klein, 1997), there is no doubt that Gardner's work has been influential in not just pedagogical but also curriculum designs, on a global level (Anderson, 2020). In detail, Gardner states that multiple intelligences requests educators go beyond the knowledge goals to potentially prepare citizen for their future social life (Gardner, 1997). When integrating music with literature, students develop their verbal ability so that appreciation with creative thinking builds-up gradually (Calogero, 2002). Beyond that, children may form their opinions of aesthetics and develop appropriate vocabulary of musical appreciation. Students establish connections with knowledge through actions and explore their own understanding of knowledge (Webster, 2011). This process of establishing connections is called constructivist learning, and the outcome of learning is the establishment of domain-specific skills in the music field. In this thesis, this domain-specific skill may be conceptualized as musicality that is learned in school music education.

The Form of Musicality through the Development of Music Education

It is, therefore, crucial to trace the formation of musicality. In some literature, musicality is a unique gift and appears at a particular time or occasion (Brànds tròm, 1999). These individuals usually grow up to be potential musicians by default However, it is also believed that every child is naturally born with musicality. Infants are frequently introduced to music through programs designed to develop their cognitive abilities, which is called the 'Mozart Effect' (Schellenberg, 2005). In theory and practice, It is unpredictable how children can expand their natural musicality through systematic music education (Webster, 2003). The potential musical inspiration may positively contribute to children's future musical learning interests, such as engaging in music composition (Webster, 1990). Children's musicality and cultural awareness

could be developed when turning that 'sound and imagination' from a story into a part of the music (Fallin, 1995). It could be demonstrated by solving problems in each situation with integrated disciplines.

Based on the above examples and discussion, it involves both an absolute and relativistic view of musicality. By this means, musicality can be a biological inheritance and a production of the environment (Brändstròm, 1999). Most importantly, music educators and teachers would hold the belief that children may have biological differences in musicality, whilst such differences may not be an excuse to prevent students from learning music in school education. In fact, formal music learning in school naturally involves the development of musicality. In the educational setting, musicality as a domain-specific skill is, therefore, not only possible but a probable outcome of curriculum and pedagogical decisions. The concept of musicianship in the classroom has expanded to a broader meaning that every child who learns in school music education can be defined as a musician.

Under this circumstance, the development and quality of the skill of musicality depends on the quality of music education or, in fact, the classroom teaching. The researcher believes that the more active engagement in music learning, the higher the quality of musical experiences (Webster, 2011). Indeed, music as a subject is designed to develop students' skills, emotions, and creativities. Research has pointed out that meanings are constructed, exchanged and interacted between audiences in learning (Scott, 2011; Shively, 2015). Therefore, 21st Century music education has been considered thinking skills or problem-solving (Deparment of Education, 2019). Through communication, cognitive and social skills can be improved by sharing aesthetic experiences and emotionality (Hallam & Papageorgi, 2016).

Similar to scientific subjects, the inquiry-based approach is also suitable for music classroom teaching. With the exploration classroom setting, students are free to make their own aesthetic decisions or create their music in composition (Coss, 2019). Students are placed in the centre of the learning process, but it should be noted that even with the approach, a

teacher's professional knowledge is important in supporting the production of creative music activities (Brown, 2008; Webster, 2016). Teachers are required procedurally to be more sensitive when direct instruction is needed when implementing this approach. For example, giving guidance on music performance or expanding the conceptual knowledge to address relevant musical problems (Scott, 2011).

Musicality is therefore a multidimensional concept that can be developed through school music learning, aligned with the development of social, cognitive, or thinking skills (Hallam, 2010a). In short, the way of developing musicality can be various and depends on the aim of music education within its educational contexts. The design of music curricula is then to provide spaces for students to explore musical content (Scott, 2011). To some extent, the curriculum is the conceptual framework of music education in its national educational context, scaffolding the knowledge construction in teaching and learning. Therefore, the following sub-sections discuss the design of music curricula and its corresponding purpose of music education.

2.2.2 A comparison of curricula in international contexts

Internationally, music is taught as an individual subject or under the categories of art education. Within this context, philosophies about music education as aesthetic (MEAE) or praxial music education have been discussed over decades, and it is important to review the music curricula in international contexts. Indeed, it also echoes the form of musicality in this thesis in the above section.

To simplify the concept of MEAE, it could be understood as the caring of quality rather than quantity of musical experiences and, in life-long terms, that experiences should respond meaningfully and musically to human life and activities (Swanwick, 1996). These musical experiences could be gained through building connections or emotional feelings with other art objects, such as drama, painting or poems, that is so-called 'aesthetic sensitivity' (Elliott,

1995). Meanwhile, praxial music education understands the social feature of musical experience but emphases more on its practical dimension of technique (Wayne, 2002). It is interesting to note that when Chinese music education was newly entered into the formal education stage (Reimer, 1989a) that this issue was considered. It is believed that musical elements learned in music programs, such as pitch, tempo and duration, do not significantly affect the quality of music learning in the philosophy of MEAE (Swanwick, 2011a).

After around four decades since major structural changes in the curriculum, it is still important to decide whether music experiences or music learning serves for musical ends or educational ends. The central part of this decision-making process is the beliefs and roles of music teachers (Bowman, 2005). Thus far, these two views on music education programs do not conflict with each other in modern music education. The philosophical view on the function of praxial music education could require a solid and systematic knowledge base established through music education, while MEAE would back up the more musical ends of the quality of musical experiences on contributing the knowledge into musical productions, such as performing (Elliott, 1995; Swanwick, 2011a).

In the actual setting, the compulsory education system and teacher education are the factors that can determine music programs in school. In Australia and Ireland, music is present in the combined music curriculum with another subject, such as visual art and drama, while in Sweden, Spain and the UK, music has its separate music curriculum (Barrett et al., 2017; Garvis et al., 2017; Hardcastle et al., 2017; Kenny & Morrissey, 2021; Long, 2015). Finland and Estonia have mandatory music lessons set up in both curricula and taught by generalist teachers and specialist teachers, respectively (Sepp et al., 2015). In China, the national music curriculum is documented separately in the 2001 and 2011 versions, while the latest 2022 version combines all art-related subjects in one document with separate sections. In this thesis, the term curriculum is primarily understood as the official guidance that provides teachers with the goals and contents for teaching music.

In the countries mentioned above, music is considered an important subject in compulsory education. Since the 21st Century, music education worldwide has concentrated on aesthetic education (Finney, 2000). Contents designed in the music curriculum share similarities worldwide by exploring various elements of music. Music is commonly taught in the context of, and inclusion with, singing, instrumental playing and music-making in the classroom to achieve the aesthetic goals established by its National Curriculum (Merryfield, 2015). The same detail is required in some activities, such as guiding students to form a proper singing posture.

A piece of music and its structure can reflect a period of history or culture (Elliott, 2005), and it may act as a cultural signifier or fixed point in the teaching content in other countries that are representative of that culture. Various music forms have been taught in different cultures, including traditional, folk, and pop music in the 21st Century (Bassett, 2010). In other words, the music curriculum includes a wide range of musical concepts and instructs the philosophy and relevant pedagogical practices (Yang, 2022).

Some researchers state that the music curriculum does not cover the full range of its original culture; therefore, the policy might not be applied to provide a more comprehensive music education (Barrett et al., 2017). In contrast, other researchers have argued that curriculum documents should not only emphasise comprehensive education in the teaching content exclusively but should hold a general philosophical idea that music education is an integral part of comprehensive education in the school curriculum (Hardcastle et al., 2017). For example, the philosophical idea of peace education is integrated with the curriculum in both Australia and Spain in discussing the role of arts education in educational policy directions (Barrett et al., 2017). However, researchers also pointed out that no clear requirements are stated in the official document for teaching peace education in art subjects. In fact, the idea of peace education is commonly and more practically transferred as the intercultural understanding or intercultural communication in music education, depending on the diversity of teaching contents. Using this example, music subjects could be appropriately placed equally

with other core subjects in the education system. In this case, then, the conflicts between music educators, teachers and policymakers could be usefully used to bring positive changes to music education (Barrett, 2005). However, these ideal implications in the designed document may not be perfectly implemented in the actual teaching, and nor might they be seamlessly included even if they offer a different perspective since there are too many impediments to their inclusion. It is also important to explore the status of music subjects in school programs and their relevant pedagogical practices.

2.2.3 A comparison of pedagogical practices in the international primary school music education

Music in primary education in countries such as the UK, US or Australia is taken by either generalist teachers supported by music instrumentalists or music specialists who have taken majors in the discipline during their studies (Holden & Button, 2006; Moore, 2019). In some states in the US, music specialists represent two types of music teachers: one arm of the profession has a wide range of music knowledge and skills, and the musician specialises in instruments or vocals (Marsh, 2012). In the individual National Curriculum, music learning in school is covered through the compulsory education stage in most countries. For example, students in Estonia have three to six lessons depending on their age groups from grade 1 to 9, while in Finland schools provide optical classes when their students enter grade 8 (Sepp et al., 2015). Some other countries, such as Australia or Spain, have ten years of compulsory school, which means students would be surrounded by formal musical practice during most of compulsory school education (Barrett et al., 2017). Similarly, in China, the National Curriculum is divided into three stages with upgraded goals taught in school as education progresses to the higher levels, aiming at a comprehensive music education (Ministry of Education, 2022).

However, the written curriculum is distanced from its pedagogical practices in schools. The most obvious issue reported by in-service teachers is the lack of coherence and incompatibility between teacher training and in-school practices. Many scholars mention the issue of

curriculum design and pedagogies correlated to teaching materials music major students' identities and beliefs (Freer & Bennett, 2012; Groulx, 2016; Jones, 2009; Merryfield, 2000). The most significant issue is the marginalisation of this subject in the school timetable for both national and international music education (Russell-Bowie, 2009). Nevertheless, in most cases, teachers have no choice but to accept the reality and work harder to improve the effectiveness of their teaching (Hardcastle et al., 2017).

In a perfectly idealistic setting, teachers are supposed to pay heed to authority and the sanctioned and validated musical curriculum and contribute to the promotion of music education (Finney, 2013). Teachers' roles in aesthetic education are to make students identify their personal experiences of that subject (Martin, 2008). When these targets are reflected in the curriculum design, curriculum documents aim to guide the chosen materials and teaching activities. Without an official textbook, teachers are free to choose their own teaching materials. So for example, Music in Western countries is more focused on listening and singing techniques or instrument performance (Mills, 2007). In addition, music-making or composing is essential to music education in Western countries (Webster, 2003). Such composition is often not strict about generating a piece of music but could be small, improvised games. For example, the teacher may ask children to add other instruments or rhythms to that piece. Questions raised in that process are somehow reflected in children's thinking about music or their musical understanding (*ibid.*).

In practice, music offered by non-music specialists often concentrates on sound-related activities or compositions, many of which rely on the human voice since there is, in practice, often a restriction on the instruments available (Fallin, 1995). Generalist teachers or music teacher students are frequently self-criticised as less professional or unqualified performers than music major students in both teacher training and in-class teaching (Mateos-Moreno, 2022). Holden & Button (2006) have researched non-specialists teaching music in the UK. Their results have shown that nearly 60% of generalists would teach singing once per week or less. However, only 6% of generalists are confident in teaching singing; therefore, they choose

activities such as clapping games or listening and appreciation instead (*ibid.*). Children could naturally react to music by movements or gestures. Relevant research addresses the internal relationship between music and those movements, while Webster (2003) suggested that the teacher explores how that connection could inspire children to think through music. In this thinking process, Webster (2003) suggested that the teacher might focus more on developing that thinking rather than judging the value of that idea. Philosophical thinking in music is considerable in music teaching as students would ultimately hold a personal view on the aesthetic and multicultural world under globalisation (McCarthy & Goble, 2002).

However, research focused on the written document can only reveal limited aspects of the actual teaching; a difference is believed to exist between the curriculum in written and in praxis (García & Dogani, 2011). The old-fashioned way of teaching music is that students directly follow the teacher's instructions, especially in singing repeats. Students are often used to that way of teaching through their experiences at home, through media representations, and often because of existing 'standard modes of pedagogy' within the grammar of schooling, in which students will involuntarily default to their inability to think in music (Wiggins, 1999). School teachers spotted that sometimes 'shouting' is more precise in describing students' actions to the singing activity (Music in Schools, 2012). The purpose of the singing activity could be assumed to be purely participating rather than reflecting students' musical understandings. In long-term training, that creative assignment in music learning is hard to imply for its original purpose. In fact, teaching singing techniques requires professors to use more accurate language to direct students using their vocal cords (Lamont et al., 2012). Learning how to read and analyse a piece plays an important role in Western music class (Elliott, 2005).

It is very difficult for teachers who have taught traditional teaching methods to immediately apply new pedagogies in practice (Barry, 2008). Music teachers worldwide have stated their problems with understanding and implementing the curriculum documents (Mills, 2007). Teachers are suggested to adopt the multi-discipline in music teaching (Barry, 2008). These in-

service teachers agreed that well-preparations in this field would benefit them in teaching music (Anderson, 1992; Groulx, 2016). Undoubtedly, music works well as a vehicle for creativity and critical thinking in problem-solving in the future (Barry, 2008). Therefore, integrating music with other curricula seems to be valued in schools. However, Barry (2008) also pointed out that balancing two disciplines in pedagogical practices is the central question for educators. School leaders might think about the proportion in school schemes, while music educators might consider the neglect of the inherent values of music (*ibid.*).

Meanwhile, music teachers worldwide unconsciously appear to have reached a consensus that some parts of syllabuses are too ambitious to achieve in a short-term implementation in a classroom. School teachers feel that the music curriculum potentially assumes that goals would be achieved by every student in the classroom without considering the specific learning needs and allocation of time and teaching materials (Barrett et al., 2017). For example, music teachers said that the document mainly aims to assess the learning outcomes and evaluate them by grades (Zandén & Ferm Thorgersen, 2015). Issues of music teaching for generalists include lack of confidence and subject matter knowledge (Lamont et al., 2012; Mills, 2007). Similar to the Chinese music teachers, music teachers in Western also complained about the massive teaching contexts with limited teaching hours (Zandén & Ferm Thorgersen, 2015). To some extent, they believed that lacking subject matter knowledge is the first barrier to understanding the curriculum (Mills, 2007). Musical pedagogies such as Kodaly or Orff have been initially developed in Western countries. Without such knowledge or property training, generalists are still unfamiliar with implementing those approaches in the classroom (Bassett, 2010). Furthermore, such teaching abilities are not valued or accessed properly as a priority in teacher education in universities (Barrett et al., 2017), which can further lead to the issue of incompatible pedagogical practices in school education.

Researchers and music educators debate about another aspect of developing musicality that concentrates on the practices of techniques or the aesthetic and aural experiences in school education (MacGlone et al., 2022). In fact, it is related to how music educators and teachers

define and practice the term ‘Musician’ in school education (Jaffurs, 2004). Hardcastle et al. (2017) indicate that interactions between students and teachers are more important than reaching established, theoretical goals on the curriculum documents for daily music learning. In response to the global demands and philosophy of 21st Century skills, music as a subject offers avenues for students to be trained as democratic citizens (Aróstegui, 2016). Thus, the meaning of musician in school music education tends to be a general concept rather than professional experts in the music field. In other words, music education at compulsory education is inclusive to all students, and every child can be a musician after learning. This is echoed by the concept of musicality, as discussed in section 2.2.1 (p.29), and implies that the National Curriculum as a guide is to state the basic standard rather than capping the potential in pedagogical practices.

Besides those factors discussed above that can be mainly controlled by music teachers, the hard conditions for music learning cannot be ignored either. For example, the theory of music might not be paid much attention to the classroom learning; however, financial support in Finland offers a wider range of music instruments equipped in school that students in Finland could have a border view on aspects of music learning than students in Estonia (Sepp et al., 2015). The most common situation in China's education context is that due to regional economic differences, rural schools might only have unqualified music teachers who are used to teaching other subjects or different year grades (Qin et al., 2022). Under this circumstance, music teaching in some areas of China remains the same or even worse situation compared to those music classrooms where generalist teachers practice.

In general, the first reaction to learning in music is imitation. For example, students can imitate teachers’ voices when singing. However, it does not mean students are only copying teachers’ behaviours; instead, they are supposed to critically analyse and interpret teachers’ actions and may express them in their own ways (Scott, 2011). The quality of this classroom learning environment contributes to the effectiveness of developing musicality (Jaffurs, 2004). During this analytical process, students ‘musically’ engaged in those learning activities and become

critical listeners (Hallam & Prince, 2003; Silverman, 2019). Besides that, as the two main objects in the learning process, students and teachers have changed their identities and relationships. Outside school, informal music experiences have largely been involved in students' daily lives, contributing to students' cognition about music learning (Aróstegui, 2016). Students' ideas about music can be expressed, and their voices can be heard by teachers in classrooms (Seale, 2009). So, constructivist perspectives support such active learning and argue that students educated in this way are worthy of being valued as independent musicians (Scott, 2011). Teachers would take the role of both instructors and facilitators by providing more leading questions and responsive feedback, particularly at the early stage of this mode of learning (*ibid.*).

It is now clear that ideally, the development of musicality through formal school education must progress so it is a gradual build-up, dynamic progression. And this development is demanding for both students and teachers (Silverman, 2019). Apart from the mention of aesthetics in musicality, sensitivity and creativity are also promoted within musicality development. These two dimensions are indicated in students' engagement with every musical activity (Hallam & Papageorgi, 2016). For example, being a critical listener requires students' sensitivity to listening to music, while students could express their thoughts creatively when making music (MacGlone et al., 2022). These three dimensions can emerge and develop simultaneously in the music learning process. Thus, aesthetics, sensitivity and creativity form the concept of musicality in the compulsory education in this thesis. The following diagram represents the relationship between each element:

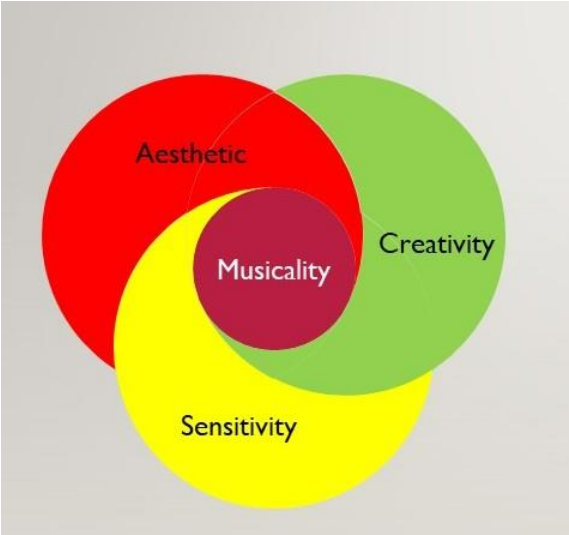


Figure 2.2-1: Conceptual Framework of this Thesis

Then, we consider discussion of the assessment in music practices as they can be viewed as another perspective of guiding teaching actions (Swanwick, 2011b). The format of assessment can be varied, including formal and informal assessments, from teachers, peers, and students themselves. In collaboration with both musical and educational ends, there are two issues raised from the question of how and why it is important to assess music musically. According to the discussion in section 2.1.3 (p. 22), the most apparent issue is the quality of formal assessments, in most cases, by teachers. It is important to consider the teacher's contributions to both musical and educational ends as part of the validity and reliability of designing assessments in class (Swanwick, 1988). In other words, the development of assessment operates within a similar vein with music learning for both students and teachers, as this learning not only happens in the classroom environment (Swanwick, 1994). To support that, Elliott (1995) suggested that assessment should be an enjoyable learning experience as well as other musical learning experiences to promote students' musical thinking.

Another issue with music assessment is from the students' perspectives. What this means is that it is significant for students themselves to understand how they assess their musical experiences and convert their music learning into musical productions, such as performance

or composition (Swanwick, 2011b). Swanwick (2011b) further argued that the vital point here is to involve student's voices to contribute to the design of the music program.

2.2.4 A comparison of music teacher education in international terms

Since the 21st Century, teacher education programs have collaborated to establish an international network in dealing with globalisation in the educational field (Rowe & Skourdoumbis, 2019). Before being qualified, teacher education aims to train student-teachers to effectively prepare for their future career in all components of music education. That is to say, any changes or reforms at the compulsory education stage should be aligned with teacher education in practice. The central focus on music in the 21st Century is arguably on enquiring rather than establishing already decided knowledge and skill (Webster, 2003). Teacher education in music has transformed as a way to harness effective teaching and learning through musical concepts (Webster, 2002). Analysing university music teacher education programmes enables the assessment of the value of student-teacher training. At the same time, the teachers' qualification examinations and working as official teachers address relevant in-service teacher training.

Being a music teacher in most countries requires a qualification. People in the UK need to attend a one-year Post Graduate Certificate Education program, while states offer licences in the US in music teaching (Groulx, 2016; Martin, 2008). Colleges and universities provided relevant courses and majors in training student-teachers in both the UK and US (Adderley et al., 2006; Anderson, 1992). South Koreans train their music teachers in two pathways: primary school teachers take charge of all subjects, including music, and specialist music teachers for secondary school and above (Shin, 2019). Similarly, students in Norwegian universities have options to be music teachers; they can either study music major degrees in university or learn music as an elective subject in their generalist training program (Fredriksen et al., 2023).

However, the situation indicates a gap between school and teacher education. It is particularly important in music education as music classrooms can either be taught by music specialist teachers or generalist teachers. Although student-teachers from the universities in most countries seem to be prepared with the specific knowledge of teaching music, they have commonly reported a lack of confidence in music teaching. Generalist teachers, in particular, might feel that they lack confidence to sing in front of the classroom (Chung, 2022a). However, universities' purposes would be to critically raise the status of music in the music teacheing profession and provide more opportunities in practice for student-teachers (Russell-Bowie, 2009).

Hennessy (2000) researched this field with some student-teachers who were requested to teach music in schools. Due to the inability to teach music, schools pay extra for experts in teaching music, known as peripatetic music teachers (*ibid.*). Interviewees in that research stated that they have no confidence in teaching music or embarrassing singing in front of children as they thought they were not musicians. Those interviewees were strongly influenced by the view that people would not be able to teach music unless they were fully in charge of the musical instruments and possess relevant knowledge. They are extremely concerned that their 'unprofessionalism' will produce errors in their students' perceptions of the subject and their future lives. As a result, they limit most of their music teaching activities to a few simple clapping activities or less skill-requested activities that they feel are low risk in teaching (*ibid.*).

In the context of such difficult and complex skill acquisition, compared to prioritizing high social recognition of profession a teacher in China, majoring in music arguably exists i because of a deep love of teaching or purely because of a passion for music (Jones & Parkes, 2010). Literature demonstrates that teachers' pedagogical practices in schools somewhat influences their beliefs about this career (Korthagen, 2004). However, there is less evidence to prove that proficiency in a musical instrument is directly proportional to the level of musical instruction. The marginalization of music subjects in schools may affect student teachers' motivation and

the development of their teaching skills. When they develop negative self-criticism and engage with professional feedback, it is more important than simply and straightforwardly needing support from their university and the school (Hennessy 2000).

In fact, teacher education is believed to be disconnected from in-school education because of the methods, skills and contents taught and because teacher education programs do not consider the practical learning needs of students in their real-life situations (Conway, 2022). It is argued by theorists in pedagogic practice that teacher education itself does not follow the mode of learner-centredness, and therefore, practices in teacher training programs are not a clear reference point for novice teachers (Schweisfurth, 2011). Preservice teachers comment that less efficient professional development makes them insecure about teaching music in a continuously changing society (Keiler et al., 2020). Such writers have argued that there is an urgent need for teacher education programs to be reformed in a positive way in considering preservice teachers' professional development, work-life balance and their identities as music teachers (Barrett et al., 2017; Chung, 2022b; Joiner & Edwards, 2008; Lunenberg et al., 2007; Mansfield et al., 2014). Teachers in Hong Kong also pointed out the similar requirements for their professional development, emphasising the components of aligned teaching contents and theories, pedagogies, collaborative working environments and sufficient training supports (Wong et al., 2023).

Socially and emotionally, teachers' motivation and self-efficacy are all critical to improve the quality of music education (Pellegrino, 2019; Spruce et al., 2021; Wong et al., 2023). Teachers' competencies and confidence can be significantly built up through a well-designed teacher education course (Chung, 2022b). However, in-service teachers complain that enough fieldwork practice in the teacher training program is essential for their future careers, while the time for practice has been minimised in reality (Conway, 2022). The same problem can negatively impact novice teachers because they also have to deal with other survival issues, such as paying off student loans, dealing with other family issues, or managing the increasing cost of house renting (Joiner & Edwards, 2008).

The most urgent problem that persists in the current situation is that it leaves in-service teachers, either novice teachers or experienced teachers, very limited time and space for reflection, and this might further cause more unique problems in music education (Powell, 2019). For example, music is a subject that focuses on balancing complex personal experiences of practice, theory and performance during the learning process and that requires teachers to fully understand their students in order to give appropriate instructions (Sepp et al., 2015). This means, music teachers or teachers in charge of music lessons would fully engage in the pre- and post-stage teaching process and be well-prepared in theory. However, referring to the most common issues mentioned in the above section, generalist teachers or even some music specialist teachers have less confidence in teaching school music which is made worse by the lack of concerted time for deeply getting to know their pupils. With fewer opportunities for self-reflection and, even worse, without qualified training in professional development, music teachers cannot further improve their teaching abilities in music teaching. This assumes of an ideal, dynamic music learning in school education that is difficult to establish, especially since teachers are required to adopt, in some countries, relatively new, student-centred approaches.

However, it is indicated by researchers that teacher education is not only for preparing well-trained teachers but also can lead to an innovative school education in future (Lunenberg et al., 2007). This is then a necessary philosophy to be considered by teacher educators, educational policymakers and preservice and in-service teachers regarding music education's past, present and future aims (Rowe & Skourdoumbis, 2019; Silverman, 2019).

2.3 Teaching Music in Chinese Primary Schools

In this section, a more detailed discussion of music education in China will be presented in the following paragraph, including the history and development of musical content in school education, the national music curriculum as the most significant official document in guiding

the pedagogical practices and other social views on music education, particularly from the parents' perspectives.

2.3.1 Music in classroom teaching in China

The history of music could be traced back to the 'Western Zhou' in ancient China. Generally, music in education is aimed at personal values and moral education of all ages (Liu & An, 2017). The functions of music have changed alongside social development. The idea of music was initially being recorded in 'The Rites of Zhou' as one of the 'Six skills', which referred to six pieces of music for sacrifice (*ibid.*). In China's modern history, music is relevant to cultural and political events (Ho, 2012). Comparatively, music in the 21st Century seems to have more independent meanings of the subject itself. Scholars and educators are more interested in music education's teaching quality that the structure and purpose of music as a discipline. Questions about how music could develop other skills in China aside from the outcomes related to music proficiency will be discussed in the following sessions.

As a non-core subject, music has been offered in primary schools weekly. The status of music in the Chinese education system was lower than subjects such as Chinese or mathematics by default (Wills, 2011). In other words, marginalization has been a common issue in music school education. On an ideological level, music is for personal and comprehensive development. Students may make independent aesthetic decisions about music (Webster, 2002). However, the function of non-core subjects compared to core subjects is more for relaxation and experience in schools. These non-core subjects were scheduled twice per week in primary schools (Reimer, 1989b). Under the musical contexts, learning relies on the interaction between teaching and practices in the classroom (Jones, 2009). However, society maintains the traditional opinion that learning music cannot be related to life skills (Leung & Xie, 2011). To some extent, the most useful function of music has increased the competitiveness in education. For example, schools, especially private schools, have taken those extra-musical

activities as proof of their 'high-quality' education, while students, parents or even the public see this as a way of increasing the possibility of entering higher education.

Based on these ideas, students, parents, and even some music teachers have viewed music as a subject of making and understanding those 'sounds of beauty', which means being able to read and sing musical pieces (Elliott, 2005). An in-depth understanding of music appreciation has been concentrated on familiarity with the background of those pieces (*ibid.*). Professional musicians have criticised this way of teaching music in schools, neglecting the systematic of musical knowledge (*ibid.*). Contrary to expected goals, students are less motivated to learn music about appreciation and creativities by mainly focusing on singing songs and memorising the lyrics (Guo, 2018).

Singing is the most common activity in Chinese music teaching. In other words, music education and music textbooks in Chinese schools have been primarily developed on the basis of singing. The music course in this primary stage was called '*ChangYou*' (Singing and Playing) and singing is technically taught by imitation (Lai, 2015) and children take their teacher's singing as an example to copy the pitch. Indeed, singing is the simplest activity in music learning, as it cannot rely on other equipment (Lamont et al., 2012) and teachers cannot feel that they are unskilled in that they do not rely on other equipment or principles to perform music. The language used in communication was important for teaching singing (*ibid.*). Instead of speaking the language, '*Hand sign*' in Kodaly's pedagogy is frequently utilized in pitch corrections in Chinese primary schools (Leung & Xie, 2011).

Western music, especially classical music, has a more powerful function in worldwide music education. Research further pointed out that Chinese society prefers the singing style of '*Bel Canto*' in teaching singing (Wu, 2019). This singing style is not matched to some traditional Chinese pieces in the textbooks. Experienced different singing techniques are also a requirement in the Chinese music curriculum, which requires high professional teaching abilities. However, not all music teachers in China have majored in vocal education, which

might cause a lack of confidence and quality in teaching singing. Thus, the concertation on improving teaching singing has been systematically conflated into a measure of the quality of Chinese teacher education.

Besides that, movement, as the assistant activity to music, was extensively utilized in the music classroom in China. There are several functions of movement in music teaching. For example, movement with singing or dancing could directly express a listener's feeling about that piece (*ibid.*). Orff's pedagogy of teaching music to children is frequently combined with singing, dancing, and music-related movements. This method has been introduced to Chinese music educators for several decades but has not been accepted nationally in music teaching(Leung & Xie, 2011; Reimer, 1989b), on the basis that it challenges the supremacy of centralised music pedagogic strategies since it encourages teachers to innovate and experiment in their classrooms.

Chinese educators believe that applying a new teaching method is not merely copying the idea but integrating the theory with local culture (Guo, 2018). Although the philosophy of Orff's method matched the Chinese music curriculum, it challenged the teacher's implementation abilities in the classroom. Under such textbooks, how to apply this method more appropriately has been one of the most significant issues for Chinese music teachers.

2.3.2 The music National Curriculum in China

Each subject has a specific curriculum standard. Music, Art, and PE are the subjects that refer to morals and aesthetics in quality education (Leung & Xie, 2011). As mentioned before, the curriculum was modified twice after the 21st Century. Those reforms were not only reflected in the documentation but also concerning teaching materials, pedagogical practices, and issues in implementation. It is concerned with the dynamics of music to address the global need and train the new generation in this era. Generally, music teaching has been requested to move to student-centred learning in class (Yan, 2015). Ho (2018) addressed the music

curriculum's meaning, goals, and targets in detail. Learning diverse cultures for worldwide content in school music education and identifying the values of the development of globalization are invisible targets set up inside the music curriculum (Ho, 2012, 2018). Experiencing harmony and respecting others in society are taught in music education as well (*ibid.*) and teachers are frequently expected to teach music with other disciplines to develop cultural awareness (Cardany, 2012).

In comparison, the 2011 version added one chapter about the ideology of the music curriculum to guide teaching within compulsory education. The curriculum stated that music at this stage was not for training musicians but to develop students' musicality (The National Music Curriculum Standards, 2011). It is essential to develop children's potential for musical ability and creative thinking with knowledge acquisition (Guderian, 2012). Children's cognitive development would be expected to be explored through the process of natural music learning. Most importantly, they would develop a meaningful relationship between subject learning and life skills (Sláviková & Králová, 2019). Characteristics are emphasised in three aspects: 'humanity',' aesthetic' and 'practical' musicality (The National Music Curriculum Standards, 2011). Theoretically, those characteristics mean to promote students' motivation for learning music focused on aesthetic and creative musical practices. Activities designed in classroom would be based on engagement and expressions (*ibid.*). Three significant learning purposes in the National Curriculum emphasize these characteristics in each subject as the conceptual framework of a lesson plan.

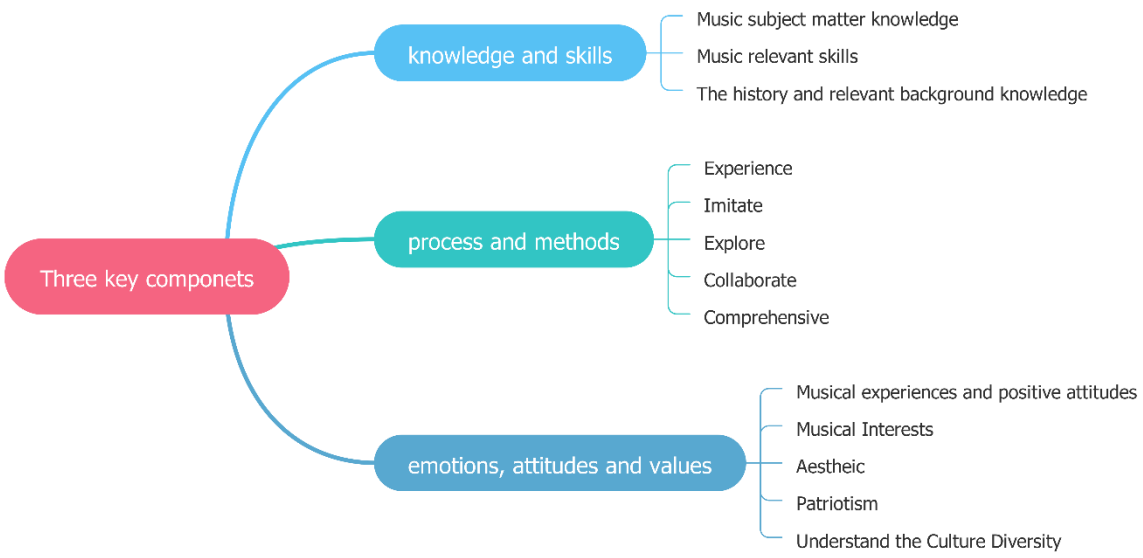


Figure 2.3-1: Three Key Components in the Chinese Music National Curriculum

A. Knowledge and Skills

Subject matter knowledge in the curriculum consists of four parts: Experiencing (singing, appreciation, instruments, sight-reading, creation), performance, creativity and music with its relevant cultures (2011). Targets of those contents in primary schools have been set up for lower stages (years one to two) and upper stages (years three to six).

B. Process and methods

In correlation to the 'knowledge and skills', teaching methods and materials used in a low stage are the combination of music, stories or pictures to inspire students' learning interests and perception of music. The proportion of musical practices, such as chorus or performance, would be increased for the upper-stage students' appreciation. Orff and Kodaly have been commonly utilized as specific teaching methods in Chinese music classes. With creative methodology, teaching music under the National Curriculum was attempted to achieve the goal of positive learning (Reimer, 1989b).

C. Emotions, Attitudes and Values

The music learning process requests thinking and analysis (Alessandroni et al., 2017). To some extent, listening to music subject would be more critical before singing. The progress of

learning music in the classroom would not only be offered by the interaction of teachers and students. Sharing experiences by peers or groups could generate new thoughts about music, called the 'natural' of music learning (Green, 2005, p. 27).

Chinese music education is often faced with the problem of properly integrating political ideas with music contexts and teacher education (Wu, 2019). Generally, Confucian theory about harmony, peace and love is highlighted and privileged in the music curriculum as a way of shaping students' values. Balancing values in music and practical life skills can be considered during the teaching preparation (Ho, 2018). Musical knowledge and creative thinking are both important in school music learning (Guderian, 2012). Ho (2018) argued that using songs to teach those values fits together in a reasonable and understandable structure, especially for students at the lower stage. Research has suggested that those political ideas were overemphasised in the teaching content (Leung & Xie, 2011).

The music curriculum (2011) stated that students should respect art and understand the diversity of world culture. In this globalised society, students could experience cultural collision and integration (Ho, 2018). Official textbooks have designed music with various forms and times (Ho & Law, 2012). At the same time, different types of music activities, such as plucked instruments ensemble, orchestra and chorus, have presented various areas of musical knowledge (Xu et al., 2016).

Folk music and other cultural musical instruments play a significant role in music learning for cultural inheritance. Traditional Chinese drama such as 'Beijing Opera' is introduced to Year three students. Research about ethnic music stated that teachers were oversimplified in their teaching strategies in Chinese primary schools (Pang, 2019). Pang (2019) in the article, further stated that only representative songs or instruments had been taught in compulsory education. Preservice teachers have less touch with those instruments or cultures, which leads to the inability to teach in that field (*ibid.*). That kind of imbalance in music textbooks could be

called ‘musical colonization’ or ‘Westernised’ in the Chinese music curriculum (Han & Leung, 2017).

According to the teaching content, there have also been arguments that the percentage of Chinese folk music is too low compared to Western content. Han & Leung (2017) suggested that Chinese folk music be taught properly as part of multiculturalism, especially representing the traditional Chinese culture. Teaching traditional folk music is primarily based on music appreciation, while students were less engaged in the cultural dimension. Interviewees stated that the main reason is due to the inappropriately designed textbook, as teachers heavily relied on the textbook due to fewer experiences in folk music learning (*ibid.*).

As mentioned before, methods like Kodaly or Orff have been introduced in Chinese music education since the early 80s (Guo, 2018; Leung & Xie, 2011) in order to encourage educators and teacher to educators focus on the quality of teaching. Within the complex society, the depth of learning in these theories and values for primary school students requires an expert teacher who is more familiar with the curriculum and relevant pedagogical knowledge. Teachers, as the class expert, would teach students in vocal training (Guerriero, 2014). Students at the upper stages are entering the sound-change period. Therefore, learning the correct way of using the vocal is a significant point teachers might consider cautiously. Teachers rarely taught what and how students might listen and built systematic singing strategies instead (Elliott, 2005).

School music teachers complained that they should not take full responsibility for those issues in curriculum implementation. In some research findings, the teacher presented their perspectives on the implementation of the new curriculum standards (Guo, 2018; Leung & Xie, 2011; Riley, 2013; Yu & Leung, 2019). In general, there are three main reasons for this. First, most music teachers thought they lacked professional training with the National Curriculum (Leung & Xie, 2011). Those ambitious teaching targets in the curriculum standard were somehow misleading their practices (Yu & Leung, 2019). Consequently, in-service teachers

believed that educational reform is needed in using the curriculum standards as guidance in teacher education (Leung & Xie, 2011).

Although the curriculum standard stated that the design of contexts should consider the differences between provinces, teaching music in Chinese schools was still facing the technical issue of fewer facilities (*The National Music Curriculum Standards*, 2011). Not every school has a specific music classroom containing a piano, even in urban areas. Therefore, educators agreed that the low status of music within school subjects is related to a paradox – parents feeling that this confirmed the status of music as an unimportant subject, and confirmation in school leadership that nothing would much change the status of music within the curriculum or timetable.

2.3.3 Chinese parents' impacts on music learning inside and outside of school

According to research, many Chinese parents do not value music compared with Mathematics or English in schools (Chung, 2022a). However, at the same time, and in conflict with other ideas, they treat music as an essential quality or a competitive element in this era (Chung, 2022a). Music has been researched about its functions and values in other aspects of learning and development, especially for verbal abilities (Schellenberg & Moreno, 2010). The way of evaluating a person was no longer limited by a single paper test in this generation, significantly when increasing the proportion of quality education in Chinese educational reforms. Although the official assessment system in Nine-year compulsory education is still based on written examinations, universities and some private schools are seeking more diverse approaches. Students with additional skills such as instrument playing, dancing or painting will increase the possibility of getting those school admissions (Leung & Xie, 2011). Therefore, parents are somehow addicted to forcing their children to learn piano.

Despite the lesser importance of school music from parents' views, instrument learning in China is strongly promoted by parents. Chinese parents are enthusiastic about piano learning

the chosen instruments (Huang & Thibodeaux, 2017). Interestingly, a similar fact has been reported by other societies, such as Spain (Hardcastle et al., 2017). Their enthusiasm for learning musical instruments weakens the value of school music education and indirectly leads to children's low interest in school music and confirmation that it is somehow unimportant.

However, the significant trend of learning piano has also exposed some issues in teaching. As Huang & Thibodeaux (2017) illustrated, teaching piano in China has primarily concentrated on muscle memories instead of establishing a stable system of musical knowledge that provides the basis for higher level understanding of both concepts and techniques. To increase the possibility of entering a high-quality school or university, parents attempted to shorten the learning cycle and ask the teacher to teach only those pieces for musical certificates. Besides that, society has a conventional opinion that females learning such subjects or skills will benefit from obtaining a teacher career (*ibid.)*, which has further led to the trend of learning piano at a very young age.

The discussion above refers to the main question in this thesis: whether the concept of musicality is focused on technical developments or aesthetic experiences. Under the best of circumstances, it could be collaboratively combined and developed. Concentrating on learning musicality in school education has the purpose of promoting the quality and value of music and music education in general. In addition, students can learn by personal experiences in multiple contexts, which is also worthy of their social skills as a whole (McArthur, 2002).

2.3.4 Being an official music teacher in Chinese primary schools

The following sections introduce the basic requirements of being an official music teacher in Chinese public schools and how they are trained in teacher education programs in China.

A. Teacher Qualification Examination and Recruitment

Officially, to become a schoolteacher in China, people must get a teaching certificate first. The national examination standard was established by the MoE according to the law of teachers (*KaoShi JieShao*, 2020) and operated by the provincial education administration. Meanwhile, considering the large populations, each province could add their own rules for this examination. It is important to mention that there is a type of university in China called 'Normal University' in which students enrolled before 2015 were directly qualified as formal teachers. However, with the teacher qualification modified nationally, normal university graduations are the same as those of non-normal university students who attend the examination (Gong, 2018).

The Teacher Law was published in 1994 and stated that applicants should have the appropriate academic qualifications for obtaining teacher qualifications at different stages. The proof of qualification examination applies the approval of the teaching certificate with other relevant documents (*Announcement of Written Examination for Primary and Middle School Teacher Qualification Examination*, 2019). There is no limitation on one subject qualification for different levels. However, the certificate could be only applied once per year.

The examination consists of a paper-oriented examination and interview to qualify the overall teacher's abilities (Gong, 2018). The interview is not available for the candidate who did not pass the written examination. Various questions in the paper test to examine candidates' professional ethics and psychological literacy on their teaching ability. Three examiners supervise the interview in the form of a trial lesson and relevant questions (Gong, 2018; *KaoShi JieShao*, 2020). Subjects in the written examination for primary teachers, including comprehensive quality and teaching knowledge and ability, interview focus on practical teaching ability. At the same time, another subject called 'subject knowledge' was set up for candidates who apply for the qualification at the upper level (*KaoShi JieShao*, 2020).

Debates on the national qualification examination concerned two topics—first, the quality of non-normal university students being formal teachers. Graduation from 'normal universities'

aims to serve as a formal teacher, and non-normal university students might lack professional training in teaching abilities (Gong, 2018). Researchers and scholars were also questioned about the quality of the qualification examination. The gap between the examination design and the National Curriculum standards could challenge the credibility of this evaluation system (Gong, 2018). In other words, questions would be more congruent if they were addressed similarly to the consistency of the curriculum reform and teacher qualification examination.

Schools or local governments would announce teacher recruitment information. Only if candidates approved the teacher qualification could they apply for a 'Bianzhi' teacher (a type of teacher used to work in public schools with government authorisation). District governments would publish announcements with requirements and the needed number of teachers in different subjects. It is the same as the teacher certification examination, a paper test including fundamental education theories with subjects' knowledge, pedagogy, and psychology theories. According to the corresponding proportion of the actual job recruitment, candidates interviewed for high-to-low scores in written examinations for the same position. The purpose of the interview is similar to that of the teacher certification examination, focusing on 60% of classroom teaching assessment and 40% of comprehensive knowledge. 7-day inspection publicity is a critical step for all candidates. Information, such as candidates' scores, would be announced around the months' probation period for schools to examine their teaching abilities.

Beyond the pure expectation of being a valued and high quality teacher, people are attracted by the steady working environment (Liu & Onwuegbuzie, 2014). The fixed holidays and salary were the additional bonus of this movement within China, and despite the competition, the teaching profession, compared to other occupations, is still valued in Chinese society. However, in-service teachers did not ultimately agree with this statement. Therefore, researchers started to focus on job satisfaction and investigated the relevant factors.

Sargent & Hannum (2005) summarised several factors of job dissatisfaction, including heavy workload with mismatching wages, fewer opportunities for promotion, the cohesion of teaching requirements and professional training. The status quo of a teacher closely influences those factors. A Chinese formal teacher's salary is in the form of two parts. In detail, the fundamental part was based on a teacher's position title and their performances made the extra payment (Cai et al., 2018). Teaching quality will influence the teacher's salary and opportunities to be promoted. In contrast, the 'teaching quality' could only refer to student's performances or final scores (Hongying, 2007; Liu & Onwuegbuzie, 2014). Therefore, in-service teachers complained that the results could not effectively evaluate their efforts (*ibid.*).

A Chinese primary school teacher is expected to work more than 10 hours in one day (Tang, 2020). The teacher might need extra working hours to consider the various learning needs of such a large class, specifically when lacking parental support (Liu & Onwuegbuzie, 2014; Tang, 2020). Some scholars and policymakers suggested that to reduce the number of students in one class (Tang, 2020). In consideration of the large population and the current policy of the second child in a family, this might not be substantially solving this problem. Therefore, it is worth exploring how it could improve the efficiency and quality of teaching in a large class.

Students' test scores would not naturally be improved only by a teacher's efforts; those extra tutorials filled even teachers' holidays. However, society has arguably been too critical of teachers' values, as society viewed teachers as being selfless and contributing to their students without thinking of their own development (Liu & Onwuegbuzie, 2014). From the teachers' perspective, they pointed out that an incomplete understanding of the changing educational reforms had blocked them from implementing the teaching context (*ibid.*). As mentioned before, relevant, and professional teacher training is essential; thus, it is essential to explore how preservice teachers were trained at a Chinese university.

B. Music Teacher Education in Chinese Universities

Teachers take the centre of implementing the curriculum standard in practice. Less than half of official teachers in China had a bachelor's degree or higher levels in 2010 (Han, 2012). To some extent, their practices have reflected the effectiveness of the policy designs and the relevance of the teacher education program (Fischetti & Lynch, 2018; Groulx, 2016). It was not about simply defining the quality of a 'good' teacher by subject-relevant knowledge but by evaluating a series of relevant skills and knowledge (Han, 2012). Their understanding of the curriculum documents decided the students' academic performance and lifelong skills learning, especially under the concept of globalization in this era (*ibid.*).

Most importantly, Chinese educators and in-service teachers would arguably be better prepared if they realised the practical issues of program training and curriculum implementation (Paine & Fang, 2006; Xu, 2009). The following paragraphs will adopt the two themes from the theoretical framework of pedagogical content knowledge by Turner-Bisset (1999) to analyse the efficacy of Chinese music teacher education and its practices in schools.

Subject-Relevant knowledge

Subject-relevant knowledge includes '*Substantive knowledge*', '*Syntactical knowledge*' and '*Beliefs about the subject*' (Turner-Bisset, 1999, p. 43). These three are the basic components of the teaching requirements. In the Chinese education context, it can be understood as the musical knowledge that pre-service teachers have also learned in the university, including music theory, and instrumental play. Teachers are supposed to create a learning environment and manage the appropriate teaching strategies with the materials (Xu, 2009). It is interesting to explore how Chinese preservice teachers have been trained in universities or colleges.

Courses designed in normal and comprehensive universities for training in-service teachers contain subject-relevant courses and other political courses (Zhou, 2014). Music major students ideally would take instrumental, vocal training, and music theory modules. As a subject-centred teacher education, those courses took more than 50% of the program design. The rest was taken by 30% of the general course, such as English or computer science (*ibid.*).

On the other hand, those pedagogical and practical courses could be even lower than 10% in a four-year program (*ibid.*).

As discussed in the previous sections, the issue of a low proportion of Chinese folk music content is also apparent in Chinese music teacher education. In general, traditional Chinese instruments are not compulsory, as well as piano in most music major programs. Student-teachers majoring in traditional Chinese instruments might be less competitive than other piano majors (Han & Leung, 2017). With fewer professions in that field, the Chinese cultural consensus would be somehow ignored or at the least, side-lined, in the learning process.

Educators in the last Century believed that a high-quality teacher would include the detailed and rigid gain of this subject-relevant knowledge (Han, 2012). Further research stated that universities overemphasised the performance of pianos or vocals rather than teaching student-teachers how to teach those skills in primary or secondary schools (Huang & Thibodeaux, 2017). Student-teachers might be trained as a learner expert but not a teacher expert.

Knowledge of teaching and Knowledge of self

Teachers are willing to reflect on their practices and difficulties to improve teacher education, which offers them a better working environment. They believed it is important to prepare well to meld the concept of globalisation in curriculum reform (Ma et al., 2009). Despite those issues in curriculum implementation, research shows that teachers who realise the key point of changing their roles in teaching and learning are more likely to acknowledge the wider purposes and significance of their teaching (Fredriksen et al., 2023).

Teachers in a global society increasingly realise the changes in their positions in teaching. Many research studies have stated that education is now a student-centred activity; students are supposed to act as inquiry-based learners (Han, 2012; Xu, 2009; Zhou, 2014). At the same time, the teachers are aware of two roles in teaching and learning: facilitator and inquiry-

based learner. Chinese teachers have traditionally been used to deliver book knowledge and be evaluated by students' exam results. To some extent, they are unconscious of teaching in empirical research (Zhou, 2014). By contrast, they are obliged to self-reflect on their teaching process, methods, and limitations (Shim, 2008). However, it has not been reflected in teacher education programs most recently. Similar to school education, teacher educators are eager to request mode details and empirical data from pre- and in-service teachers to address the specific issues and requirements for improving teacher education.

2.4 Implementing the IBL Approach in Chinese Primary School

This section discusses the historical development of the IBL approach in the Chinese educational Context with some examples of actual practices. Specifically, it demonstrated the adaptation of this approach in Chinese primary music education and defined the gap between theory and practice.

2.4.1 How has IBL developed in China?

As the emphasis of Quality Education is to meet and attempt to fulfil individual learning needs in school education, teachers in Chinese schools in all stages have been required to explore the possibilities of developing such student-centred learning. Pedagogies are varied depending on the characteristics of different subjects and age groups. Educators and Chinese teachers have started working on certain programs that can be integrated with subject contexts in primary schools (Sargent & Hannum, 2005). For example, researchers started the investigation of how P4C could be embedded in the Chinese National Curriculum. As a practical thinking program, philosophy for children usually comes with the word 'Community of Inquiry' (Cassidy & Christie, 2013). Lipman introduced philosophical thinking with children (Lipman, 2003). This ideological use of P4C nowadays is connected with other philosophical theories, such as Dewey, Vygotsky and Piaget (Lai, 2015). In parallel, programs such as IBL have been introduced into subject teaching.

These newly high-demanding pedagogies were first introduced into China's most financially and educationally developed areas (He & Qi, 2022), based on the fact that those areas are with better education conditions. Those schools typically hold the same characteristics of better equipment, higher quality teachers and more freedom in designing their school curriculum. Such research was usually conducted in those called 'International Schools' or private schools in China (Lu & So, 2023). There is also another context where the local Chinese school works in collaboration with other schools in different countries as a 'sister school' to compare the differences and meanings of implementing the IBL approach in various educational contexts. The study was carried out with both Beijing and Netherlands mathematics teachers when implementing the IBL approach in mathematics teaching (Huang et al., 2021). This research has indicated that Chinese mathematics teachers should leave more time and space for their students' self-development, while students in the Netherlands are encouraged to develop questions for themselves. Expecting those external factors, school culture, or in other words, school philosophy, to lead to the promotion of the IBL approach with subject learning (Kamath & White, 2023) is a critical issue at this point within musical education in China.

Research and examples support that such activity-based learning design is beneficial to the Chinese educational context (Zhang & Leung, 2023). Gao & Wang (2014) conducted research about applying the IBL in the Chinese chemistry classroom. Their exploration concludes that transferring the learning centre to students is a great change; this would not be achieved without collaboration between all chemistry teachers in the group and the school's support. The interviewee comments that she had no experience in such an approach in her teacher education, and that caused an extreme worry about failure in classroom management in teaching. Internationally, empirical research has proved that applying IBL in science learning can also be operated within countries (Spires et al., 2018). Teachers in scientific subjects are satisfied with the outcomes of implementing IBL and state that those learning outcomes not only work for the school education but also can have a long-term impact on students' science learning and even contribute to the whole society's view on the subject (Nuangchalerm, 2014).

Considering the second feature of the IBL approach to the historical development in the Chinese education system is that the practical and experimental characteristics of those scientific subjects are implied with the problem-solving skills that can be developed through the inquiry (Wu et al., 2021). Although the history of the IBL approach in the Chinese educational field was not as traditional as other pedagogy, most of the research conducted during this thesis investigation from 2019 to 2023 was mainly in implementing the IBL approach in Chinese scientific subject learning.

In the same vein, students within the scientific inquiry are tasked to investigate and mostly be responsible for answering classroom inquiry, simultaneously explaining concepts and skills to others in the groups. During such highly concentrated engagement, students are believed to develop their enjoyment of professional skills and language skills in expressing and communicating (Ulker & Ali, 2023). This is because this learning process also considers the step of generating assumptions or hypotheses based on that inquiry or question, designing the appropriate experiments to test, analyse and interpret the data and concluding with a solid, convincing result (Sun et al., 2022). Other voices support this opinion and state that students are trained as active learners through this pedagogy (Şensoy & Güneş, 2023). Students are given sufficient chances to enjoy the challenge of exploring their inquiries, in which their problem-solving skills and self-efficacy are developed in invisible and potentials (Shroat-Lewis & Hage, 2021).

After the benefits of adopting the IBL approach in school education are confirmed, the academic field is then further questioned about the applicable scope in relation to the student's age in the education system. Kamath & White (2023) examine the feasibility of implementing IBL in Australia and doubt the tensions on such implementation in secondary school biology teaching and its relationship between those tensions and the original teaching content. As they introduce that the word 'tension' is used to describe an equal, objective perspective, believing that tension viewed from the teachers' perspectives is strongly

associated with opportunities for students' learning (Kamath & White, 2023). In other words, the significance of this adoption has been valued by researchers and further researched by many disciplines and educational levels. For example, Tian et al. (2022) conducted their research on implementing the IBL approach at an undergraduate level.

It now seems that the IBL approach is more suitable for upper-level learners. However, the third feature of implementing the IBL approach in the Chinese education context is argued that this approach should be inclusive to all age groups of students, no matter what subject is involved. Studies addressing the possibility of adopting the IBL approach in teaching Chinese scientific education can be found from the primary school level to the high school level. A study examined by Amin et al. (2022) reveals the result of students' success and firmly suggests that learning the STEM approach in primary science education is feasible. Shroat-Lewis & Hage (2021) explain in their research that utilising the IBL approach, especially in relation to lab use, might cause unsuccessful learning within students' scientific inquiry. This would further contribute to, first, fewer experimental explorations in designing the lower-grade students' inquiries, which, to some extent, is against the principles of the IBL approach. Second, it can somehow limit students' confidence in learning the scientific subjects and doing the inquiry simply because the students believe that they are not 'professional scientists'. Identities in students' learning in school education are significant in all subjects, like the question about students' musician identity mentioned before in section 2.2.1 (p. 29-32).

Besides that, referring to the inequality of regions' developments and school differences, researchers pointed out that the IBL approach is supposed to be equal to all schools within the education system, and that guidance for implementing the IBL approach varies depending on the school conditions and needs of teachers (Aditomo & Klieme, 2020).

So, it is suggested that a more careful and considered implementation of the IBL approach in school education requires a comprehensive consideration of the subject curriculum with its target age groups, a supporting system that involves all parties in the school education field

and a preliminary plan of professional development for teachers before the implementation (Kamath & White, 2023). The focus of implementing the IBL approach is then transferred to the teachers, and the fundamentals of this adoption are then the form and details of that inquiry. It is this that occupies a significant portion of this thesis.

The discussion on the form of inquiry in learning in the IBL approach is around open inquiry or guided inquiry. In some cases, the topic of an open inquiry can be determined by students without limitation of time and content in interests under the subject discipline and within such a level of openness, teachers work as complete facilitators in guiding and assisting the exploration (Şensoy & Güneş, 2023). In parallel, teachers can view themselves as complete observers to record how students act within that inquiry (Costes-Onishi & Kwek, 2022). It is agreed that the first step in implementing IBL is to fully educate teachers about its philosophy and theory (He & Qi, 2022; Zhang et al., 2023). Findings revealed by Aditomo & Klieme (2020) prove that guided inquiry tended to have a positive association with students' learning outcomes while independent or open inquiry did not. The rationale behind this might be that students are turned into active learners developing their cognitions and other learning abilities with property teachers' guidance (Aditomo & Klieme, 2020; Teig et al., 2019).

A study taken by Sun et al. (2022) addresses the differences and relationships between the various forms of inquiry and student learning outcomes concerning the external learning environment. Their suggestions post that individual learning needs and corresponding professional guidance would be an important factor in implementing the IBL approach in future education. And this customised idea in the design of the IBL approach in learning in general has been supported. Due to the impact of COVID-19, much research has focused on online learning and developed multiple relevant apps to assist learning. Interestingly, the app for implementing the IBL approach in teaching science has also been developed, and researchers have addressed the review and implications of that app for this new learning trend (Liu et al., 2021). However, the mainstream teaching mode is primarily in class and in person since the pandemic. Thus, the consideration of implementing the IBL approach in school

education remains central to how teachers can conduct the appropriate inquiry in combining the subject contents and encouraging students' engagement (Pilten et al., 2021).

Teachers' self-efficacy, duration, and the frequency of implementation, in general, can be critical factors in influencing the effect and quality of the IBL approach in school education. Typically, the low self-efficacy and limited time for preparation and operation would heavily reduce teachers' confidence in such implementation in the classroom, and then, the frequency of the IBL approach would be potentially avoided by teachers (Teig et al., 2019). The participating teachers in the research conducted by Gao & Wang (2014) explained that the IBL approach was not taught as a pedagogy in their teacher education and without professional training in their teacher career. Empirical evidence shows that the implementation of this approach can be innately successful if the philosophy of IBL is integrated with the National Curriculum (Yang et al., 2019). Therefore, the appropriate adjustments should be considered when implementing the approach in actual teaching (You, 2019). The most significant point in classroom implementation is how teachers may creatively engage with original teaching contents and materials and, through that learning, build up students' joy and convince their ability to do such higher-order thinking or skills (Shroat-Lewis & Hage, 2021). If this can be achieved, the focus and modification of how the IBL approach can be integrated with the National Curriculum has potentially transferred to the school and political level of education.

To some extent, it is not only the responsibility of one teacher, but also the school community should all be involved. The participating chemistry teacher in Gao & Wang's research (2014) argued that the final achievement of implementing the IBL approach in the classroom cannot be separated from her colleague's support. The success of this pedagogy reflects a transformation of individual working mode to an interactive, collaborative group mode. Even the work of continuously reading and reviewing the National Curriculum was not done by an individual teacher but instead by a 'research group' within this community (Gao & Wang, 2014).

The metacognition design and the philosophical approach of IBL can be learnt through pre- and in-service teacher training in advance before official implementation (Pilten et al., 2021). Issues exposed in those IBL studies in the academic field reflect either students' intentions of inquiry skills or teachers' needs for professional development (Tian et al., 2022). In other words, such teacher training offers an important test site that can significantly allow any practical faults to be fixed and improved before teaching in school education. For example, in relation to the in-service teacher's feedback from Gao & Wang (2014), an advanced level of classroom management is also an important teaching ability that should be listed in teaching training for implementing the IBL approach in school education (Lu & So, 2023).

Indeed, in-service teachers reported that they personally felt a significant improvement in their STEM-based inquiry skills during the enhancement of subject content knowledge in teacher training, and correspondingly, they highlighted the outcome of promoting collaborative classroom management in the teaching process (Ong et al., 2020). Kamath & White (2023) further support this argument and state that teachers' professional qualities in implementing the pedagogy are the key to promoting the effectiveness of the IBL in the classroom in general and the scaffold of the design and assessment of that inquiry. The attractiveness of that inquiry might be the key factor that may maintain students' strong curiosity about the content in balancing with their self-control abilities and avoiding being distracted when learning, especially for young learners (Wu et al., 2021). For example, assessing students' scientific skills in scores might not entirely harm students' confidence in learning; instead, multiple dimensions of that score assessment can be a cheerful basis on which to celebrate students' achievements in learning advanced knowledge and skills (Shroat-Lewis & Hage, 2021). Therefore, guided inquiry in the Chinese education context is significantly valued and suggested to apply in school education (Costes-Onishi & Kwek, 2022). With the proper amount of teachers' instructions, students can largely establish their confidence in that relevant inquiry, which might implicitly contribute to their subject knowledge learning (Shroat-Lewis & Hage, 2021).

2.4.2 Inquiry-Based Learning approach taught in musical contexts

It is apparently beneficial for both teachers and students in the implementation of the IBL approach when the teachers are well-trained and support their students due to the direct reactions and reflections from students during the IBL. However, the time for preparation in an individual class has been ignored by some researchers, while in-service teachers still positively viewed this issue in that they believed the time consumed in preparation could be gradually reduced when they are experienced and trained (Ulker & Ali, 2023).

In summary, the history and development of the IBL as a pedagogy in Chinese education has several features:

a) Researchers have confirmed the possibility of implementing the IBL in Chinese school education.
b) This pedagogy is firstly and widely developed in well-developed areas and schools in high quality or better conditions, such as international schools or private schools.
c) Further studies address the scope of that pedagogy that could be applied to all school-aged students.
d) Within the Chinese education context, it would be beneficial if the inquiry is designed to integrate with the Chinese National Curriculum guidance. Therefore, the guided or structured inquiry would be more suitable in Chinese schools.
e) Teachers' self-efficacy and professional development are the key components of the effectiveness of the IBL approach.
f) But it does not mean all efforts only remain at the teachers' level. School culture and possible peer support or community play a critical role in implementing the IBL in the classroom.
g) However, the issue of time consumption for teaching preparation is an important barrier that might affect the quality of that inquiry implementation.

Researchers believe that such IBL can provide extra opportunities for expressing students' emotions and performing creative works in music (Barrett, 2005). Although it is globally instructed in schools, the examples of implementing this approach in music education are quite limited. As in-service teachers reported, difficulties in Chinese educational settings prevent the possibility of implementing such a student-centred learning pattern. In detail, these difficulties are inclusive but not limited to large class sizes, insufficient support, and the disappointing status of music subjects in school timetables (Zhang & Leung, 2023).

Most of the empirical research to which reference can be made occurs in specific music teaching environments or with certain teaching materials. For example, Younker & Bracken (2015) utilised the sound of birds as the main teaching content in the inquiry lesson plan, asking students to explore the connection between aural experiences and the nature of birds. It is a detailed example of implementing IBL in music, but it is not targeted at music learning. This research constructs the inquiry based on two subjects in both science and music. Although the inquiry was successfully assessed by professionals and confirmed the achievements made by students, it is hard to separate and address certain improvements in music learning from that study. Thus, how IBL can be beneficial to music education and students' musicality might not be the solid evidence for Chinese primary music education.

Interesting to point out here is that many studies about the implementation of the IBL in Chinese scientific education mentioned in section 2.4.1 were adopted the experimental design in their research. This is not problematic in the academic research field, but it might not have reference significance in the school education practices in music teaching in considering the possibility of adopting that pedagogy. Wang & Guo (2021) then explained that such research design with detailed observations could provide insight into students' behaviours through the inquiry and short-term learning outcomes, which might be transferred into long-term skills could be assumed either. However, those long-term skills could not be evaluated in post-tests, which may have caused the issue of incoherence in further research or longitudinal studies (Wang & Guo, 2021).

To support this, Ong et al. (2020) conclude that the participants selected in the study are not representative enough; in particular, the research design does not consider the comparison group, which largely affected the generalisability of the results of implementing that pedagogy. Moreover, the basic characteristics of music and scientific disciplines rarely have similarities in the Chinese National Curriculum. It is much less onerous to explore the learning of musical knowledge or musicality in the scientific inquiry, according to the time and experiences requested in forming a personal aesthetics and further applying that to either music or scientific education (Wu et al., 2021). Simply because music learning in school education is about making music and making the meaning of that music, which is more about communicating that meaning with peers, students and teachers in the classroom learning (Costes-Onishi & Kwek, 2022), those higher-order thinking skills as a characteristic of music, suggest that critical thinking can promote the maturity of aesthetics in music appreciation activity which might not be consistent with the learner's original emotional reactions (Costes-Onishi & Kwek, 2022; Kertz-Welzel, 2008).

In this case, Kertz-Welzel (2008) doubts the level of involvement of those advanced thinking skills in the music inquiry about the tension between critical thinking and aesthetics, inquiry skills and certain artworks in music education (Costes-Onishi & Kwek, 2023). It is argued that the form and design of music inquiry might significantly influence the assessments of the student's musicality development and teachers' teaching abilities during that process. As an implementor at the early stage, it is extremely important for teachers to visibly observe those musical and thinking skill developments. Within the educational context, implementing the IBL approach is inherently considered simultaneously with the quality of students' musicality development and those intended goals are reached by students through the learning activities (Costes-Onishi & Kwek, 2023).

In response to the fundamental requirement of 'For All Students' in the Chinese education system, it is challenging but rewarding to explore the possibility of implementing IBL under

the auspices of the national music curriculum. Specifically, IBL was applied successfully in the primary music demonstration lessons (Zhang et al., 2023). Although participants were selected in a common local primary school, the criteria of implementing the IBL approach in a demonstration lesson is the most significant barrier as this is a unique type of lesson that means sufficient preparation time and multiple practices or rehearsals before official implementation. It is then limited by the research context that the details in the demonstration lesson plan cannot be reproduced and generalised in Chinese primary music teachers' everyday teaching. In the meantime, that study does not reveal details about how teachers construct and reflect on that inquiry, which places that research as an individual, small-scale research without associating it with further research or actual practices.

Based on previous literature and discussion above, discussing the details of lesson planning, lesson performance, and teachers' preparation and post-teaching reflections is necessary in the field of exploring the possibility of implementing the IBL in the Chinese primary music classroom. Most importantly, these details and examples are arguably valid and generalizable to the different contexts of Chinese music education. Therefore, this research is aimed at investigating the pedagogical practices of teaching musicality through the IBL approach in the Chinese primary music classroom.

2.4.3 Inquiry Based Learning, musicality, and the Chinese primary music teacher

As discussed earlier, in Chapter 2, China operates a nine-year compulsory education system, including six years for primary and three years for secondary school (in some regions, for example, in Shanghai, some schools offer five years for primary and four years for secondary school). The education law published in 1986 first enacted and clarified this education system. As the educational administration department of the State Council, the Ministry of Education (MoE) oversees the national education work, which includes local administrative, educational departments at all levels. Since entering the 21st Century, education has gradually shifted to a comprehensive universal 'Quality' education. After the first two decades, education reform

has begun to explore and consolidate the necessary lifelong skills for students in this generation and integrate them with the National Curriculum. Wrahatnolo & Munoto (2018) asserted that education nowadays should ensure our students have sufficient knowledge and skills base to meet the challenges of their future lives. Numerous studies have concluded that educators are supposed to provide at least the following skills in the learning process:

a) Thinking skills: Critical Thinking and Creative Thinking (Deng et al., 2020; Kivunja, 2014; Rotherham & Willingham, 2010; Wright & Lee, 2014)
b) Problem Solving (Kivunja, 2014; Wrahatnolo & Munoto, 2018)
c) Collaboration (Beswick & Fraser, 2019; Kereluik et al., 2013)
d) Communication and Teamwork (Beswick & Fraser, 2019; Kivunja, 2014)

21st Century skills are related to the aims of the Chinese curriculum reform as it provides a holistic conceptual understanding of what kind of citizens are being developed (Guan & Meng, 2007) and emphasise knowledge-based skills (Dello-Iacovo, 2009). Developing 21st Century learning also requires collaboration with the source of curriculum authority, as well as the teachers and students (Wrahatnolo & Munoto, 2018). As the main implementers of educational reform in practice, teachers' perceptions of 21st Century learning will directly influence the learning outcomes (Sang et al., 2018). Teachers, thus, are particularly important in all educational endeavours within the domain of curriculum studies. Subsequently, relevant studies have been conducted to explore the possibilities and properties of particular methods, such as game-based, project-based or IBL, in teaching those skills (Dai et al., 2011; Deng et al., 2020).

The concept of 21st Century skills is incorporated into the design of the subject-matter curriculum in the Chinese National Curriculum and strengthens those life-long learning through domain knowledge (Guan & Meng, 2007). Science, for example, is the only subject in compulsory education that completed a new adaptation of the National Curriculum in 2017 and proposes the aims for 'science-related competencies, information literacy and inquiry' in its core components of 'Learning to learn' and 'Practice, creativity and innovation' (Wang et

al., 2018, p. 2082). In terms of the discipline of music, musicality refers to the pedagogical objectives associated with the integration of 21st Century skills in the National Curriculum. Students are expected to acquire the basic domain knowledge in music to nurture interests and positive attitudes in learning music through creative events (Yu & Leung, 2019).

IBL in this study is presented as a learner-centered, participatory and high contextualised pedagogic strategy with a focus on the decisions and actions of the teacher that privilege structure, creativity and the development of individual skills and knowledge. In addition, it is arguably related to a different way of conceiving the curriculum, that in this thesis, is related to questions of quality and of different, possibly more demanding, standards of pedagogy and curriculum for teachers and pupils alike. For the last two decades, China has explicitly asserted the centrality of the concept of quality within its compulsory education system, and in parallel, aesthetics in all arts-related subject education. However, the research demonstrates that such movements require deep and sustained structural change for teachers and schools alike, and yet such change has been piecemeal and frequently subverted by other subjects' importance in school curriculums, as well as the need to appear to be successful in other ways, most notably through the validation of examination results, parental pressure, and district achievements.

Musicality can be interpreted as musical awareness (Toropova et al., 2016) and sensitivity to music expressions (Khalass et al., 2019) and is frequently regarded as the basis of all musical experience and activities, such as sight-reading, listening in music and performance (Levitin, 2012). Musicality can be conceptualised as the nuance and detail that make a performance sound like music rather than a technical execution of sounds, so elevating a succession of notes to 'music' (Roholt, 2010). Levitin (2012, p. 637) argued that 'musicality is polymorphic' that requires the combination with emotions, cognition, and perceptions in musical events. Most listeners can hear the difference between a performance that is musical and one that is not even if they cannot articulate why they are different (Roholt, 2010). For example, the audience may perceive the brightness and shadiness of a chord but not necessarily identify

the major and minor keys of the chord (*ibid.*). Debates in the field of psychology, cognition and music education are about whether children are born with an innate musicality (Fawcett, 2012; O'flynn, 2005). Musical intelligence tests, in the meantime, are designed for music educators and teachers to assist students in gaining the maximum benefit from music education (Hallam & Prince, 2003). The evaluation criteria typically include the component of music domain knowledge, such as sound, rhythm, musical memory (Hallam & Prince, 2003; Khalass et al., 2019; Toropova et al., 2016).

Essentially, musicality may be developed through education. In the context of 21st Century education, musicality has its own framework to teach in school in diverse international contexts. What is common to many curricula, is the notion that students should have the ability to appreciate music and, in certain circumstances, to create some music independently (Shuler, 2011). Alternatively, they are expected to evaluate the composed music's quality and improve it at an upper stage of learning (*ibid.*). It can be noted that the perception of aesthetic, sensitivity and creativity of music education is increasingly important in the last decade. For example, Spain has introduced three components in the national music curriculum: listening, performance and creativity (Mills et al., 2006). The Swedish music curriculum requires students to have the ability to understand, perform and create musical works (Garvis et al., 2017). Similarly, the Australian music curriculum requires students to acquire an independent musical aesthetic ability to appreciate and respect music through music learning (*ibid.*). In addition, there is research that specifically identifies students' needs for music appreciation skills and corresponding teacher competency training (Rosa-Napal et al., 2021).

Music is conceived as another verbally communicative tool (Lawson, 2020). Studies in this field turned the focus on the impact of music on interdisciplinary. For instance, scholarship in the field of music argued against easing mathematics anxiety (Feng et al., 2014), music as an intervention for STEM classes is said to enhance creativity within STEM design processes (Hamilton et al., 2018) or enrich the pedagogical practices for teaching school mathematics (An & Tillman, 2015). Similar studies have been conducted in the context of China, such as

using Chinese folk music to boost thinking skills in learning mathematics (Wang & Luo, 2021), engaging pop music with the enhancement of learning beliefs in mathematics (An et al., 2008). Correspondingly, research in China was also conducted in the field of music and language learning in both Chinese and English (Davis & Fan, 2016; Guo et al., 2021).

However, this exposes the issue that music is frequently not studied in very early years education as the primary discipline in research. There are research gaps in the study of preschool and school-age children in learning musicality in a Western context (Blackburn, 2016). Yang et al. (2021) also systematically reviewed the largest database CNKI in China from 2007 to 2019; most importantly, most of the research in this database was conceptual studies rather than disciplinary and curriculum studies. Results show that research during this period typically focused on curriculum reform and aesthetic education (*ibid.*, p. 242) rather than the substantive and conceptual nature of the curriculum itself. They (2021) pointed out that the different understanding of 'music educational research is the main reason. Indeed, Chinese school teachers are not used to conducting educational research that cause the lack of empirical data in the field. Therefore, it is important to collect such data for solving the 'real-world issues' in pedagogical practices in the Chinese context (Yang et al., 2021).

Once the purpose of the study is clearly defined as to develop a possible teaching mode of adopting IBL in teaching musicality in the Chinese primary music education, the next step to consider is what research perspective to adopt. While some research suggests that musicality is an innate ability, others argue that it can be developed relatively fully through systematic study (Marcus, 2012). That also means that the role of the teacher in this process is very important in attending to these different pictures of what musicality may be. Musicality is not a totally brand-new concept in this era; however, the teaching strategy taken by teachers has not correspondingly changed in parallel (Rotherham & Willingham, 2010). Arguably, and this thesis pursues this idea, students would benefit from a student-centred approach in learning musicality. However, teachers without sufficient support rarely consider this approach in actual teaching (Rotherham & Willingham, 2010; Shuler, 2011).

The teacher may facilitate students in an active, collaborative, and creative learning environment by taking IBL (Bruder & Prescott, 2013). Musicality will then potentially develop through that progression when space is given to students for experiencing and constructing (Shuler, 2011). It was developed in Western education and then brought into Chinese science education at first (Huang et al., 2021). When sufficient background knowledge is given, students are expected to explore the questions and answers to be researched on their own (Abaniel, 2021). However, this does not fully apply to the current Chinese primary music education as the domain knowledge are also required by the National Curriculum in parallel. Chinese teachers are concerned that students who are used to lecture-styled learning could be overwhelmed by the process (Dai et al., 2011). Therefore, the 'openness level of inquiry' should be carefully considered in the research design (Yang et al., 2019, p. 829). A key focus in adopting the IBL approach is integrating it with traditional teaching methods to achieve the transfer of subject knowledge and the development of musicality. In addition, it is appropriate to consider the IBL approach in Chinese primary music classes as teachers do not have the pressure to deal with entrance exams at that stage. Music teachers, therefore, could also develop their practice toward fostering lifelong skills in students' learning (Dai et al., 2011). I would then explore whether the adoption of IBL within the Chinese music curriculum might help with teachers' self-reflection on pedagogical practice as well as the long-term development of students' musicality.

In view of the research literature, several conceptual and practical gaps emerged that suggest the need for further and new investigations. Research suggests that young children bring rich musical experiences with them into primary school, and so teaching should begin by exploring what pupils can do and consequently extending their understanding and practice through inquiry. Yet there is scarce research into teachers' pedagogic practice that explores musicality in this way within the primary music curriculum and particularly within a setting in which external curriculum reform is a significant structural factor impacting teachers' practices. In addition, there is a paucity of research that exposes the possibilities for teachers to critically

expand their practices according to changes within the curriculum, and in addition, how music education is viewed currently by many teachers, parents, and pupils alike. But most importantly, there has been very little rigorous and rich research as the potential of an active and participatory pedagogy to bridge the gap between teachers' intentions to include and expand children's abilities in music, and at the same time, observe these and evaluate them in a series of innovations within the primary classroom. There is therefore a pressing need to find out about how musicality may be fostered in a complex curriculum context of external pressure, the cultivation of aesthetics, and the internal decision making and tensions within teachers' experiences.

Teaching musicality within the Chinese primary music education content has some specific issues from the teachers' perspectives. It was summarised in a National Curriculum review, of which one point is very noteworthy:

'*Teachers are overemphasising the format of operating an 'exploratory' classroom. For example, the excessive introduction of other art forms makes music lose its central position in classroom teaching* (Wang et al., 2012. p. 5).'

In other words, teaching methods are either too formal or too generalised to be effectively compatible with traditional teaching in terms of musical ideas and concepts. The involvements of some new pedagogies, such as IBL are only placed in the structure of teacher development as an experiment in research rather than long-term, practical approaches in daily learning (See more details and examples discussed in Section 2.4.1. p. 60-66). Therefore, it is important to explore a possible pattern for teaching musicality in Chinese primary music classes.

This study is concerned with innovatory pedagogy within music and explores Inquiry-Based Learning as an approach that has already been introduced into the Chinese curriculum, but not within the context of this study, namely, that it is used to develop and explore elements of creativity as well as cognition, incorporating Musicality, within the Chinese primary music curriculum. As such, this thesis defines musicality as a domain-specific skill encompassing

aesthetics, sensitivity, and creativity in school music learning. This study therefore explores the possibilities of adopting Inquiry-Based Learning as an approach to primary school music learning and in which musicality is a key concept, under the Chinese Music National Curriculum.

2.5 Conclusion

This chapter has discussed compulsory education, in particular, music education in China, compared to the international level. Further discussion addressed the national music curriculum and its reform in Chinese education history and development. Issues in the status of the music were shown in the margination of music subjects in schools. The inability to teach some designed goals emphasised gaps between the music curriculum and its implementation. In consideration of issues in current music education in China, music teachers are facing difficulties in understanding and implementing the curriculum in the classroom. Most importantly, issues caused by that gap are also reflected in teacher education in China. It implied that the National Curriculum and its reform guide the curriculum design in teacher education in school. Utilising the IBL approach in music class is to explore the possibility of teaching musicality in music and reach those expected goals in the curriculum.

Music learning has been correlated to improve cognitive abilities and intelligence (Elliott, 2005; Schellenberg & Moreno, 2010). Parents are willing to pay instrumental or vocal tuition fees. At the same time, educators started to explore the efficiency of school music lessons. Music has multiple ethnic and cultural concepts in practice, which would offer students an international view of aesthetic education. Educators have debated the mandatory requirements of being a 'high-quality' teacher (Korthagen, 2004). Under globalisation, the most important thing for a teacher is to identify their role as an education facilitator (Merryfield, 2015). Their teaching approaches and quality will reflect their understanding of social demands on music education.

Besides that, the IBL approach has also been addressed through its historical development since its first implementation in Chinese scientific education and how this pedagogy has been promoted in social science learning. This research will provide a different perspective on how music teacher deepens their understanding of curriculum standards and improve their practical issues in the classroom through the IBL approach to music.

Chapter 3. Methodology

This chapter presents the details of the whole research context and design in practice. It demonstrates the philosophical aspects of this research, including ontology, epistemology, and methodological considerations. It explains why the grounded theory combined with elements of action research was adopted in this qualitative research. A pilot study was conducted before the fieldwork to facilitate the selection of participants and sampling. It then presents the methods and sources used to collect and analyse the data, followed by the researcher's role and belief statement. It also critically provides this research's limitations, validity, reliability, transferability, and ethical considerations.

3.1 Research context

This section demonstrates how those 21st Century learning skills relate to the concept of musicality in the national music curriculum and a background introduction of the participant school in this study.

3.1.1 Teaching musicality in music National Curriculum

The national music curriculum in China aims to develop various musical perceptions through diverse musical activities. Relevant details are summarised below:

Year 1-2	a) Develop music perception b) Experience the music
Year 3-6	a) Develop the ability to appreciate music b) Develop creativity
Year 7-9	a) Develop the ability to evaluate appreciation b) Develop the cooperation and coordination skills

Table 3.1-1: Targets for each stage from the Music National Curriculum (2011)

21st Century learning has been integrated with the discipline of music itself, contributing to the specific framework for teaching musicality in China. Those 21st Century skills are regarded and classified as high order skills, combining the concepts of music knowledge and converting into musical abilities. Within the concept of musicality, Chinese primary music educators aim

for building the ability of aesthetic, sensitivity, and creativity. However, in practice, there is not a strong relationship between the theoretical framework, supporting materials and methods, resulting in a lack of understanding of pedagogical practice for many teachers, especially for teachers who worked in rural schools (Yu & Leung, 2019).

The official material utilised in music teaching in this current research context, is the music textbook. This is arguably the most obvious and important factor in this research design, that differs from other music education setting in worldwide and that contributes to a different way of thinking about music education research design. The development of textbooks is usually reviewed by the MoE and edited by people with relevant qualifications. A teacher's guidebook is correspondingly published with the textbook. Teachers have no choice about the content to teach but more freedom to develop the possibility of how creative they are to teach this stated content in practice.

The textbook used in the participant school has both simplified (numbered music notation) and stave versions. Teachers choose to use the simplified version is primarily for developing students' pitch correction (explained by the year 5 participant teachers in this study). Here is an example of the content for the textbook:

Figure 3.1-1: An Example of the Cover and Content of a Year 4 Music Textbook (Semester 2, Stave Version.)

Normally, one textbook consists of eight units for one semester. Each unit has four types of different activities, represented by children in different clothing colours, with four or five pieces of music in that unit. The final section of each unit is called 'Growing Up' and is mainly devoted to music-related extension exercises, such as melodic sight-reading.

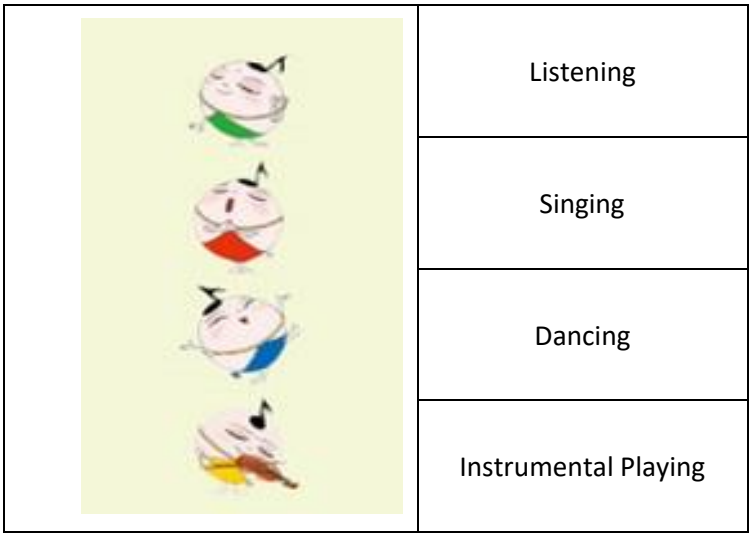


Figure 3.1-2: Characteristic and Corresponding Activities

In this research, the participant school is a primary school located in the southeast of China. Like a typical public primary school, this school offers all the National Curriculum's subjects. This school has six grades with 5 or 6 groups in each stage. In total, the school has around 1,200 students. There are four music teachers in charge of the music subject. In addition to regular music classes twice a week, there are music-related activities such as small instrument competitions, singer competitions and art festivals. Meanwhile, the school curriculum offers specific instruments tutorial for students interested in playing in an orchestra by outside school specialists.

The entire school shares two music classrooms, so not all music lessons are done in the music room. The four teachers usually must negotiate music classroom arrangements with school and curriculum leaders in advance to ensure that each grade and class have equal access to the music classrooms. Here is an example of the music classroom:

Figure 3.1-3: An Example of the Music Classroom

The music classroom includes a computer, blackboard, and multimedia equipment such as projection. In addition to the piano, the entire wall of mirrors makes this classroom also function as a rehearsal room. It is worth mentioning that there is a quote decorated on the wall at the front of the classroom, which means '*music is a 'thinking voice''*. It shows the teachers' perception of music and their expectations of their students in music learning.

3.1.2 Research design of the pilot phase and main phase

The table below presents the overall design of this research, including the phase of the study, the Methodology in design, activity in researching, methods in collecting data, research questions that the activities covers and the timescales.

Phase of the Study	Action Research or Grounded Theory	Activity	Methods	Research Questions that the Activity covers (Research Questions see p.7)	Timescale
Pilot Study	Stage 1: Action Research	Observing a music lesson	Observation	Sub-question 1&2&3	02/2021
	Stage 2: Grounded Theory	Interviewing the teachers	Interview	Sub-question 2&3&4	
Design the first lesson Plan after the Pilot Study					
Main Phase	The main phase is combined the action research and grounded theory in its methodological design.				
	Stage 1: Preparation	Generating the Lesson plan	Documentary Analysis	Sub question 1	16/03/2021-04/07/2021
	Stage 2: Action Research	Practicing in the Classroom- by the participant teacher	Observation	Sub question 1&2&3	
	Stage 3: Grounded Theory	Interviewing the teacher	Interview	Sub question 1&2&3&4	
	Stage 4: Reflection by the Researcher	Fieldnotes, Memo-writing, Coding and comparing.	Documentary Analysis	Sub question 1	
	Then, it goes back to stage 1 in the main phase. After 8 arounds of the main phase, a final interview is conducted with the participant teachers individually and an evaluation sheet is given to children.				

Table 3.1-2: Details of the Research Design

3.1.3 The research philosophy

The research philosophy comprises the researcher's ontological, epistemological, and methodological considerations. I will briefly introduce the ontology and epistemology utilised in this study first by stating how I view the world and then explain how the research is design to combine the action research and grounded theory as the main research methodology.

A. Ontology

Ontology is concerned with the nature of reality (Crotty, 1998). The nature of reality is not the objective existence, and it depends on our understanding of it (Charmaz, 2006). The researcher's philosophical understandings were reflected in their research design (Chun Tie et al., 2019). It studies the social phenomenon that calls for the researcher's personal understandings, whose biases might contribute to the inquiry (Charmaz, 2006; Kolb, 2012).

As stated in the objectives presented in section 3.1, this research explores the possibility of adopting IBL in the Chinese primary music classroom. This research is not about reporting the facts but inductively constructing the social reality meanings and interpreting to audiences (Charmaz, 2005). By observing and reflecting on the teaching, it is anticipated that interpretations will be presented as the result of this research. In other words, this inquiry does not encompass whether the IBL is acceptable for teaching musicality, but it demonstrates how IBL integrates with traditional teaching in musicality. This research is preliminary for conducting the IBL as a capable pedagogy for future music education. It is important to discuss how I reached this view of the world.

B. Epistemology

Alongside ontology, epistemology is about knowing about social reality (Crotty, 1998). It is a basis of the research methodology by claiming the data collecting and analysis process and how the theory will be constructed (Manuell & Graham, 2017). Unlike positivism's independent and objective social reality, this inquiry studies the internal world (Charmaz, 2006). It is recognised as the external reality but could only be acknowledged by the social construction (Keane, 2015). In short, the social reality is diverse. The epistemological position

in this research is based on constructivism. The construction of social reality is based on interaction. It studies participants' nature of the world and how it contributes to social reality.

This inquiry is attempted to make subjective interpretations of teaching in the Chinese primary music classroom. In this qualitative research, data are gathered from those 'designed' lessons which adopted the IBL as the pedagogical practice and were systematically analysed by coding and memo-writing. The after-session interviews are set up interactively to understand and construct the participant teachers' views of the empirical events. Thus, it aimed to construct the theoretical explanation of the adoption and implementation of the IBL in teaching Chinese primary music lessons.

C. Methodological considerations

This section demonstrates the plan for research methods and how its findings answer the research questions (Chun Tie et al., 2019). Research questions and objectives initially drive the project design. The concepts of 'music curriculum', 'pedagogical practice', and 'musicality' define the study as qualitative research. The expected data first determine how to collect them by observing the music class and interviewing the teacher. This inquiry ultimately aims to obtain an operational model for teaching musicality in the classroom combined with traditional teaching methods. Therefore, it considers the adoption of the grounded theory approach as the basic design but also utilises 'action research in practice and interactional terms. The rationale is that it explores and interprets events and interactions that happened in certain situations, and then 'raw data' were collected and analysed to form a theory (Denscombe, 2003; Wertz, 2011). In my case, it is for developing the pedagogy of teaching musicality in the traditional Chinese music classroom.

This research adopts grounded theory as the main methodology combined with some elements of action research in practice, for the reasons of the explicit nature of the practical guidelines and for the rigour theory-development. In other words, the participants will be actively involved in the practical stage while the research is responsible for building the theory based on the data. Observations and semi-structured interviews will be conducted and

compared with other documentary analyses. In the following paragraphs, I will clarify the reason for combining action research with grounded theory as this qualitative research design.

A. Adopting the Grounded Theory study

Grounded theory, originally developed by Barney Glaser and Anselm Strauss, can be defined as a methodology that collects and analyses qualitative data to construct grounded theories (Charmaz, 2006). The reality is observed and interpreted by the meaning of social interactions, and it is not used to test the hypotheses or existing theory (Cohen, 2018; Suddaby, 2006). Grounded theory inductively discovers this process and provides conceptual explanations of that human actions (Chun Tie et al., 2019; Lingard et al., 2008; Nathaniel, 2021; Sbaraini et al., 2011a; Timonen et al., 2018).

Dynamically, the grounded theory analyses constant comparisons and categories when collecting the data in parallel (Sbaraini et al., 2011). It looks forward and backwards to the data to establish the theoretical sampling (Ralph et al., 2015). Grounded theory is frequently chosen as the research methodology in social research (Kolb, 2012). Researchers believe that studies taking this methodology are started with a problematic situation in that in-service music teachers are conflicted with challenges in teaching musicality in the involvement of student-centred learning, with less knowledge being known from it (Baskerville & Pries-Heje, 1999; Manuell & Graham, 2017). The educational concepts allow the researcher to understand the research context, systematically compare and structure their findings, and raise questions in further discussions (Kolb, 2012; Pauleen & Yoong, 2015). This is the critical factor of this methodology to be considered in this research design.

Unlike the case study concerns with the external factors of that case, grounded theory understands the case deeply and constructs theory from practice. Meanwhile, the character of 'representativeness' in the grounded theory is not as important as in the case study (Denscombe, 2003). It would, therefore, allow further implementations of the constructed teaching model in my case to the same or similar conditions due to the transferability.

Data were primarily collected as qualitative and narrative data. In contrast to the classical grounded theory that 'produces abstract generalisations separate from the specific conditions of their production', the constructivist grounded theory states that data represent participants directly to influence interpretations (Bryant & Charmaz, 2007; Wertz, 2011, p.168). Constructivist grounded theory is developed from the basics of objectivist grounded theory and emphasises pragmatism (Charmaz, 2011). The researcher takes a neutral stance by taking the objective grounded theory (Keane, 2015). Researchers and participants collaboratively work together to construct the meaning in the field (Chun Tie et al., 2019). Within the iterative cycle, memo-writing, coding, categories, constant comparations, theoretical sampling emerge for the theory development (Lingard et al., 2008; Nathaniel, 2021). Details on methods, data collection and analysis are presented in sections 3.5 and 3.6 (p. 104-111).

B. Combination with Elements with Action Research: How and Why?

It is crucial to compare the plan and actual practice within the classroom setting to justify the teacher's actions and thoughts. Codes, categories, and concepts that emerged from the constant comparisons guide the plan and actions for the next step (Butler et al., 2018). Those changes in grounded theory present the different waves in theoretical sampling, whilst it leads to actions during the whole teaching. The eight lessons in the design are independent contents, chosen from each unit in that music textbook. Those lessons were designed with a specific music inquiry, defined as IBL activities or discussions. Meanwhile, they can also be seen as coherent teaching acts. The most important connection is the teacher's reflections. Another actional cycle: plan, implement and reflection were operated with the research cycle in parallel. Thus, it is considered that combing the grounded theory and action research in my research design. Here are the details of the framework:

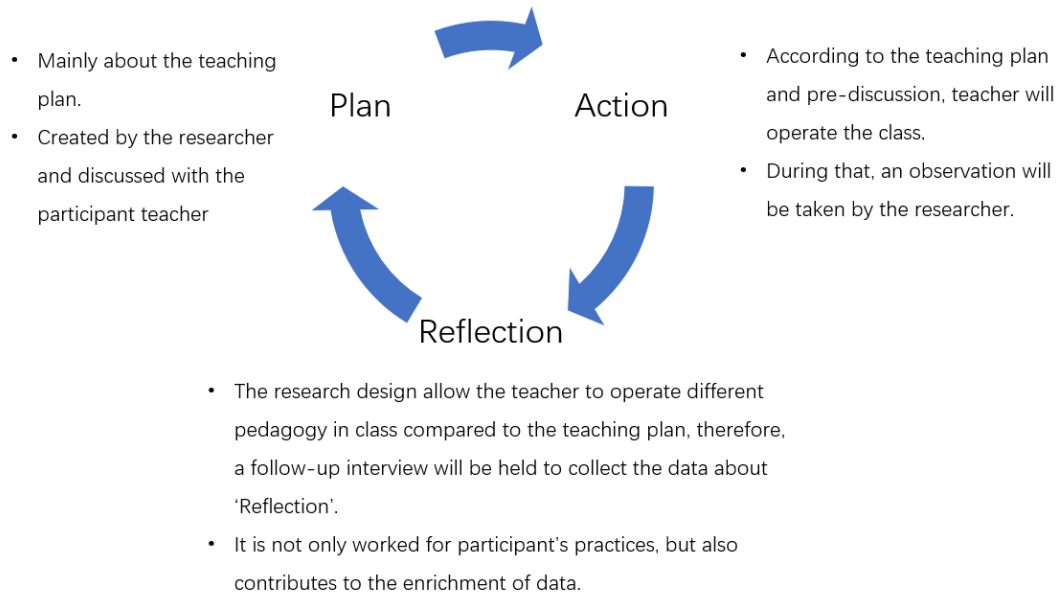


Figure 3.1-4: The Research Cycle of this Project

'Reflection' is the centre of this iterative cycle in the research design. Feedback from teachers influence both actions and interpretations of data and might minimise biases from researchers (Bytheway, 2018). In fact, the iterative cycle has happened since the implementation of the pilot study. After the pilot study, Philosophy for Children was deemed not to be suitable for teaching musicality in the Chinese classroom (See Section 3.3 for more details and explanations, p. 91-98). Then, the reflection section addressed the possibility of teaching musicality through IBL. Which further influences the next wave of data collection and final theory-building of that pedagogical model.

This actional cycle engaged in the design will allow the participants to be more active in actions. In other words, participants are part of the research team and work closely with their practices (Denscombe, 2003). However, the grounded theory still worked as the fundamental discipline in this inquiry for the following reasons:

a) Action Research is driven by the urgency of solving the practical issues in the real-world (ibid.). In comparison, grounded theory could start with an open research interest (Weidner, 2020).

Especially for research in the educational field, action research is primarily taken by practitioners. It is used to narrow the gaps between theory and acts for teacher-researcher (Kelly, 2005). However, in my case, the starting point is my personal interest based on my previous teaching experiences, in which it was not one of the most immediate and important pedagogical issues for the participant teachers to address. Most importantly, I was not engaged in the actual teaching processes with students in classrooms, so that I am not a main agent myself in the practice within this study.

b) 'Democracy' as one of the features in action research was not as important in this research design.

Problems that occur in different grade groups do not necessarily have commonalities. Therefore, the participated teacher does not work within the community but individually with me (Kelly, 2005). However, this does not mean that these issues are not linked to the process of theory formation. They will make the awareness of additional observations and further consider why the same questions arise or not in a wider variety of teaching situations.

c) Participants were not engaged in the process of theory-building.

Participated teachers are specialists in teaching music but have less knowledge about research, specially building a theory from the data in grounded theory, as they did not view the research question as a first-place problem in their teaching. However, with the action research cycle, teachers reviewed their actions compared to the plan and explained reasons. That feedback contributes to the variety of data in the final theory construction. In essence, the participated teachers do not represent the ‘theoretical sampling’ in grounded theory.

3.2 Participants

Due to the complexity of this research design, the selection of participants and theoretical sampling are discussed separately. Purposive sampling is chosen for representing a specific population in the research (Charmaz, 2006; Sbaraini et al., 2011). Participants were selected as those with the privilege of teaching knowledge in the first phase of implementing the design combining action research and grounded theory. This study took place in a typical Chinese

public primary school with two female music teachers (n=2) in eight-week teaching. One class was randomly selected in each of the fourth and fifth grades, respectively, to enrich the diversity of the sample. The procedure of choosing participants was divided into two parts. After discussing with all teachers, they argued with the aim of this research and its final design. However, they are concerned that it requires a certain level of basic knowledge, such as formal expressions and logical thinking, as it will be difficult for students at the lower stage. Therefore, as they suggest, the pilot study was randomly conducted with a Year 5 group.

After the pilot study, the participating teachers felt that upper-grade students were better suited to participate in this study for the following reasons:

a) Through 2-3 years of schooling, students in grades 3-6 have a more standardised perception of the classroom, rules, and learning. In contrast, students in grades 1-2 are still adjusting to the normative classroom learning that moves from kindergarten to the elementary level.
b) In the earlier semesters, students in the upper grades have developed awareness of learning, logical thinking, and normative expression. They can better understand and participate in such new teaching and learning.
c) If we choose to conduct the research at a lower grade, there is a high probability that the 'designed sessions' will not be carried out.

Music is a relatively 'marginal' subject given to the 6th-grade students who are pressured to enter secondary school education. The fourth and fifth-grade teachers also showed greater interest in selecting participants. Therefore, I finally decided to work with these two teachers. The participating classes were randomly chosen to maintain the generalizability of the sample. The following table summarised the essential information for participants in this study:

Group No.	Size of this group	Teaching Experience of the teacher	Relationship with this group
Year 4	45 students	12 years in primary school	Since the beginning of this academic year (From September 2020)
Year 5	44 students	First two years in high school and two years in primary school	Taught this group from their Year 4

Table 3.2-1: Basic information for Participants

3.3 The Pilot Study

Before conducting the main research, a pilot study was applied with a Y5 group. Details of the selection of participants are presented (see in section 3.6, p. 109-111). Initially, the lesson was designed as a P4C session. When Chinese education is looking for student-centred teaching in its National Curriculum, programs like P4C have been introduced. Nowadays, educators and Chinese teachers started to teach philosophy within-subject content in primary schools (Sargent & Hannum, 2005). Researchers started investigating how could P4C be embedded with the Chinese National Curriculum. This pilot study examined the possibility and potential issues in research design.

The most important reason for adopting P4C in this pilot study is that this programme directly works for the 4C (caring, collaborative, creative and critical) thinking skills (P4C China, 2020), which are matched to the aims in the National Curriculum. Besides that, the use of P4C at the primary level has the advantage that the material chosen can be more 'childlike'. Some of the content in music textbooks is story-based and appreciative, so P4C in music is a possibility to be considered. However, the results showed less possibility of doing P4C under the context of Chinese traditional music classrooms. Possible external reasons include large class sizes, limited presentation opportunities, students can easily get out of control, and extra preparation work. These factors greatly undermine teachers' confidence in P4C practices. Details of the findings are presented in the following sections.

3.3.1 Methods and Procedures

As the teacher was new to the P4C program, all music teachers in that school were offered a workshop to understand the content. Materials used in this workshop is from P4C China (2020), including inquiry plans, teaching materials and case studies as an example. During this meeting, schoolteachers have a brief understanding of the P4C programme. However, they do not have the confidence to complete a lesson plan independently. Then, a detailed teaching plan was provided by me and discussed with the Y5 teacher before the implementation of that lesson.

It is worth noting that at this stage, teachers raise the question: it is difficult to teach a music lesson exactly according to the P4C model. The strong cultural traditions potentially influenced the introduction of learning concepts in China and some other Asian countries. Asian students may see education as a mission to be completed at a certain stage rather than a lifelong one (Choy et al., 2015). It argued that student-centred teaching is contradictory to Confucianism in traditional culture (Pham Thi Hong, 2011). For example, students prefer to receive information from the teacher to avoid making their own mistakes (Choy et al., 2015), or they may prefer to work with friends in groups instead of unfamiliar classmates (Pham Thi Hong, 2011). It, therefore, is relevant that we need to modify the form in which P4C is used in the classroom. Alternatively, we kept only the philosophical questions and discussion parts of P4C in practice in response to this. At the same time, we decided to present and ask the philosophical question directly.

Methods including observation, in-depth interviews were utilised in this pilot study. As the complete observer, I took the observation sheet as a recorder whilst the video recording visually recorded the complete classroom activities. The table below shows the structure of the observation sheet. This template refers to the teachers' usual observation notes template, with additional timelines added to record the time spent on each session.

Title of today's Lesson		
Content: ◆ Teaching Objectives ◆ Method ◆ Teaching Materials		
Procedures:		
Times	Activities	Comments
XX: XX: XX		

Table 3.3-1: Template for the observation record sheet

There was a 20-minute semi-structured interview with the teacher to gain her feedback afterwards. Questions started with 'How do you comment on today's class?'. The focus was on the positive and negative effects that teachers believe the implementation of P4C has had in traditional Chinese music classrooms from this practice. Then, the follow-up question was about the teacher's suggestions on actual teaching.

All transcripts were translated from Chinese to English by me for data analysis. After the classroom observations were completed, the video recordings were played back. Some details that may have been missed in the direct observations were added to the paper observation sheets. It is also to ensure that the observation information is accurate.

3.3.2 Results

In the following section, I analysed the data from this pilot study and explained the main study's final decisions.

A. Observation

This lesson is taken from one of the appreciation pieces in Unit 4 of Grade 5 (Second Semester): "To Spring" (solo piano, Griego). The following table is the transcription for the observation class.

Time	Activities	Comments
13:35	Review the song in the last session- singing and mentioning the relevant knowledge	
13:42	Introduction to today's song: Listen to the 'To Spring' and generate THREE keywords present their thoughts when they listen. Introduce the three parts of the piece: A+B+A'.	Some of the students said immediately that this song is three parts or three themes. Thoughts 1: Students might have learnt the piece before, or they are sensitive to the way of questioning. [This might be an important point to observe in the following lessons.]
13:49	Listen again to recognise those three parts. After introducing the background of the piece and the composer, the teacher asked the question: What kind of pictures did you have when you listened to the three different parts in this piece?	it is the second time to listen, students appear inattentive and discuss when they are listening.
13:52	Time for discussion: Share the ideas in groups - 4 students per group. Students did not sit in a circle as the normal P4C session does.]	Thoughts 2 'Surprised point': The teacher did not set up an exact time stop; students naturally stopped twice for 2-3 seconds every five minutes.
14:07	Share the ideas in class: only three children have spoken their pictures.	It is hard to back to the whole class discussion. Students were not silent when they listened to others. Students do not yet have a sense of mutual respect]
14:14	Flute Practices: Do Re Mi	The teacher summary today's lesson by reviewing the piece.

Table 3.3-2: Observation Sheet for the Pilot Session

From this detailed observation sheet, it can be summarised the structure of this class:

Intro: Leading session	7 mins
Main Task for today: Appreciation (Full appreciation: twice)	10 mins
Discussion in P4C	15 mins
Sharing Ideas as a whole class group	7 mins
Flute Practice + Review the class	1 min

Table 3.3-3: Structure of This Lesson

Intuitively, traditional teaching methods and P4C are almost equally divided in terms of percentage. The teacher used a leading question during the first-time appreciation to maximise the retention of the P4C format. However, the reaction from students raised the question about teachers' questioning skills in teaching. It is clear from both the direct observation and the post-lesson observation video playback that the students were sensitive to the keyword 'three' in the question.

In addition, the "stop" during the discussion caught my attention. Students seemed to instinctively stop at the fifth- and ten-minute mark and give each other eye signals. After they realised that the teacher did not pause their discussion, they returned to the group discussion. This behaviour first indicates that the students are unfamiliar with longer discussions. Still, at the same time, their ability to return to the discussion shows that they are capable of discussing such philosophical questions. The accompanying noteworthy point is that students seem excited to express themselves during the sharing phase. It was difficult for them to remain calm while other students exchanged ideas. It was often possible to hear the students sitting below them while maintaining a constant exchange. It is contrary to the 'respect for others' in P4C.

B. Interview

Questions in this post-lesson interview were based on asking teachers to evaluate the effectiveness of the lesson. The teacher's first impression of this lesson is that it is a well-engaged class. Listening to their creative ideas is a special new experience when she gets closer to the group discussion. As she stated:

'They are talented and thoughtful, which is beyond my expectations. Their thoughts about the link between imagination and music and desire to express were surprised me. I clearly remembered the last girl who said, 'We saw a rainbow came out from the heavy rain when we reached the A' session. That description was extremely beautiful and creative.'

'I felt like I am no longer the only person responsible for this class.'

Then, she comments on the duration of the discussion that causes those 'stops'. Students were not used to having more than 3-5 minutes in the discussion. She believed that such discussion requires students' logical thinking skills, whilst students in this class mainly stated their position rather than raising supportive reasons or explanatory. In other words, students can clearly represent the "what" but can be distracted by the "why" questions. She also believes that the biggest challenge is using the time to have an effective discussion. Students are likely to talk about unrelated topics after 5 minutes; however, due to the size of the class, she, as the only teacher, cannot take care of all the group discussions.

On the negative side, the key issue she raised was that they would only spend about 5-10 minutes on this piece of music in their regular teaching – only focusing on the melody and/or the song's theme. Such a short piece for appreciation is usually taught in combination with another appreciation or singing piece. She was convinced that if the next courses were designed with this structure and content choices, the biggest problem would be the inability to complete the set teaching assignments in one semester. Also, it is a challenge for the teacher to modify their teaching in such ways. She believed that this type of more language-integrated activity is rare in traditional music classes. Still, it can be beneficial for some of the higher-order goals in the National Curriculum.

The teacher argued with the idea about questioning skills. She said they are so used to asking such strongly leading questions. According to her experience, when the teacher gives some ideas or guiding opinions on difficult questions, students unconsciously follow them completely, thus limiting their own thinking ability. It will be interesting to see how the student reacts to those unpredictable questions, which could offer much space for the development

of musicality. Then, the teacher reflected on 'respect' as it is commonly viewed as a discipline issue in the classroom. As an essential aspect of P4C, it is meaningful to observe how it improved in the process. The teacher suggests it might work if she could use a signposting word or slogan to remind students in the following lessons.

Overall, the teacher argued that 12-15 mins would be a possible duration for discussion, and the content in design would not only be limited in appreciation. She suggested that singing or musical movements could also be engaged as a warm-up game.

3.3.3 Discussion and problems

The results above show that methods in the design are capable of data collection and analysis. However, a few things need to be concerned about in relation to the research design. First, students were interested in the 'sudden appearance' of the camera. In order not to affect their concentration too much, the camera was set up at the end of the classroom and could only capture the entire classroom. Since taking notes during the observation process was necessary, it was not possible to adjust the picture structure at any time.

Most importantly, the pilot study shows less possibility in conducting P4C in Chinese primary music lessons. The original format of the P4C program is not compatible with the traditional Chinese music classroom. First, the official lesson was only 40 minutes, which cannot reach the one-hour requirement by P4C. Second, the discussion takes only 15 minutes in this pilot, and students do not already have many ideas for sharing. From the teacher's perspective, they would not generate their philosophical discussion questions even if required in the last two sessions. In this circumstance, it is hard for the teacher to implement the expected goals in that lesson if the discussion takes a major part of learning.

In response to this issue, the teachers and I attempted to propose multiple approaches. One of the most in-depth proposals we have considered is to take P4C as an extracurricular activity. Under this assumption, we could hire students from all stages interested in this project. However, this assumption has two key problems. Students have different school timetables

according to their year groups. P4C classes can be challenging to coordinate, as most students have their own after-school schedules. Besides that, students' intellectual ability and teaching pace at different stages are different. This inquiry aims to teach musicality under the National Curriculum, and it is not very worthy of utilising other sources rather than music textbooks.

Instead of doing P4C in music, I focused on implementing the IBL approach in teaching musicality and how this pedagogy could be adopted and applied in Chinese primary music teaching in balancing with the traditional teaching methods.

3.4 The Phases and Practical Stages of the Research

This grounded theory study comprises three phases: the preparatory, action, and participant-evaluation phases. Details of these three phases were presented in the following sections. The table below summarises the timeline of each activity in this study.

Contact with Participant School-Get Permission	06/2020
Writing up the Research Design Plan for Fieldwork Documents Preparations	07/2020- 12/2020
Meet up with the School Principal and Module Leader	01/2021
Writing up the Teaching Plan for Pilot Study Group Discussion with All Music Teachers	02/2021
Implement the Pilot Session	03/03/2021
Two-Weeks for Reviewing the Feasibility of the Project and Any Issues in Data Collection	
Conduct the Fieldwork with Two Different Year Groups a) Teaching Plan Provided One Week in Advance and Discussed with the participant teacher before implement. b) Video recording and observation offered for the class. c) A 10-15mins Interview will be Operated after that session. The teaching plan might be revised according to the feedback from the teacher's interview on that day's class, including: a) Feasibility of those classes' activities in actual teaching- advantages vs disadvantages b) Specific interests c) Better Ideas	16/03/2021- 17/06/2021
Final Evaluation Collected from Y5 Students (After Their Final Examination)	26/06/2021
Final Evaluation Collected from the Y5 Teacher	28/06/2021
Final Evaluation Collected from Y4 Students (After Their Final Examination)	
Final Evaluation Collected from the Y4 Teacher	04/07/2021

Table 3.4-1: Timeline of activities in this study

3.4.1 The preparatory phase

The preparatory phase occurred after the pilot study and is in preparation for the formal research. After the pilot study, I took one week to analyse the data and present it to all music teachers. We have reached a consensus on the grade level of the participants in that workshop. In addition, we have undertaken further reflection on the implementation of P4C but have also rejected some proposals. We finally argued with the implementation of IBL in music classes (details about activities in classrooms are mentioned in section 3.4.2). Participating teachers suggested that despite the pilot study, they could not manage lesson plan writing properly. Thus, I would provide the draft teaching plan every week in advance. After each lesson, the lesson plan for the next class will be revised and improved based on teachers' feedback and ideas to ensure that teachers are familiar with the lesson plan.

In terms of implementing IBL, participating teachers suggested that the format used in the pilot study was applicable. Therefore, we agreed that it would be feasible to include a 10–15 minutes topic for discussion in the next class design and place it in the last part of the class.

3.4.2 The action phase

The main stage of this study was conducted two weeks after the pilot study. There are 8 'designed' lessons for each group in one semester. It is integrated with the IBL in music activities, and the content is drawn from music textbooks. It is worth noting that in the course, we have modified how IBL is integrated so that it is no longer confined to a pure discussion but to some flexible and highly engaging classroom activities (See more details in Chapter 4, and examples in Appendix D-G, p. 300-305). The two tables below summarise the details of the teaching plan.

Title	Objectives	A Summary of Question/Activity
1.‘A May Evening' (Hungarian Folk Song)	Singing	What colour should a May night in Europe be? Why is it this colour? And how you could show that in the song?
2. Xi Feng De Hua ('Words from the West Wind')	Singing	Do you think these makers express the changes in the seasons that you imagine?
3. Jiang Nan Hao (The ensemble of traditional Chinese instruments)	Appreciation	Do you think the melodic rhythm expresses the emotion of such a piece of music? Or is it the timbre of the instruments that express the mood of the music? Why?
4. Peter and Wolf	Appreciation	Could you please draw your storyline according to the characters, instruments, and music?
5. Forest waterwheel (A Japanese song) + *Spring Sightseeing*	Appreciation Singing	What form of singing do you think is expressed in each of the two pictures below? Why does each person feel completely different when they hear the same piece of music?
6. Chen Si (Meditation).	Appreciation	When we listen to the music, could you please have some movements? Or draw the melodic lines?
7. 'Good moon, you have gone so quietly' (An Austrian folk song)	Singing	What is your point of view of the chorus? Do you like it? How can we work in collaboration?
8. Spring Excursions-Part 2 (A Typical Chinese School Song)	Singing	Listen and identify the teacher playing is F or #F? – A little game in pitch identification

Table 3.4-2: Teaching Plan for Year 4

Title	Target	A Summary of Question/Activity
1. Li Yuan Ying Xiu (A pop song contains the elements of the opera)	Singing	Do you think elements of opera are appropriate in modern pop music?
2. Symphony No. 6 in F major, Op. 68 (Beethoven)+ To Spring (Grieg)	Appreciation	Listen to the music. Could you please draw the spring in the music you heard?
3.An der schönen blauen Donau, Walzer, Op.314	Appreciation	Could you design five sessions based on the five themes of the music? And rehearse them with your group members into a mini sitcom?
4. Hi Bing Yin Shi (A violin solo, composed in 1962)	Appreciation	Could you please show on paper what you think a violin should look like based on the music?
5. Hua Gu (A traditional Chinese Drum)	Appreciation	According to the background, could you work with your group members to create some accompaniment to these four bars using the tools at hand?
6. Feng Yang Hua Gu (A traditional Chinese Folk Song)	Singing	Could you work with your group to choose a way of singing that you think shows the lively atmosphere of the piece better?
7. Lightning Bug	Singing	With your classmate, singing the chorus. Could you please make your singing beautiful and soothing?
8. Bai Niao Chao Feng (Song of the Phoenix)	Appreciation	Could you please tell or draw your storyline after listening?

Table 3.4-3: Teaching Plan for Year 5

The iterative cycle of combing action research with grounded theory (Figure 3.1-4, p. 88) was operated through this phase. Eight waves of data were collected and analysed in this phase, corresponding to the theoretical sampling. The procedure is as outlined below:

a) The drafted teaching plan provided after the Pilot study.
b) A workshop with the participating teachers to discuss that teaching plan.
c) Lesson Delivery
d) Interview with the teacher
e) Preliminary data analysis and summarisation for writing the next lesson plan.
f) The cycle restarted from step 2.

Lessons were delivered in the morning, and the interviews were operated during the teacher's lunch break. Within that period, I initially analysed the data from the observation and teaching plan. In general, keywords were grouped into structured interview questions that were used to get a direct insight into the teacher's perception. Also, those keywords and teachers' reflections guided the next teaching plan.

3.4.3 The participant-evaluation phase

After sessions were done, children were provided with an evaluation sheet to collect their perspectives on such pedagogy in music learning. Two questions were designed in students' evaluation:

a) 'Tell us about or draw a picture of the three things you found most interesting in music lessons this term?'
b) 'Could you please draw a self-portrait of yourself in music class this term?'

There were no restrictions for students to choose only those eight lessons. This helped them to compare the lessons side-by-side with other lessons that did not go through the design. The main reasons for the creation of these two questions are:

a) To listen to 'their voices' better, we were curious to see how they saw themselves in music class.

b) We can get a visual representation of what students feel during this semester.

Then, there was a structured interview with both teachers separately in gaining their thoughts, feedback, and suggestions for implementing this pedagogy in the Chinese music primary classroom. Before meeting with two participating teachers, I preliminary analysed the evaluation sheets from students and set up the following questions for the teachers:

a) Could you please tell me about the three things you found most interesting about teaching these eight lessons?
b) Then, could you please tell me about the three things you found most difficult about teaching these eight lessons?
c) If you look at it from your perspective, what are the most immediate learning outcomes that students gain?
d) How likely do you think it is that such a teaching style will be implemented in the long term?
e) What do you think is the biggest challenge for teachers to implement IBL in Chinese primary school music classrooms?
f) Do you have any further comments?

As a structured interview, I presented the results from the students' evaluation sheets to the participating teachers after the third question. By comparing similar 'most interesting' questions, teachers could have a more intuitive understanding of the students' feedback. After these interviews, all data were collected and prepared for the theory-building process.

3.5 Data Collection Techniques and Sources

Several adopted qualitative methods were discussed in the following sections in collecting data. The use of those methods in this inquiry is to understand the possibility of adopting IBL in the traditional Chinese music classroom, with the development of the teacher's pedagogical practices and children's potential musicality. Data was collected from:

a) Observation

b) Interview

c) Other Official Documents

Those methods were commonly utilised in the grounded theory studies to access detailed information (Kolb, 2012). An important point in grounded theory research is its ability to develop the theoretical ideas and concepts from the collected data in their analysis (Holton, 2007). Therefore, three revelated terms needed to be explained first.

Theoretical Sampling. As discussed in selecting participants (see section 3.2, p. 89-91), purposive sampling is to recruit informants for the initial set of data (Chun Tie et al., 2019). Then, theoretical sampling gathers further data based on the in-depth focus on concepts (Denscombe, 2003). This sampling is a unique technique in a grounded theory study to emerging concepts categories and prepared for the next set of data collection during the constant comparison (Birks & Mills, 2015; Holton, 2007). In short, theoretical sampling collects and analyses data in parallel in multiple waves of data collection to eventually emerge the theory (Glaser & Strauss, 1967). Substantively, the grounded theory research process starts with purposive sampling and is then guided by theoretical sampling (Charmaz, 2014; Glaser, 1992). In my research project, theoretical sampling represented those emergent concepts from teaching actions rather than the recruited informants (Corbin & Strauss, 2008). Those participants were mainly selected due to their meaningful characteristics, and then the emerging concepts were significantly focused (Morse, 2007).

Theoretical Sensitivity. Within the process of theoretical sampling, it is also important to understand the research situation and abstract the terms, which is called theoretical sensitivity (Charmaz, 2014). Theoretical sensitivity was continuously applied throughout the research process and determined how the researcher extracts concepts from raw data and develops them from fragmented coding to theory (Chun Tie et al., 2019; Glaser, 1992; Holton, 2007).

Theoretical Saturation. Leading by theoretical sampling and sensitivity, data collection and analysis in grounded theory research are not endless either. Theoretical saturation is the factor to decide whether to stop further data collection. In general, researchers would notice when no new things emerged (Charmaz, 2014; Glaser & Strauss, 1967). It is not simple, or a simple statement in the analysis said no emerged concepts. Instead, theoretical saturation indicates the development of categories and their attributions and connections with other concepts (Corbin & Strauss, 2008). One of the important criteria for reaching theoretical saturation is that the researcher concludes that the codes, categories, and concepts which emerge are sufficient to form a theory to encompass the research aim (*ibid.*). In short, theoretical saturation is determined by theoretical sampling and its corresponding purpose. It would certainly be questionable if a small-scale study were to raise its conclusions to all human race (Charmaz, 2014).

By illustrating the three terms above, it can be recognised that data collection and analysis are alternately cyclical in traditional GT research. However, it should be mentioned that the theoretical sample process in my study does not follow exactly the sequence: raw data - coding - categories - the new wave of data collection. The main reason is that at the action phase, it followed the iterative cycle of 'Plan-Action-Reflection' (see Figure 3.1-4, p. 88). Corbin & Strauss (2008) demonstrated that it is feasible because the researcher can take a fresh perspective on the raw data and even notice some previously neglected issues. In the following sections, each method is explained in detail.

3.5.1 Observation

Systematic observation has been widely used in the educational field, particularly in the classroom setting (Denscombe, 2003). Observation is intended to obtain the most direct and objective view of classroom behavioural activities (Webster, 2015). Educational research needs to be distinguished from conventional observational activities in teacher's development (Rozsahegyi, 2019). However, the form of observation adopted in my research was combined with the ideal observational activities in the teacher's daily work. After the pilot study, the final structure of the observation sheet was shown with the participating teaching. Compared

to the pilot study, only the procedure section was kept in the recording sheet during the in-process activities. The structure is presented below.

Time	Activities	Comments
XX: XX: XX		
XX: XX: XX		

Table 3.5-1: The Final Template of the Observation Sheet

It is a structural observation, but the design of this form allows for a degree of flexibility, particularly in the use of field notes. As a complete observer, I was not engaged in the teaching activities. To address the issue of it failing to capture specific essential characteristics within the observed objects, the section of comments offers the space for recording the timely impressions of the classroom (Cohen et al., 2018; Denscombe, 2003). Based on the duration record, data was collected in the combination of numerical and narrative data (Rozsahegyi, 2019).

Besides the observation sheet, a video recorder was held at the back of the classroom to record the entire session objectively. Therefore, the Hawthorne effect was concerned in the setting as it may affect the participant's behaviours (McCambridge et al., 2014). The study concluded that the less the disturbance to the environment, the less affected the observed person (Morse, 2007). After commissioning, the video recorder was placed on the bookshelf at the end of the classroom. It was placed in a fixed position in advance of the start of each class.

3.5.2 Interview

Interviews in this research aimed for understanding the participating teacher’s thoughts about adopting IBL in the classroom setting. The interview can unfold from a conversation to obtain the participants' specific interpretations of some concepts (Winwood, 2019). The interview is associated with a daily conversation, but it has to be distinguished that interview is guided by purposive questions or topics (Cohen et al., 2018). In my research design, both semi-

structured and structured interview was adopted. All interviews were recorded on tape for transcripts. Unlike the observation, only audio-recording was adopted in the interview.

After each lesson, semi-structured interviews were utilised to gather teachers' reflections about their teaching experiences. It has been generally considered the main data collection method in grounded theory (Denscombe, 2003). The most significant reason for using semi-structured interviews in the action phase is that this type of interview obtained more flexibility. Thus, researchers could modify the way of questioning (Birks & Mills, 2015). With the process of theoretical sampling and constant comparisons, the focus on participants and sampling might be changed, in which the questions in each interview may be different (Charmaz, 2014).

In contrast, the final interview at the evaluation stage was taken the form of a structured interview. It was followed by a list of pre-designed questions (Winwood, 2019). However, although the topics for responses in this structured interview were limited does not mean sufficient space for responses was not offered (Denscombe, 2003). Follow-up questions were applied to the final interview as well. Interviewing in a grounded theory study requires the researcher to be clear about abstracting the concepts and generating the next question (Morse, 2007).

Depending on the nature of the theoretical sample, prompts and probes were utilised in forming questions in the semi-structured interview (Cohen et al., 2018). Prompts is for ensuring the understanding of that interview questions for interviewees (*ibid.*). Then the probe question is to check the truth of that answer further and explore the participants' thoughts, including confirmatory and expansive probes (Priede et al., 2014). These two techniques were to confirm the truth of informants' responses. The questioning method mainly started from 'Could you please…?' or 'Tell me about your' to offer space for participants to respond (Corbin & Strauss, 2008).

3.5.3 Other documents

Official documents, including the national music curriculum, teaching plan, music textbooks and the teacher's guidebook, were viewed as documentary data in the research design. Those authoritative default sources provided a different perspective of teaching musicality and emphasised the expectations on teachers' pedagogical practices and children's potentials (Kolb, 2012; O'Connor, 2019). When interpreting those documents, their original intentions and those requirements in design were referenced as a comparison for practical teaching.

3.6 Data Analysis

A grounded theory study aims to construct an emergent theory based on the raw data (Corbin & Strauss, 2008). This research aimed to generate a possible model for teaching musicality by combining IBL and traditional teaching methods in Chinese primary music classrooms. Data include observations, interviews and documentary analysis, forming a triangulation (Deng et al., 2020). Codes, categories, and concepts were constructed and analysed through the NVivo 12 program. Such a computer programme allows the analysis process to be displayed in an organised manner in order to think about theoretical saturation (Morse, 2007). Graphical presentation of the coding and concepts from the constant comparison allows the researcher to visualise the analysis process and check that the analysis is complete (Lempert, 2007). Once the researcher has identified a problem, they can go back to the very first data set and analyse it again. Memo-writing is necessary for this forward and backward process (Corbin & Strauss, 2008). In summary, coding, memo-writing, and constant comparison were served as the analytical tools in this research. Details of each tool and how they engaged in this study were discussed in the following paragraphs.

3.6.1 Coding

Researchers interpret their raw data by describing them in codes. However, it reflected the researcher's thoughts and understanding rather than paraphrasing texts in short terms (Charmaz, 2014; Corbin & Strauss, 2008). Broadly speaking, initial, intermediate and theoretical coding formed the three levels of the coding system in a grounded theory (Chun

Tie et al., 2019). In the constructed grounded theory, codes are labelled by initial, focused, and theoretical coding (Birks & Mills, 2015). By coding and constantly comparing data, a certain theoretical saturation is reached before the next set of codes and comparisons are made to produce a potential core (Holton, 2007). The potential core then concentrated on focused codes for greater analysability (Charmaz, 2014). The theoretical code will then form the final theory (*ibid.*).

3.6.2 Constant comparison

The analysis tool used in the iterative process of deriving code categories and concepts is called constant comparison (Birks & Mills, 2015; Denscombe, 2003). Constant comparisons and theoretical sampling is the basis of constructing a theory in the grounded theory (Chun Tie et al., 2019; Kolb, 2012). As the analysis unfolds, the similarities and differences of different objects are compared, and different perspectives of the same object are developed (Corbin & Strauss, 2008). Another situation, known as the negative case, arises when some detailed and easily overlooked features are unfolded. Negative cases refer specifically to those incompatible with, or even contrary to, the identified codes and concepts (Charmaz, 2014). Its presence did not imply an error in the analysis and formation of the theory but rather alerted the researcher to revert to the original data for further inspection (Morse, 2007).

3.6.3 Memo-writing

In this iterative process of theoretical sampling, the researcher's reflections are valuable and important to be recorded to check against the data. Memo-writing were served as a reflective tool to track the researchers' thoughts and questions in the data collection and analysis (Chun Tie et al., 2019). Writing memos is a simple but one of the most important steps to take, especially during the preparation for those teacher's interviews (Lempert, 2007). Field notes were taken during and after the classroom observation, whilst leaving the field and writing memos was for in-depth conceptual thoughts (Corbin & Strauss, 2008). The memos written around the observation drove the process of thinking about the interview questions, whereas

the memos after interviews furthered the writing of the next lesson plan and the next wave of data collection.

Memos allowed for a brief pause in data collection and analysis (Charmaz, 2014). It is a narrative dialogue between the researcher and the data (Lempert, 2007). Memos at an early stage, to some extent, constantly stimulated the theoretical sensitivity of the researcher and refreshed existing knowledge of the data (Holton, 2007). Language and format for memo-writing could be varied and informal, as it simply needs to make the researcher's position clear (Charmaz, 2014).

3.7 Researcher's role and beliefs

The intention of this study began with my previous teaching experience in a Chinese primary school. After each lesson, I used to do post-lesson reflections, and thoughts and questions were raised in my mind about what was being taught and the methods that I and other teachers used. During that one semester of teaching, my enthusiasm for work is consumed by many external factors. External factors include the large size of a class and its contribution to the difficulty of controlling the classroom discipline, time-wasting, and some repetitive and unstimulating activities in learning singing. The most impressive thing for me was that the first-year students I taught had to complete a written paper for their final exam. I wondered whether this assessment examined the students' musicality or memory capacity. This paper only accounted for 20% of their final grade and did not primarily affect their end-of-course evaluation. However, I started to reflect on the efficiency and meaning of those music lessons delivered to my students. They were all well-engaged in the class, and they might be easily distracted or drawn in by other things. They were willing to present or answer the question. However, the space given to them was relatively limited. Indeed, this inspired me to undertake the research project to explore the flexibility of space given to students to develop their potential musicality. Most importantly, I hoped that it may provide insight into teachers' ability to teach musicality.

I acted as both facilitator and an observer during the entire research process. The role as a facilitator was mainly concerned with writing the draft teaching plan. I was involved in the subject as a complete observer for most of the time. The main aim was to reduce the impact on the behaviour and confidence of the teachers engaged in teaching. As the project progressed, the participating teachers could partially organise their teaching activities from the pre-determined lesson plans. The most apparent feature was that the participating teachers no longer confirmed the content with me as often as they can before the lesson but were more explicit in discussing what they think when planning and practising. It was honoured that the Y5 teacher used the teaching plan for lesson 4 in a competition on district lesson plan writing and won second place. The teacher commented that that lesson was the most memorable of the eight designed classes. In this regard, the grounded theory methodology design provided opportunities for looking forward and backwards on data. Thus, even the drafted teaching plan was modified to the most appropriate version at that moment.

3.8 Limitations of the research

The research has some limitations that should be demonstrated. First, the preparatory time and training for teachers are not sufficient due to the impact on international travelling since the COVID. The unexpected COVID restrictions in both China and the UK have occupied most of the time as planned in the original preparation stage. For instance, my initial plan was to hold the pilot study at the end of semester one and then reflect and discuss the findings and plans for the formal research for semester two. However, with the limited time, the pilot study and the formal study were operated within a short interval. It has eventually resulted in teachers being incapable of writing lesson plans independently throughout. Although participating teachers can gradually modify their lesson plans and even adapt them to their own circumstances in the later stage of their actual teaching process, this still affects the development of their abilities to some extent. In response, the interview questions were designed to get as much insight as possible into what they think when teaching. However, I have been positively improved my adaptability through this challenged time by preparing the necessary alternative plans for conducting research.

Besides that, the lack of time also affected the theoretical sampling in the grounded theory. It has been argued that researchers can still use theoretical sampling even if they have collected all the data, as long as the researcher remains open to treating the data. However, this could still make a difference to the data, as it would affect the design of the next lesson plan. In response, I conducted preliminary data processing after observations and interviews, including primary coding, classification, and summarisation of keywords. Through weekly meeting presentations, my supervisor and I discussed ensuring maximum consistency and visualisation of data and reducing the possibility of unexpected problems.

The third limitation was the number of informants. Even though the grounded theory study does not consider more data to be more convincing, only two teachers and one of their respective groups participated in the inquiry. Some basic features cannot be adequately compared to guarantee the transferability in qualitative research (Denscombe, 2003). However, a theoretical sampling strategy allows for diverse cases and theory generation from them. The 16 lessons provide a range of possible teaching activities and demonstrate the challenges teachers encounter when using IBL in combination with traditional teaching methods in different situations.

The participating teachers had considered and suggested that two lessons from the semester's content could be taken in sequence in all year group classes. They believe that this will better enable them to improve their teaching and even achieve perfection as it was how they prepared for an open class. I did not adopt this design in consideration of the research question about developing children's potential musicality. In fact, the same content operating in two separate classes might give the teacher a better sense of the changes in the ability to teach musicality if time were permitted.

3.9 Reliability, Validity and Transferability

In qualitative research, reliability refers to the terms of dependency, consistency and repeatability, while validity means the value effectiveness of research containing the transferability as an external validity (Cohen et al., 2018, p. 254). Reliability and validity

measurements are present throughout the entire research and in specific research methods. In the observational method, a high degree of reliability can be obtained with specific time sampling (Denscombe, 2003). The researcher was supposed to get closer to the participants and be familiar with their working environment in advance to keep the interview much more reliable (*ibid.*).

However, I decided and argued that adopting observation in the research setting would naturally affect the participant's perceptions and research findings, such as the Hawthorne effect (McCambridge et al., 2014; Rozsahegyi, 2019). Failure to inform participants that they are being observed would be an ethical concern. In addition, it was a challenge for the researcher to ensure that the participants' responses were completely truthful during the interviews (Denscombe, 2003). All transcripts were translated into English by me. An additional instrument used in the interviews was to return the original transcripts to the interviewees to ensure the authenticity of that information. Field notes and memo-writing were used as extra strategies to maintain the validity and reliability of this research.

In particular, qualitative triangulation was adopted into the research design to ensure further integrity and reliability of the findings and the interpretation of the findings (Kolb, 2012). The data collection methods of observation, interview and documentary analysis form as the methodological triangulation and increase the validity and reliability of the qualitative data (Deng et al., 2020; Denscombe, 2003).

However, it is important to note that the concept of transferability is used in a particular way within grounded qualitative study: the specificity and context of the study are thus explored within this thesis in great detail, with all aspects of the study and its design open to scrutiny (Robert, 2021). When sufficient information is provided in a grounded theory, including the geographic location or social characteristics, further research can refer to these research conditions and conduct similar studies to investigate whether similar results can be acquired, and thus maximisation of ‘transfer’ is granted to future researchers (Creswell, 2014).

3.10 Ethical Considerations

This research is guided by the British Educational Research Association (BERA, 2019), which considered several dimensions of ethical issues. Before conducting the fieldwork, this research is ethically approved by the School of Education, Communication and Language Science (ECLS) and Newcastle University. Some participants are under 18 years of age is a crucial consideration in ethics. The participant information sheet was sent to the school principal, two participating teachers and guardians of students to get permission. Two teacher-informants and guardians provided informed consent and kept their rights to withdraw this project at any time.

To ensure smooth and effective communication, I conducted several workshops with teachers, who conducted communication with parents to ensure they understood and agreed to their child's participation in the study. The information provided includes the purpose of the study, the content objects, and methods, how the data was collected, processed, and stored. I was also introduced to the students by the participating teachers before the first session began. Regarding the students being observed, they were also informed that the whole session would be video recorded (Cohen et al., 2018). The camera hidden on the bookshelf at the end of the classroom reduced the disturbance of the natural environment. In addition, participating teachers are informed of their rights to be informed, beneficial, harmless, and confidentiality of results (*ibid.*).

The participant information sheet and consent form were presented in Appendix A and B (p.292-294). In summary, the following are promised to participants:

1. All information will be stored encrypted in the device. Only the researcher will have direct access to the raw data.
2. All personal information appearing in the text will be anonymised or named with a code.
3. All data will be destroyed once the project is completed.

Chapter 4. Findings

This chapter presents the findings from three data sets: paperwork, including the 2011 version of the Chinese National Music Curriculum and associated written teaching plans, music textbooks and teachers' guidebooks; 16 video-recorded observations, and finally, 18 interviews with two-year groups with designated music teachers. Using NVivo 12, all transcripts were analysed for emergent theory and to find answers to the four research questions.

The diagram below illustrates the relationship between the concepts in the document and the various teaching content.

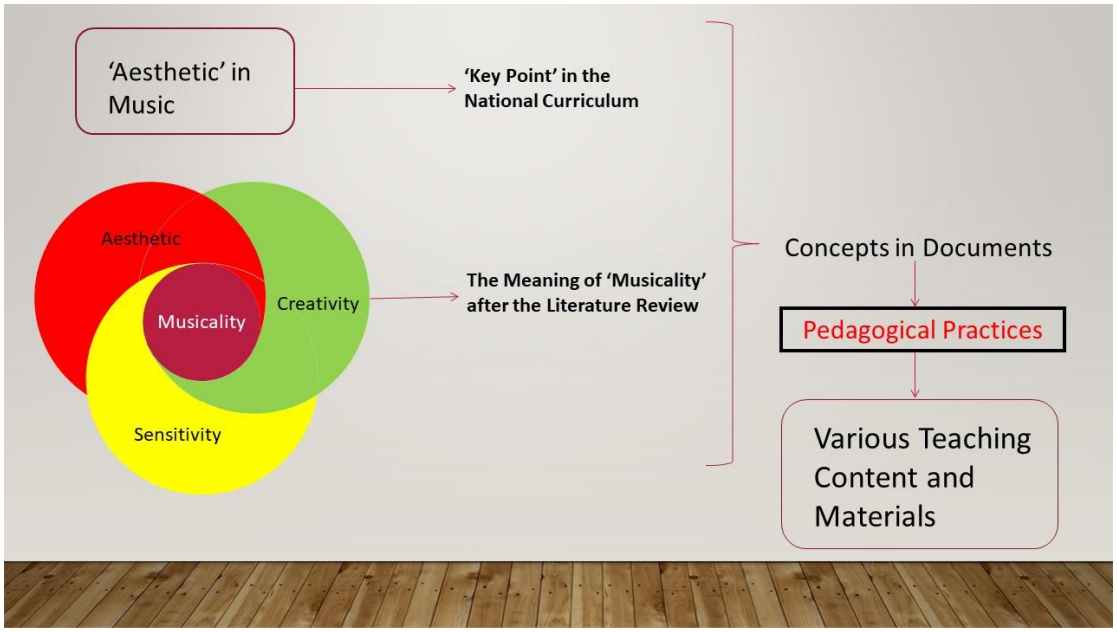


Figure 4-1: The Relationship Between Concepts in Documents and Specific Teaching Contents

Pedagogical practices translated and transformed theoretical concepts into teaching outputs through lesson plans and fieldwork. Therefore, the initial coding and focus of the coding analysis in three data sets corresponded to the research cycle of 'Plan-Action-Reflection' (See Figure 3.1-4 in the Methodology Chapter, p. 88). Then, the theoretical codes were generated from the combination of these three data sets and their focus codes to answer each sub-

research question. Ultimately, these four theoretical codes were compared to generate the theory and answer the main research question. See the table below for details.

Research Question	Research Design Elements	The Origin of the Data Sets
1. How can IBL be applied and adopted in the Chinese Primary Music Classroom?	Comparisons between the whole progress: *Plan-Action-Reflection*	1. Documentary Analysis 2. Classroom Observation 3. Teacher's Interview
2. How does this pedagogical approach impact teachers' ability to teach musicality within the Primary Curriculum?	Focus on Pedagogical Practice (*Action*) and Teachers' Feedback (*Reflection*)	1. Classroom Observation 2. Teacher's Interview
3. What are the relative impacts of this approach in enhancing musicality in Childhood?	Focus on Pedagogical Practice (*Action*) and *Self-Reflection*	1. Classroom Observation 2. Teacher's Interview
4. What are the challenges in the implementation of this pedagogy in the Chinese primary music classroom?	Focus on After-class Feedback from the Teacher's Perspectives	1. Teacher's Interview

Table 4-1: The Connection of Research Question, Methods, and Data

4.1 Analysis of the 2011 version of the National Curriculum

The analytical work started with the Chinese National Curriculum in response to presenting Chinese compulsory music education philosophy. Due to language differences, building the initial code in its original content decreased the risk of misinterpretation when analysing the data (Nes et al., 2010). The 2011 edition of the National Curriculum contains four chapters, and it can be broadly divided into two sections: an overview of music education and segment objectives in the 9yrs-compulsory education. Therefore, the coding process was primarily analysed in the overview sections to explore the philosophy of Chinese music education. Segment objectives were then used to demonstrate the expected teacher and student developments.

4.1.1 Initial coding

As a result, 95 units of text were coded through a line-by-line process. These coded texts were initially reviewed and arranged according to the original framework of the National Curriculum

to keep objectivity and reduce the essential duplication in Chinese. There were 117 initial codes translated into English. The diagram below shows initial codes that captured the framework of the National Curriculum.

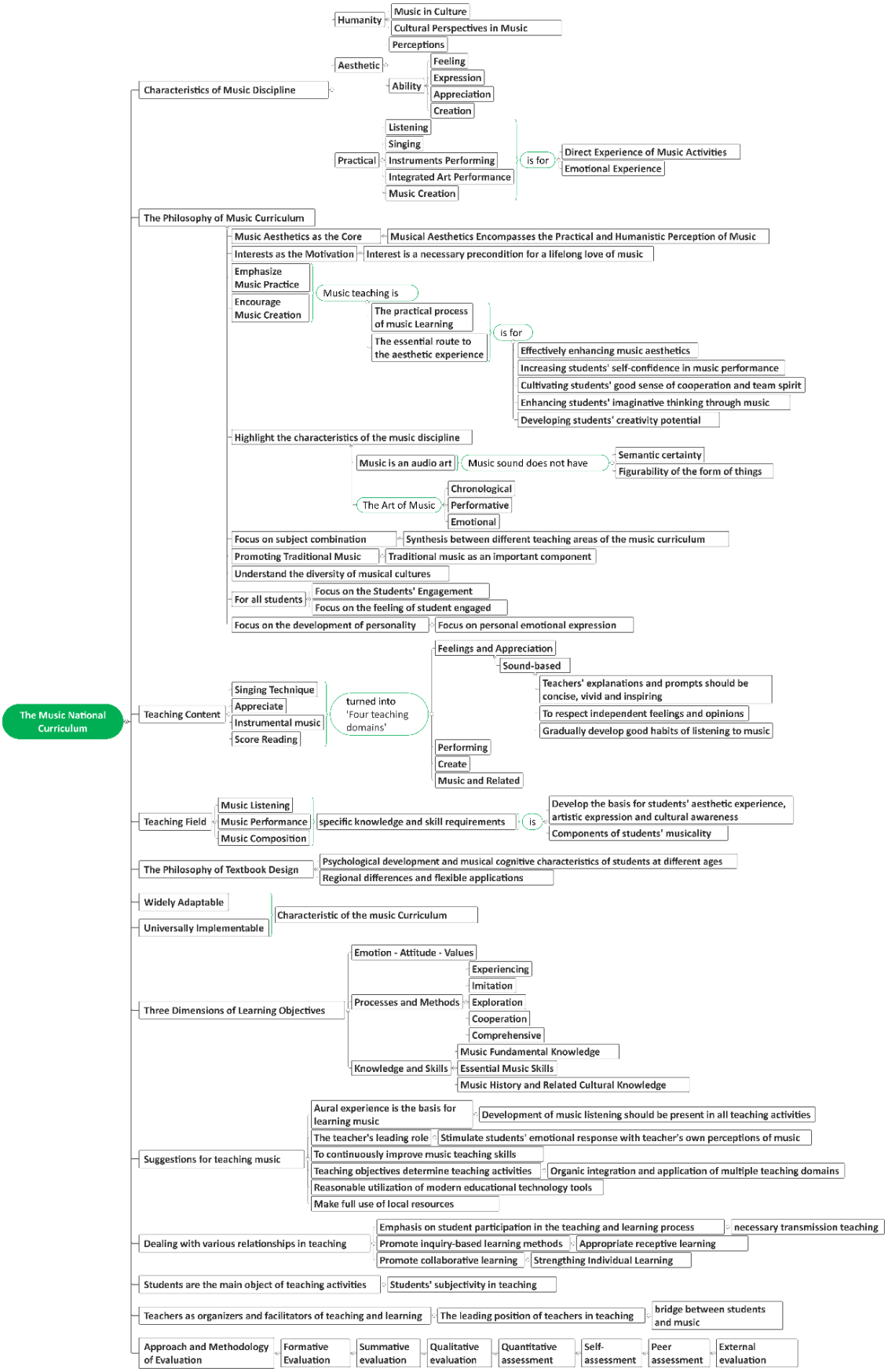


Figure 4.1-1: The Initial Framework of the Music National Curriculum

However, the coding list continued to show duplication to some extent. Therefore, the second review was done to reduce the repeated codes in English. Overall, 100 initial codes remained at this stage and are listed in alphabetical order in the following table:

1. Ability	2. Aesthetic
3. Aesthetic Experience	4. Aesthetics as the Core
5. Appreciation	6. Bridge Between Students and Music
7. Chronological	8. Cognitive Levels
9. Collaboration	10. Components of Students' Musicality
11. Composition	12. Comprehensive
13. Continuously Improve Music Teaching Skill	14. Creation
15. Cultural Awareness	16. Dealing with Various Relationships in Teaching
17. Developing Students' Creativity Potential	18. Emotional
19. Emotional Experience	20. Emotional Resonance
21. Emotion-Attitude-Values	22. Emphasis on Musical Practical Activities
23. Emphasis on Students' Active Participation	24. Encompasses the Practical and Humanistic Perception of Music
25. Encourage Music Composing	26. Engaging Modern Technology
27. Enhancing Imaginative Thinking	28. Enhancing Musicality
29. Essential Music Skills	30. Evaluation
31. Experiencing	32. Exploration
33. Expression	34. External Assessment
35. Feeling	36. Figurability of the Form of Objects
37. Focus on Personal Emotional Expression	38. Focus on Subject Combination
39. Focus on the Development of Personality	40. Focus on the Feeling of Students Engaged
41. For all students	42. Formative Assessment
43. Highlight the Characteristics of the Music Discipline	44. Humanity
45. Imitation	46. Increasing Students' Self-Confidence in Music Performance
47. Inspirational Prompts	48. Instrumental Music
49. Instruments Performing	50. Integrate and Apply Multiple Teaching Domains
51. Integrated Art Performance	52. Interests as the Motivation
53. Knowledge and Skills	54. Lifelong Love of Music
55. Listening	56. Listening Should be Presented in All Teaching Activities

Table 4.1-1:List of Initial Codes in the National Curriculum

57. Listening Technique	58. Make Full Use of Local Resources
59. Music Fundamental Knowledge	60. Music History and Related Cultural Knowledge
61. Music is Sound-Based	62. Necessary Lecture-Style Teaching
63. Peer Assessment	64. Perceptions
65. Performative	66. Performing
67. Practical	68. Processes and Methods
69. Promote Collaborative Learning	70. Promote IBL Method
71. Promoting Traditional Music	72. Psychological Development
73. Qualitative Assessment	74. Quantitative Assessment
75. Receiver Learning	76. Regional Differences and Flexible Applications
77. Respect Independent Feelings and Opinions	78. Score Reading
79. Self-Assessment	80. Semantic Certainty
81. Singing	82. Singing Technique
83.Specific Knowledge and Skill Requirements	84. Strengthening Individual Learning
85. Students are the Main Learning Objects	86. Suggestions for Teaching Music
87. Summative Assessment	88. Teachers as Organisers and Facilitators
89. Teaching Content	90. Teaching Domain
91. Teaching Objectives Determine Teaching Activities	92. The Essential Route to the Aesthetic Experience
93. The Leading Position of Teachers in Teaching	94. The Philosophy of Music Curriculum
95. The Philosophy of Textbook Design	96. Three Dimensions of Learning Objectives
97. Traditional Music as An Important Component	98. Understand the Diversity of Musical Cultures
99. Universally Implementable	100. Widely Adaptable

Table 4.1-2:List of Initial Codes in the National Curriculum (Continuous)

4.1.2 Focused coding

Focus coding in the grounded theory approach further compares and reveals the meanings of those initial codes (Charmaz, 2014). It explicitly captures the framework of raw data and builds categories (Charmaz, 1996). Consequently, the grounded theory approach was adopted to analyse the data set that was constituted by the Chinese National Curriculum. These initial codes were modified to create the new framework in this study, with some of the initial codes undergoing final revision. Changes include two parts:

- Duplication

Deleted	Remained
3. Aesthetic Experience	92. The Essential Route to the Aesthetic Experience
19. Emotional Experience	31. Experiencing & 35. Feeling
25. Encouraging Music Composing	11. Composition
49. Instruments Performing	66. Performing
71. Promoting Traditional Music	97. Traditional Chinese Music as An Important Component

Table 4.1-3: Changes in the Initial Codes

- Semantic modification
  - *Code 12: From 'Comprehensive' to '**Comprehension**'*
  - *Code 46: From 'Increasing Students' Self-Confidence in Music Performance' to '**Increasing Students' Self-Confidence in Music**'*
  - *Code 61: From 'Music is Sound-Based' to '**Sound-Based**'*
  - *Code 97: From 'Traditional Chinese Music as An Important Component' to '**Traditional Chinese Music as An Important Component**'*

Overall, 95 initial codes were reviewed during the focus coding phase. It combined similar codes into a conceptual view that these codes were initially related to four concepts (Johnny, 2021). Therefore, those initial codes were generally divided into four groups:

- **'Music Discipline-Related':**

  1, 2, 7, 18, 33, 36, 43-4, 61, 64-5, 67, 80, 92
- **'Feature of the Music Curriculum-Related':**

  4, 8, 10, 15, 17, 22, 24, 26-8, 37-9, 41, 52, 54, 58, 72, 76, 83, 94-5, 99, 100
- **'Teaching-Related':**

  5, 9, 11-2, 14, 21, 29-32, 34-5, 42, 45, 48, 50-1, 53, 55-7, 59, 60, 63, 66, 68, 73-4, 78-9, 81-2, 87, 89, 90-1, 96-8
- **'Objects and Relationships-Related':**

  6, 13, 16, 19, 23, 40, 46-7, 62, 69-70, 75, 77, 84-6, 88, 93

Four focus codes emerged by comparing the original content and initial codes with its groups: 'Aural Art', 'Musicality in the National Curriculum, 'Pedagogical Practices' and 'Teachers as Organisers and Facilitators'. The corresponding four frameworks were employed to capture the overall structure of music education in the Chinese 9yrs-compulsory education presenting in below.

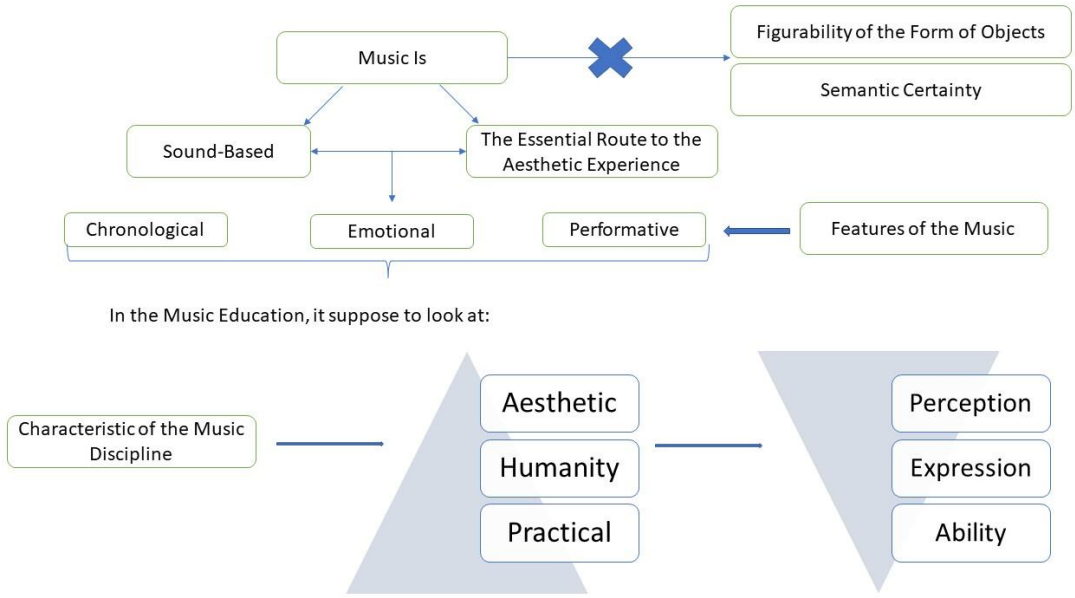


Figure 4.1-2: Aural Art

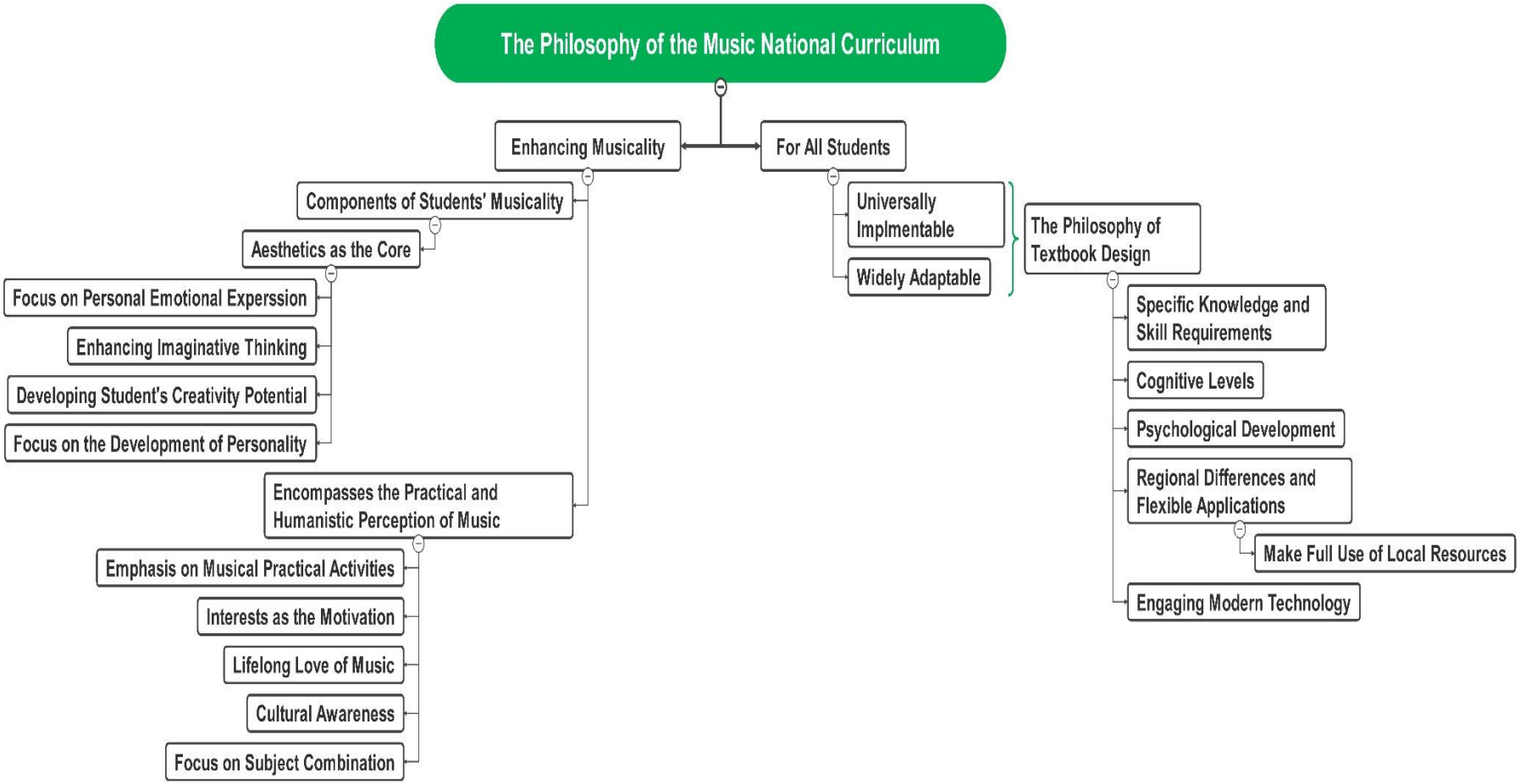


Figure 4.1-3: 'Musicality in the National Curriculum'

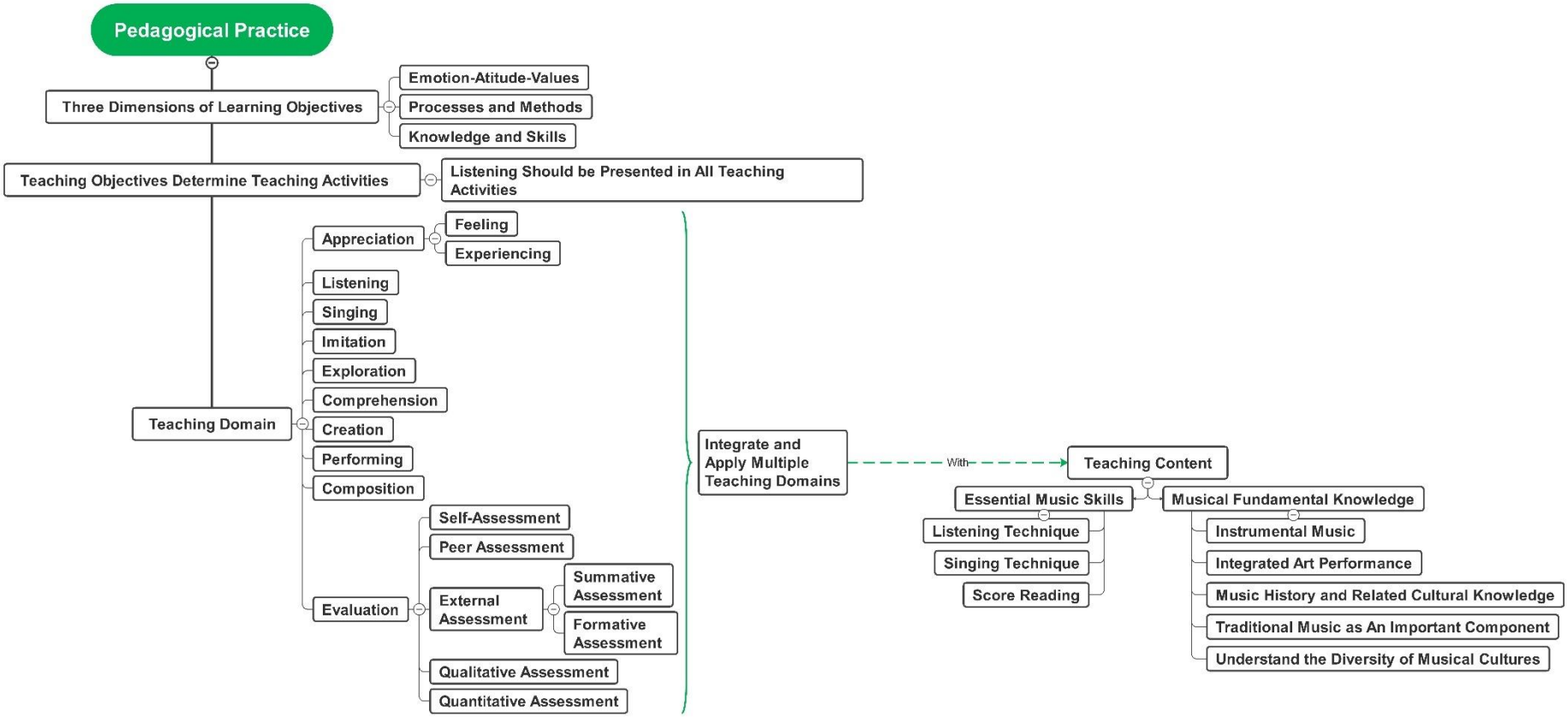


Figure 4.1-4: 'Pedagogical Practices'

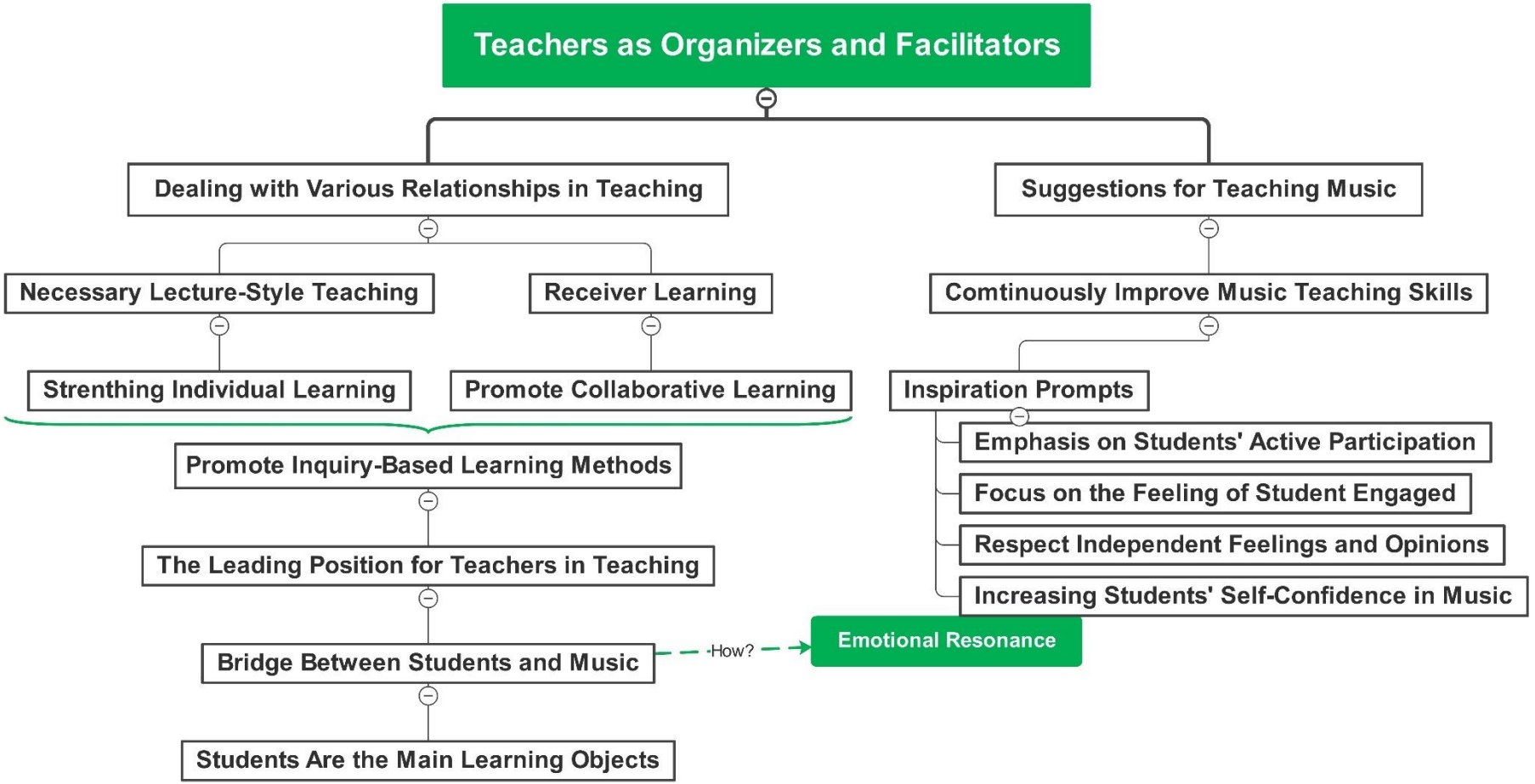


Figure 4.1-5: 'Teachers as Organisers and Facilitators'

A. Comparison with Segment Objectives in Different Age Groups

The National Curriculum divides the 9yrs-compulsory education into 3 phases:

a) Phase I: 1-2 grades

b) Phase II: 3-6 grades

c) Phase III: 7-9 grades

The participants in this project were in Phase II, so the details of Phase I would explain the level requirements already obtained, followed by the expected level requirements in Phase II. The details of the 'Segment Objectives' section were compared with these four focus codes, particularly with the concept of 'Pedagogical Practices', to understand the level of musical cognition participants had achieved and the upcoming new knowledge that needed to be acquired. The fifth focus code was then emerged. This section was also analysed by a line-by-line process and then grouped according to the two stages. The table below presents the overall learning objectives:

Year Groups	List of Initial Codes – Overview
Phase I	◆ Motivate Learning Interests ◆ Develop Perception ◆ Experience Musicality ◆ Engage in Musical Activities ◆ Singing Naturally ◆ Foster Optimism and Friendliness
Phase II	◆ Leading in Feeling ◆ Maintain Motivation ◆ Develop the Ability to Appreciation ◆ Cultivate Proper Appreciation Habits ◆ Singing Confidently ◆ Cultivate Imagination and Creativity ◆ Cultivate Collaboration Skills

Table 4.1-4: Initial Coding in the Segment Objective

The table 4.1-3 depicts a progression from stage 1 to stage 2. Details in relation to specific teaching elements were summarised in Appendix C (p. 295-299). In particular, the bolded

sections in Phase II (in Appendix C) clearly contrasted the more advanced teaching requirements for the same content. So far, two important preliminary results have emerged from the above coding and comparison: one is the concept of musicality. According to the curriculum, students need to develop musical perception and relevant skills, such as singing or listening techniques. According to these tables and graphs, musicality in Chinese music education was defined as the capacity to communicate with/through music.

The second exposition addressed the formation of a new focus code. Musicality in the literature review incorporated the three domains of aesthetics, creativity, and sensitivity, albeit it is not precisely the same as the standard concept of musicality within studies in the field of teacher practices. The idea of aesthetics was stated three times in the initial coding of the National Curriculum, and it was explicitly highlighted as the core of musicality. Meanwhile, creation was mentioned as a significant part of teaching content. Finally, sensitivity was embedded in the segment objectives. When evaluating the teacher as a facilitator as well as the student as an active learner, the approaches, language, and teaching activities were employed to dictate the progression from preconception to action. Therefore, a new focus code labelled 'From Knowing to Doing' emerged after a cross-sectional analysis of the segment objectives aims of Phase I and II.

From the students' perspectives, these focus codes revealed the development of musicality as a competency. In fact, the meaning of musicality here does not mean 'Being a musician' in general. The relationship between different definitions of musicality sees in the diagram below.

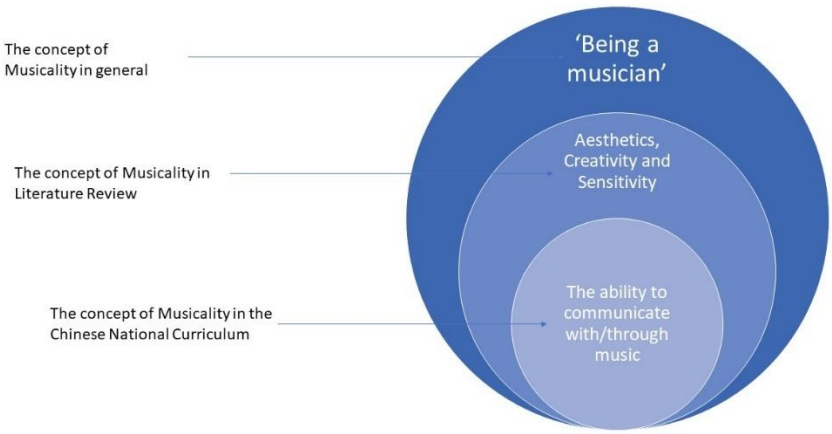


Figure 4.1-6: Three Layers of the Concept of Musicality in This Study

In the context of Chinese education, there is a very important premise that subject education at the compulsory level is for all students. Therefore, the basic criterion set by the music National Curriculum should be an achievable requirement for all students. The National Curriculum does not predict an upper limit for students' development in music but offers the possibility of developing students' musical potential. Through pedagogical practices, teachers should then emphasise their capacity to train students to develop musicality. In other words, it is important to assess how music teachers integrate various teaching content, materials, and practices.

4.1.3 Summary of this section

The following five focus codes for the National Curriculum were established based on the above analysis:

- ***'Aural Art'.***
- ***'Musicality in the National Curriculum'.***
- ***'Pedagogical Practices'.***
- ***'Teachers as Organisers and Facilitators'.***
- ***'From Knowing to Doing'***

Under the first step of the 'Plan' in the research cycle (as mentioned in the methodology chapter, Figure 3.1-4, p. 88), these categories outlined the developmental goals for teachers and students, respectively. In the Chinese Music National Curriculum framework, music is an aural art with musicality as its central point in musical education. This framework explicitly reveals the teacher's leading position in teaching and the importance of pedagogical practices for students to develop their musical learning skills.

Since this study primarily stood on the teacher's perspective, observational data were analysed in conjunction with the teacher's guidebook, music textbooks, and lesson plans. In the next section, the emphasis was on how teachers plan and implement designs in the classroom and how it reflects the teacher's leading role. Those generated codes were used in the ‘Plan’ stage for understanding the learning objectives in the teaching plan and in the ‘Action’ stage for assessing the teacher’s teaching skills in class.

4.2 Analysis of the stage of 'Plan': Coding in the Teaching Plan and Teacher’s Guidebooks

The actual procedure of a lesson includes preparation, pedagogical practice, and the teacher’s self-reflection. In the preparation step, the teacher would write the teaching plan according to the textbook and teacher’s guidebook and prepare relevant materials, such as musical instruments. Participated teachers believed that learning objectives were the centre of the teaching plan. Pre-determined teaching activities and processes were designed to achieve the anticipated teaching objectives. Most of the teaching objectives were inspired by the teacher's guidebook to achieving uniformity in teaching. An example of a designed lesson in the following sections provided details about how IBL was engaged in the Chinese primary music lesson. Then, the analysis started with coding each lesson's learning objectives and comparing them to the codes and frameworks from the Music National Curriculum.

4.2.1 An example of a designed lesson

The textbook and teacher's guidebook utilised in the participant school was edited by Jiangsu Phoenix Children's Publishing House and approved by the Ministry of Education in 2013. These two materials were typically used to construct lesson plans. A traditional teaching plan contains teaching content, objectives, methods, tools/instruments, common procedures, and teachers' reflections (see Appendix D and E, p. 300-303). The provided example was chosen from lesson 4, year 5, as the participating teacher's favourite lesson design. After the lesson, the participating Year 5 teacher used the lesson plan design to enter a local lesson plan writing competition and came second in the primary category.

This lesson was designed for a violin piece (Content in the textbook; see Appendix F, p. 304). According to the textbook, the designed activity was around singing, accompanying the music, and creating relevant movements. Based on previous lessons, the teacher and I designed the activity was connected music to images. We provided students with an A4 paper with a violin frame and asked them to design a background that they thought would fit the music's emotions and the violin's colours based on the music they heard and their background knowledge. For some examples of students' work, see Appendix G (p.305).

4.2.2 Initial coding

The details of the chosen contents were presented in the methodology chapter (seen in Section 3.4.2, p. 101-102). Initial codes were generated from the learning objectives by the teacher's guidebook and their teaching plan in each lesson. A final list of initial codes is provided below:

1. Actively collaborate with peers (2)
2.Compare and contrast
3. Connect music to characters (3)
4. Connect music to colour
5. Connect music to mood (2)
6. Connect music to nature
7. Develop a love of life and nature
8. Develop an interest in the folk songs
9. Develop their creativity and practical skills
10. Distinguish it from a wide range of genres/forms of music (8)
11. Enrich the emotional experience (4)
12. Express understanding and feelings in various ways (5)
13. Gain pleasure
14. Identify the rhythmic characteristics (2)
15. Identify the timbre of instruments (5)
16. Musical notation (4)
17. Musical Structure (5)
18. Participant in musical activities (4)
19. Practice choral skills (4)
20. Recognise the different phrases (Terms and Signs) (4)
21. Respond to variation and repetitions of musical themes through language or movement (2)
22. Rhythm, beat, timbre and melody (3)
23. Singing parts of the melody along with the music (2)
24. Singing with feeling and proficiency (9)
25. The role of notation in the music

Table 4.2-1: List of Initial Codes in the Learning Objectives

The number after the code represents the number of times, and some codes have significance for the frequency. For example, the 'Singing with feeling and proficiency' code combined eight similar codes (see Appendix H for details, p. 306-308). All these codes indicated musicality in relation to singing requirements. However, some codes were recorded where the frequency simply represented their duplication in the chosen content, particularly those about musical elements.

4.2.3 Focus coding

Under the National Curriculum, teaching objectives were typically measured by the three dimensions of 'emotion, attitude and values', 'process and methods' and 'knowledge and skills' (see Figure 2.3-1, p. 50). All initial codes were then categorised based on these three dimensions. A summary of the initial codes in learning objectives compared to the segment objectives provided (see Appendix I, p. 309-312) was additionally to ensure that the learning objectives set at the 'plan' stage align with the course syllabus's requirements. Based on the frequency of the segment objectives, it was evident that 'Feeling and Appreciation' accounted for the largest proportion of the 16 lessons chosen. Therefore, initial codes in the learning objectives related to ‘feelings’, ‘expressions’ or ‘emotions’ would be considered separately from other codes as those codes were musicality-related.

In total, four categories were generated at this stage. Details in the table below:

‘Knowledge and Skills’	10,14,15,16,17,20,22
‘Process and Methods’	1,2,18,19,23
‘Musicality-related’	3,4,5,6,11,12,21,24,25
‘Emotion, Attitude and Values’	7,8,9,13

Table 4.2-2: Categories in Focus Codes in the Learning Objectives

In general, teachers would complete the objectives in ‘Knowledge and Skills’ through ‘Process and Methods’ to reach those advanced demands in 'Emotion, Attitudes and Values'. However, the initial codes expressed those high-level emotional needs that would be difficult to quantify. With the IBL designs in the plan, those ‘musicality-related’ codes turned the development of students’ learning in class into a more visible process. In other words, the IBL design would show the development of musicality in a more conceptual way that teachers can use to reflect on their teaching through students' feedback as they progress in class.

Additionally, as is the case explicitly with the primacy of aurality within music education in China, listening is the foundation of music teaching and learning. For example, in the category of ‘Knowledge and Skills’, four initial codes start with ‘distinguish’, ‘identify’ or ‘recognise’. The relevant activity was mainly listening to the music or specific musical phrases. Listening at this level emphasises audio input and inner perception. The most likely situation is that students can express the difference through innate perception but are unable to explain the reason or give examples. Converting simple acts into students' development of valid learning skills might remain invisible. It would consequently contribute to the challenges of teachers’ in-class evaluations and afterwards reflections. Integrated with IBL in the teaching design also implied that the function of 'listening' has changed from a simple act to a learning skill.

4.2.4 Summary of this section

Under the above analysis, four focus codes in the ‘Plan’ stage demonstrated the relationship in the diagram below:

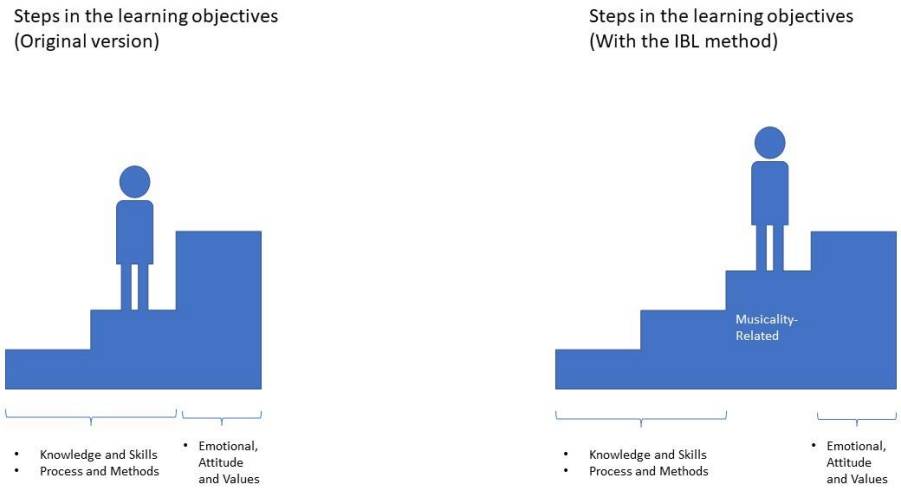


Figure 4.2-1: The Relationship between Four Focus Codes in the 'Plan' Stage

According to the coding illustrated in Figures 4.1-2 to Figures 4.1-5 (p. 123-126) in previous section, traditional teaching methods and IBL can be balanced in classroom design. In the

preparation step, it was believed that the teaching design involved with IBL methods could enhance students' musical understandings and expressions in learning. The objectives of those advanced learning needs would be ideally more achievable with the integration of IBL when the teacher is the key to connecting students to music.

4.3 Analysis of the stage of 'Action': Coding in the observation

The actual implementation was unknown at the 'Plan' stage, so this section will analyse the observational data from the actual classroom and compare it with the above data and findings. The analysis contains three parts, including the general information about observations in class, the process of generating initial coding and focused coding.

4.3.1 Overall structure of a lesson

The key variables in determining a lesson are the teaching objectives, the teaching material, the teaching methods, and the timing of each session. In this study, the teaching goals and material were pre-determined, and IBL was primarily balanced with traditional teaching methods in the classroom. Therefore, the analysis of observational data focused on the arrangement and fluency of each teaching session in a 40-minute class (An example of an observation sheet, see Appendix K, p. 317-318). The following table shows the timing of each session in the Y4 and Y5 observational classes.

Year 4															
Lesson 1		Lesson 2		Lesson 3		Lesson 4		Lesson 5		Lesson 6		Lesson 7		Lesson 8	
Review	7	Warm-up	2	Warm-up	2	Review	2	Warm-up	2	Warm-up	2	Warm-up	6	Warm-up	2
Leading 1.0	2	Learning	16	Review	3	Learning	22	Leading 1.0	2	Leading 1.0	7	Leading 1.0	4	Leading 1.0	2
Learning	21	Leading 2.0	12	Learning	17	Leading 2.0	2	Learning	26	Learning	14	Learning	11	Learning	18
Discussion	7	Discussion	7	Discussion	13	Discussion	11	Discussion	9	Activity	10	Activity	14	Activity	10
Summary	3	Summary	3	Summary	5	Summary	3	Summary	1	Flute	4	Flute	3	Summary	3
										Summary	3	Summary	2	Examination Announcement	5

Year 5															
Lesson 1		Lesson 2		Lesson 3		Lesson 4		Lesson 5		Lesson 6		Lesson 7		Lesson 8	
Warm-up	2	Review	2	Review	2	Review	2	Leading 1.0	2	Review	3	Warm-up	1	Warm-up	4
Leading 1.0	5	Leading 1.0	10	Leading 1.0	1	Leading 1.0	2	Learning	20	Leading 1.0	4	Learning	21	Leading 1.0	3
Learning	14	Learning	10	Learning	17	Learning	18	Leading 2.0	1	Learning	15	Leading 2.0	4	Learning	10
Leading 2.0	1	Leading 2.0	4	Activity	18	Activity	15	Activity	16	Activity	22	Activity	10	Activity	19
Discussion	10	Discussion	11	Summary	2	Summary	3	Summary	1	Summary	1	Flute	2	Flute	3
Flute	6	Review Today	2									Summary	2	Examination Announcement	
Summary	2	Summary	3											Summary	1

Table 4.3-1: The Structure of Course Design

The primary elements of a lesson were started with a review/warm-up exercise, target piece learning, an IBL-related discussion or activity, flute practice and a summary, as shown in the above table. It is worth noting that some sessions that could be planned separately as introducing the target piece were coded as 'Leading 1.0' and 'Leading 2.0', which connected the planned activity after the introduction of new content had been taught. In addition, the coding of 'Discussion' meant that IBL designed in that class was around discussing a question, while the 'Activity" code tended to refer more to some music-related activity, for example, four-voice music composition or rehearsal of a mini-musical.

Much of the time spent in grade 4 learning the core piece in one lesson was longer than the time spent on the activities. While the duration of the IBL-related activity was between 7 and 14 minutes, the range for learning new knowledge was 11 to 26 minutes in grade 4. In the fifth grade, the IBL-related activity was between 10-22 minutes and the range for learning new knowledge was 10-21mintues. Comparing the time given for the designed activities in the two grades revealed significant differences. The specific reason would be discussed with the teacher’s reflections in the interview section.

4.3.2 Initial coding

The video observation recorded everything that happened in the classroom. Unlike other data sets, a large proportion of observational data was transferred from actions to language on the observation sheet. Those actions were instructions or feedback given in response to teaching objectives, and most were purposeful. Therefore, the first step in processing this study's observational data was to summarise key points from the observation sheet. Initial coding was then generated through a line-by-line process. By reducing the duplication in the original version (see Appendix J for details and changes, p. 313-316), there were 74 initial codes listed in the table below:

1. ‘2 natural stops’ in discussion	38. Reminder: ‘Please do not limited by teacher’s example’ (2)
2. ‘A bored sign’ to similar musical activities	39. Repeat answer to ensure everyone heard (2)
3. ‘Re-Name’ it by personal emotions (3)	40. Respect to each other (3)
4.A ‘never responded’ student	41.Sense of identity (2)
5.Ask Question	42.Set an emotional scene (3)
6.Background introduction (9)	43. sight-reading (3)
7.collaborative task (2)	44.Simple answer/responses
8.Compositional approach	45.Singing in different groups: Combination between the teacher, students, and flute.
9.Connect music to colour (2)	46.Singing in right pitch but wrong name
10.Connect music to imagination (8)	47.Singing practices: focus on difficult phrases (5)
11.Connect music to shapes and melodic Line (2)	48.Strategy for engagement: hand out additional materials as a prize for concentration
12.Connect music to words/storylines (2)	49.Strategy for pitch correction- Convert vague concepts into direct adjectives or equivalent language
13.Connect musical elements to emotional expression (7)	50.Strategy for pitch correction: Find the pitch on the flute
14.Connect the tone of instruments to emotional expression	51.Strategy to draw attention: use drum instead of words
15.Difficulty in back to the whole class group	52.Strategy used in practice beat: Hands clapping or add body movements (2)
16.Direct Leading (14)	53.Strategy used in practice score-reading: find the similarities and differences
17.Discuss feelings after listening	54.Student as the marker
18.Distinguish the different emotions	55.Tempo practice
19.Eager to play with drum- interest to additional stuff	56.The ability of identify the pitch after practicing
20. Eager to show	57.The difficulty of philosophical question

Table 4.3-2: List of Initial Codes in the Observation

21.Feeling Empathising When Listening to music	58.The impact of being observed
22.Explain and Review the key points (8)	59.The impact of difficulty of 'concertation'- not singing in a beautiful voice
23.Express ideas supported with 'how, what and why'	60.The impact of external factors- classroom layout
24.Identify the musical phrases (7)	61.The issue of teaching coverage
25.Identify the rhythm and its strength and weakness pattern (2)	62.Time limitation in presenting (10)
26.Less patients in overlong piece (5)	63.Understand the role of musical notation in emotional expression (2)
27.Listening as a mechanically action	64.Understand the song through melodic variation
28.Listening as an appreciation	65.Understand the song through musical phrase
29.Logic in presenting ideas	66.Understand the song through overall mood (2)
30.Proper singing posture	67.Understand the song through the lyrics (4)
31.Quickly engaged	68.Understand the song through topic
32.Raise interests because of the uniqueness	69.Unstable pitch- get better with teacher's leading (4)
33.Recognise the form of the song	70.Unstable pitch- particular in backing vocals
34.Recognise the timbre of the instruments (4)	71.Unstable pitch-easily distracted by others (2)
35.Reminder: 'Be quiet' (9)	72.Various Singing Form in Practice (2)
36.Reminder: 'No right answer' (3)	73.Warm-up game about musical notations (2)
37.Reminder: 'Pleas site straight'	74. Warm-up game: Singing in different tempos and recognise the differences

Table 4.3-3: List of Initial Codes in the Observation (Contious)

4.3.3 Focus coding

The code 'Pedagogical Practice' in the National Curriculum (see Figure 4.1-4, p. 125) summarises teaching elements in a lesson, while the teaching domains and content are in the 'Action' stage. Therefore, the focus code on observation was categorised by teaching purposes. In other words, the process of categorisation in the 'Action' stage was to place initial codes by

their functions in teaching. Overall, seven focus codes were generated, and the following diagrams explain the relationship in each category.

a) Various teaching sessions
b) Issues of singing
c) In-class solutions
d) Feeling Empathising When Listening to music
e) Strategies and tips
f) Issues in the general teaching process
g) Unexpected Findings

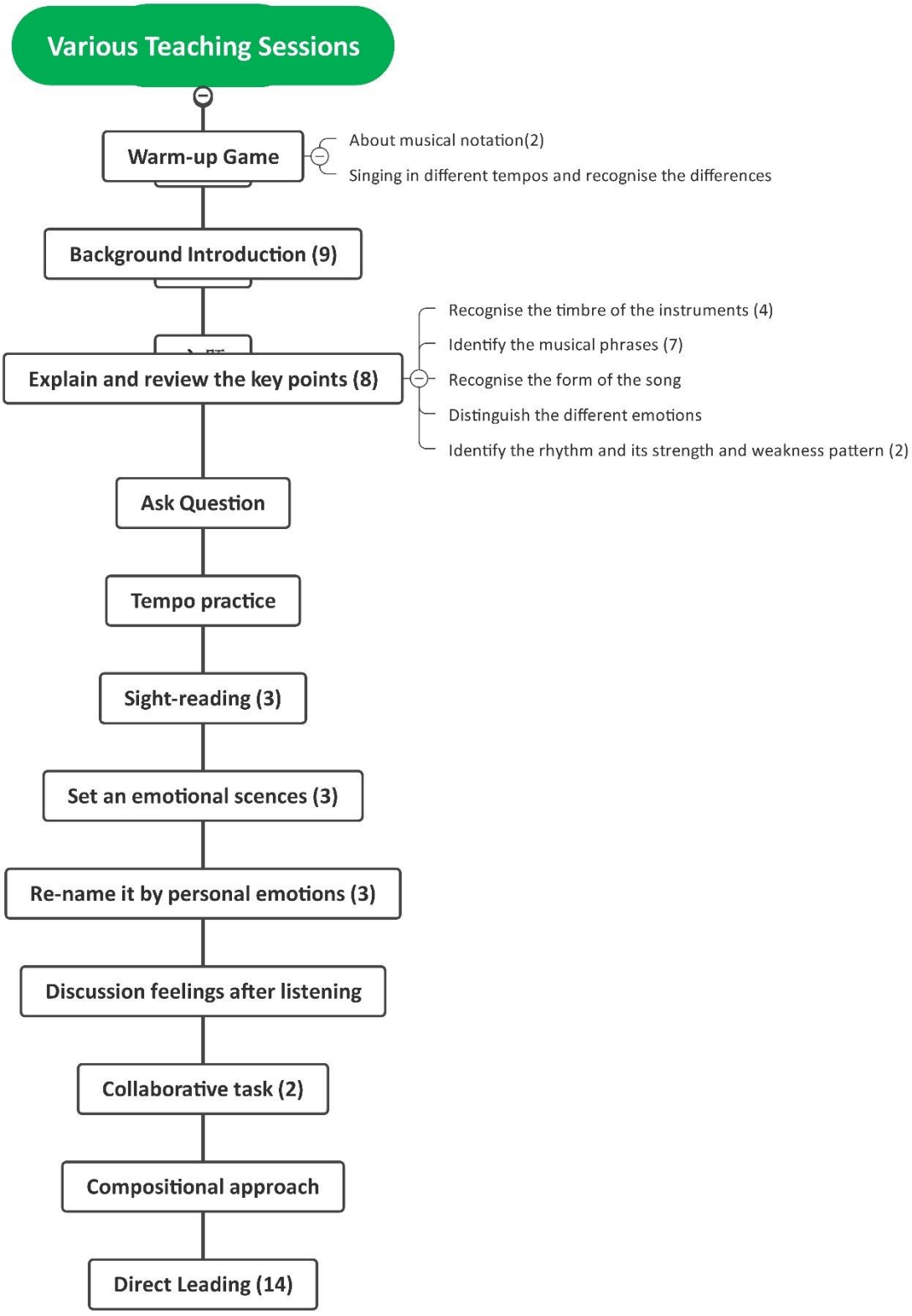


Figure 4.3-1: Various Teaching Sessions

Under the code "Various Teaching Sessions", the initial code contained all teaching activities and sessions related to the teaching objectives. They were arranged according to the regular

flow of a lesson, which corresponded to the lesson's structure in Table 4.3-1 (p. 136). Some initial codes appeared more frequently when considering specific teaching content. It is worth noting that in addition to 'direct leading', several other initial codes also represented some leading behaviour. For example, ‘Set an emotional scene’ and ‘Re-name it by personal emotions’ were also common leading activities adopted by teachers to engage students in further understanding the musical piece.

The songs chosen in this study were originally intended to be sung or appreciated. Therefore, there were several issues appeared, particularly in the singing session. Meanwhile, teachers offered a variety of in-class solutions for rapid improvement in the short term. Details see the diagram below:

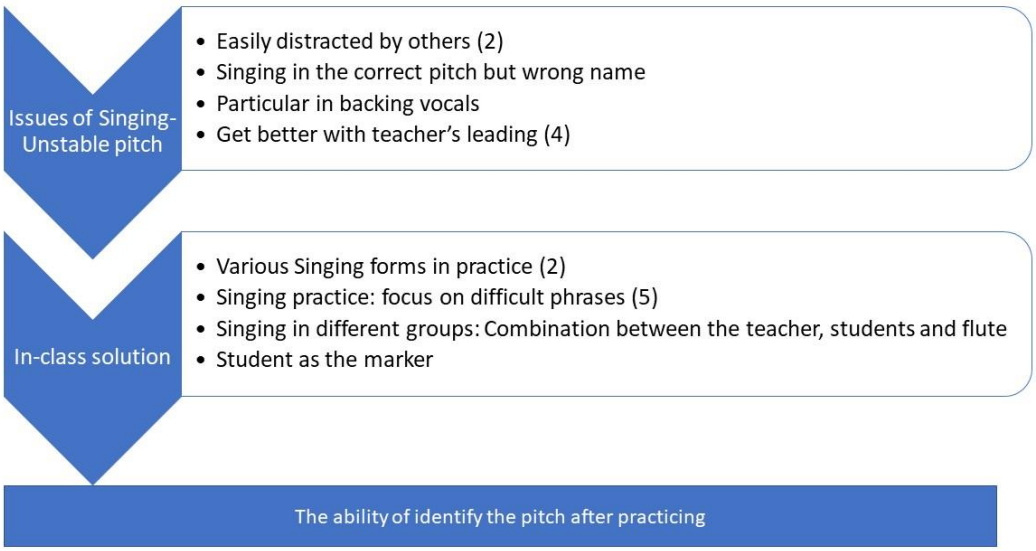


Figure 4.3-2: Issues in Singing and In-Class Solutions

The IBL was designed to be more effective in teaching pieces for appreciation. Teachers led students to a deeper understanding of the music through specific questions or teaching activities. These activities or activities were typically designed to link the music to more visual images or shapes, with the aid of language to convey the students' understanding of the

different musical elements. The following diagram shows the possible activities designed in the classroom.

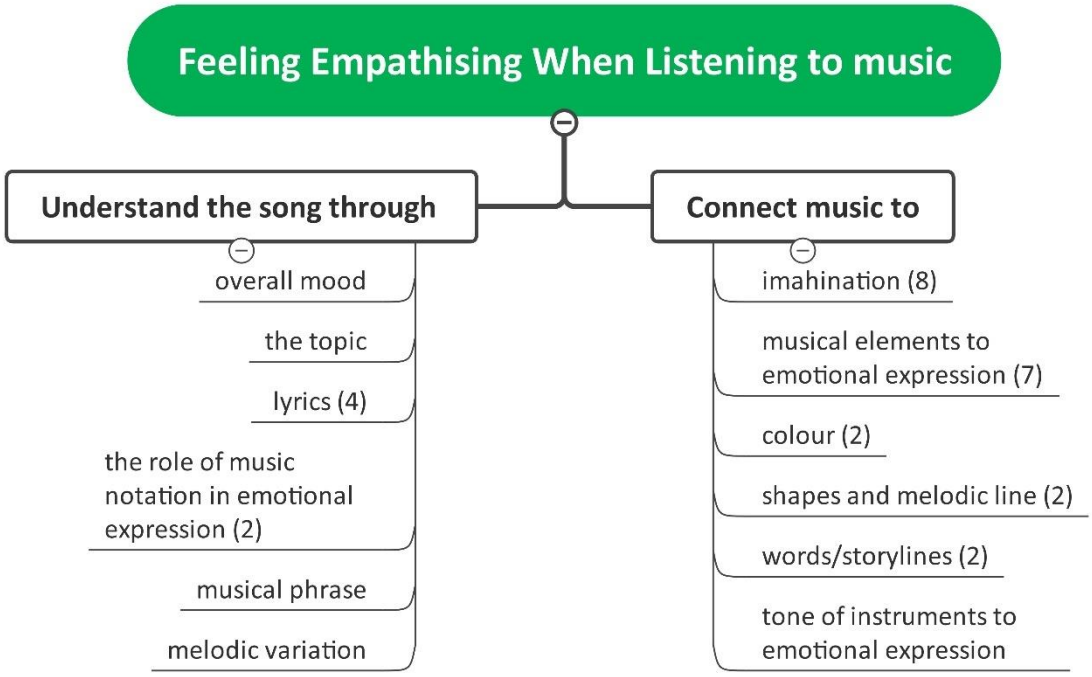


Figure 4.3-3: Feeling Empathising When Listening to Music

This also implies that the teacher attempted to make the musical connection resonate with the students in this process. This aligns with the National Curriculum (See Figure 4.1-5: 'Teachers as Organisers and Facilitators', p. 126) and confirms that combining traditional teaching methods and IBL is actionable.

In terms of their role as organisers and facilitators, participant teachers also have unique skills to ensure that the class progresses effectively. Therefore, the focus code of 'Strategies and Tips' below summarised the teacher's techniques.

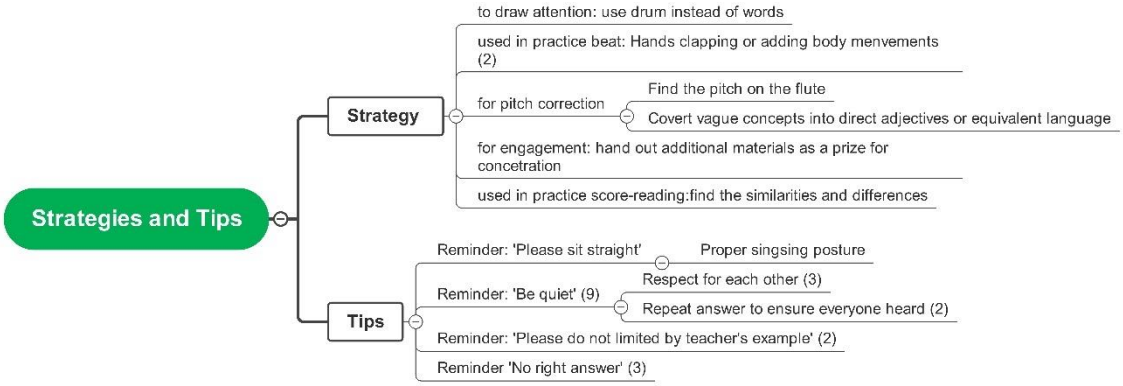


Figure 4.3-4: Strategies and Tips

The next category represents several general teaching issues, most of which arose in relation to the design of the IBL. Other issues are also present in traditional classroom teaching and might be solved by the IBL design. As the observations in the action phase only objectively record the behaviour that has occurred, the specific reasons for this need to be linked to the teacher interviews in the ‘Reflection’ phase.

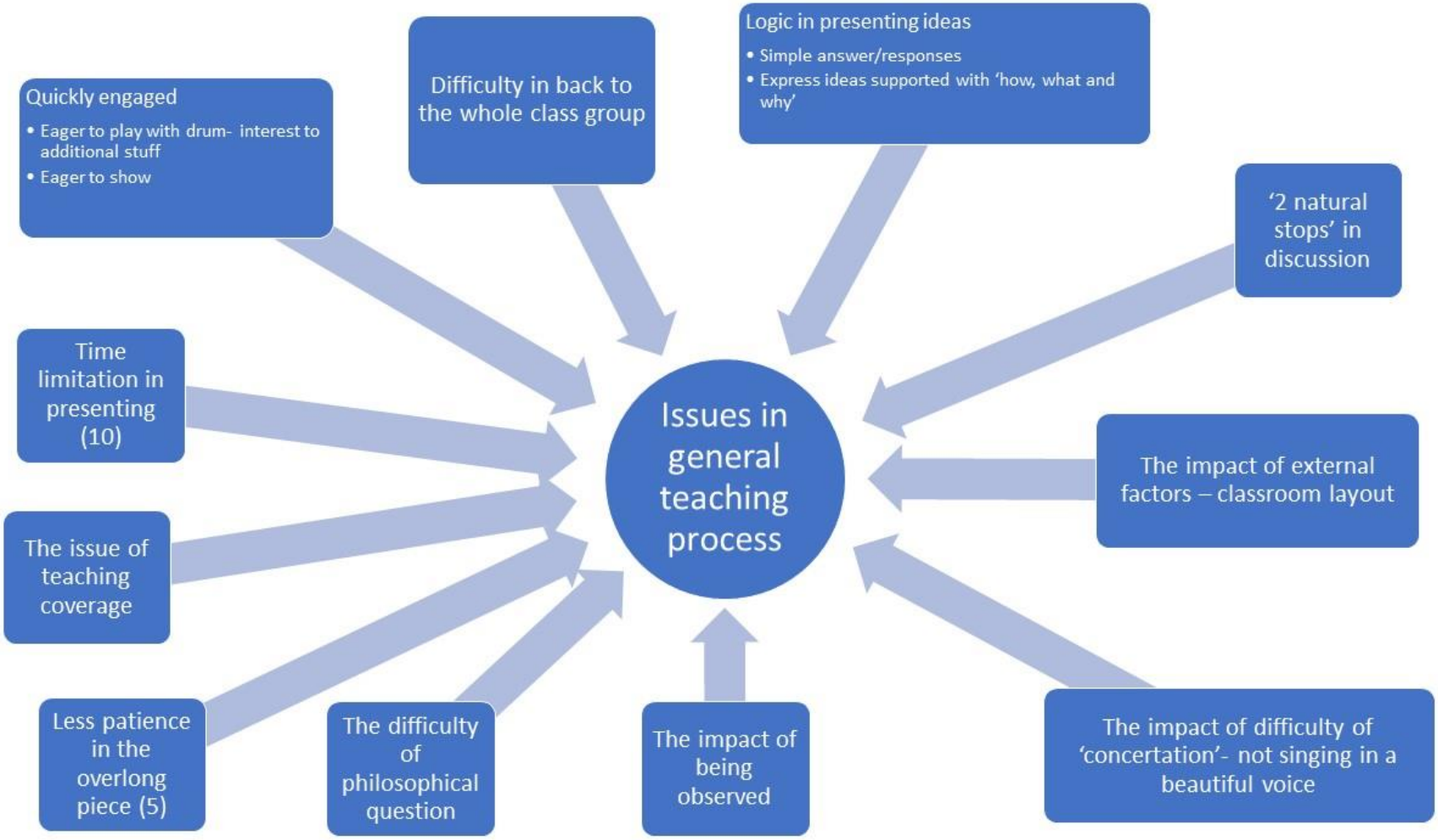


Figure 4.3-5: Issues in the General Teaching Process

The rest of the initial codes were mainly from notes in the observation sheet that recorded the researcher's thoughts that emerged in class. They were categorised as 'Unexpected Findings' and also structured some questions in teacher interviews.

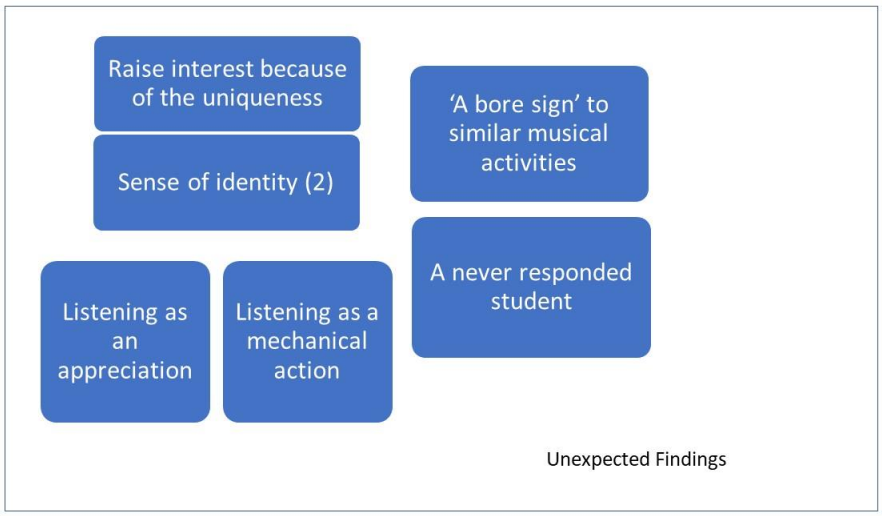


Figure 4.3-6: Unexpected Findings

4.3.4 Summary of this section

The initial and focus codes generated from the observational data objectively demonstrate the results of incorporating IBL into actual classroom teaching. It confirms the practicability of IBL in Chinese primary school music classrooms but also exposes some problems, particularly stated in the code of 'Issues in the general teaching process' and 'Unexpected Findings'. These issues will further contribute to both teachers' reflections on their quality of teaching and implementation of IBL in Chinese primary music education within this study.

4.4 Analysis of the stage of 'Reflection': Coding in the interview

The analysis of the interview was utilised to answer the four sub-research questions in combination with other data sets. It described the teacher's experiences with the application and of the IBL design in Chinese primary music education at the final 'Reflection' stage in the research cycle. Therefore, the initial codes and focus codes will be generated in the following section.

4.4.1 Initial coding

There were 16 after-class interviews and two final interviews transcribed and coded at this stage. 212 initial codes were ultimately generated from texts. Details see the table below:

1. A childish mind- the sense of unique achievement	2. A high level of engagement
3. A long-term developmental process	4. Medium length
5. A 'preconceived' feeling	6. A regular routine for large classes
7. A small percentage of music lessons	8. Activity with a clear objective is more acceptable and understandable for a beginner
9. Afraid of being 'outstanding' in the group	10. Afraid to make mistakes
11. Always a 'right' answer	12. An equal classroom environment
13. Appreciate music based on personal feeling	14. 'Artificially added' emotions
15. Avoid behaving badly	16. Avoid only mechanically listening to the teacher
17. Be distracted by other events	18. Be flexible in the Format of the IBL design
19. Being able to deliver the set teaching tasks	20. Best answer
21. Build up their sensitivities in listening	22. Cannot concentrate on the class
23. Care about the opportunity to express	24. Challenge for balancing
25. Challenge for student's collaboration task	26. Check all students' learning completion
27. Child psychology	28. Childish behaviours
29. Children at the back are less manageable	30. 'Complete a collaborative task'
31. Compromised effect in practice	32. Conflict with experienced teaching
33. Conflict with the 'delivery method'	34. Consider the characteristics of each age group in teaching
35. Control their 'musical emotions' by their volume	36. Curriculum as an 'optimistic' role model
37. Develop a sense of respect for each other	38. Develop their own musical aesthetic
39. Different answers in group discussion and whole class presentation	40. Different levels of sensitivity to music from different sources
41. Different teaching methods and characteristics among teachers	42. Difficult to correct pitch without the piano
43. Difficult to have a preparation without interruptions	44. Difficult to teach chorus in a regular class

Table 4.4-1: Initial Codes in the Interview Transcripts

45. Difficulty in getting students' full attention	46. Difficulty of self-discipline
47. Direct instruction	48. Do everything in class
49. Do not know what to listen to in music without instructions	50. Do not know what to say
51. Doing IBL as a learning for the teacher	52. Each student can engage in class
53. Emphasis on music technique or emotions	54. Enrich my teaching experience and methods
55. Enrich their experience	56. Ensure all questions are answered for students
57. Ensuring all teaching is completed- gap-filling	58. Ensuring consistent progress
59. Equal opportunities for all kids	60. Expand more possible pedagogies for teaching various contents
61. Expand their capabilities	62. Express too much
63. Fewer opportunities for collaborative work in content design	64. Find their own way to make things interesting
65. Folk music and opera are challenging contents	66. Gain teacher's appreciation
67. Get to know my students well	68. Give clear pointers
69. Give time and space to students	70. Hard to concentrate on the whole piece
71. have a more prominent feature	72. Have knowledge of another relevant field
73. Have more advanced control of the class	74. Have overlooked the feelings of many students
75. Have paper exams in music	76. Have the awareness to listen to what others said
77. Must keep the whole process smooth	78. Must prepare adequately for IBL- more than regular classes
79. Higher demand on the teacher's musicality	80. How to motivate student
81. Idealised teaching objectives	82. Important to have a sense of involvement and achievement
83. improve teacher's skills	84. Incompatible parts of music knowledge and music feeling in the curriculum
85. Individual and groups	86. Insensitive to pitch
87. Interesting and childish expression	88. Intuitive express their feelings
89. Issues of respect for each other	90. Large class sizes
91. Learning habit	92. Learning in the normal classroom
93. Learning singing by imitation the teacher’s pitch	94. Less confident in chorus
95. Less experience in creation and collaboration	96. Level of excitement
97. Level of motivation	98. like my students more than before
99. Limited by preconception	100. Limited chances to share the idea

Table 4.4-2: Initial Codes in the Interview Transcripts (Continuous)

101. Limited class time	102. Limited developments in short-term
103. listen to what students said	104. Listening skills for students – both music and others
105. Logic in expression	106. Long-term impact cannot be reviewed shortly
107. Low to medium difficulty	108. Made an upward progression
109. made progress in appreciating music	110. 'Main job as a side job'
111. Make music visualise	112. Make real-time adjustments based on students' responses
113. Make the emotional connection between the teacher and students	114. Make up my sense of professional fulfilment
115. Mechanical teaching without a soul	116. Mind changed on teaching style
117. More ability demanding for teachers to do the IBL design	118. More accessible to new teachers
119. More leading work	120. More relaxed as I went on
121. more willing to teach music	122. No after-school time for music
123. No further explanations or examples	124. No real-life connection to the content
125. No standard answer	126. No well-trained listening skill
127. Not all content is suitable for IBL teaching	128. Not always concentrated on discussion
129. Not willing to share at the beginning	130. Observe the teacher's attitude
131. Only a few students responded in class	132. Only listen to the beginning of a long piece
133. Indoctrinate	134. Personal identity shift
135. Personally feel tired	136. Pitch is the key to Singing Piece
137. Practice collaborative skills through activities	138. Practice student's listening skill
139. Practice student's memory	140. Present in an 'excellent' way
141. Questions with predicted/direct/obvious answers	142. Questions/Wording in leading technique
143. Reflect on improving my teaching plan	144. Remain consistent in teaching activity or purpose
145. Remain the children's characteristics	146. Same content but different plan in different classes
147. Save my personal energy	148. Scene setting
149. Select a lesson from a unit for IBL design	150. Self-Comparison
151. Set a vivid, music-related atmosphere for learning	152. Show student's creativity
153. Speak less/less instruction in teaching	154. Spend a long time to decide who to share in the group
155. Start to express	156. Step-by-step leading
157. Strong impressions of the content	158. Student status as a teaching factor
159. Student-centred	160. Students' diverse ideas

Table 4.4-3: Initial Codes in the Interview Transcripts (Continuous)

161. Student's music preference	162. Suitability of contents and other materials in design
163. Superficial understanding	164. Take part in student discussions as much as possible
165. Targeted teaching or audio-visual appreciation	166. Teach according to student acceptance
167. Teacher's adaptability	168. Teacher's Confidence in teaching in IBL
169. Teacher's duty vs other chores	170. Teacher's leading
179. The design of school timetable as a teaching factor	180. The difficulty of the designed question
181. The external factor of learning- students' overall mood on that day	182. The external factor of the learning
183. The impact of being observed	184. The impact of classroom learning environment on individuals
185. The impact of the external factor on learning-weather	186. The importance of getting approval from the teacher
187. The importance of leading process for first try challenging activities	188. The level of completion of a lesson
189. The overall amount of IBL design in one semester	190. The overload of content in the original design
191. The quality of music equipment	192. The relationship between listening and singing
193. The time requirement of input-output in learning	194. The willingness to express
195. Think and explore on their own	196. Time and effort in equal proportion
197. Time restriction is the main challenge	198. To meet the requirement of IBL
199. Too tired to control the entire class	200. Unable to identify without leading
201. Unable to lead individual step-by-step	202. unable to make their own judgment
203. Unable to sit still	204. Understand music through other aspects
205. Unexpected situations in teaching	206. Unstable pitch
207. Valid information in the discussion	208. Want to hear more ideas
209. Weak at sight-reading and ear-training skills	210. Worry about students not gaining the 'must-have' knowledge
211. Worry about the unpredictable results	212. Write a detailed plan for IBL

Table 4.4-4: Initial Codes in the Interview Transcripts (Continuous)

4.4.2 Focus coding

In the research design, interview data are employed to answer all four sub-research questions; the rationale for generating focus codes is therefore based on these key words of the four

sub-research questions. Meanwhile, a set of initial codes representing individuals' subjective feelings was distinguished from the other four categories in the review phase. Therefore, five focus codes were created in the ‘Reflection Stage’. The relationship between each initial code will then be presented in diagrams in this section, and a detailed explanation will be demonstrated according to the relevant sub-research question in section 4.5 (p. 155-173).

a) Teacher’s Self-reflection and Self- assessment
b) Conditions of Apply the IBL in Design
c) Teachers’ Abilities
d) The Developments of Musicality in the Childhood
e) Challenges in Pedagogical Practice

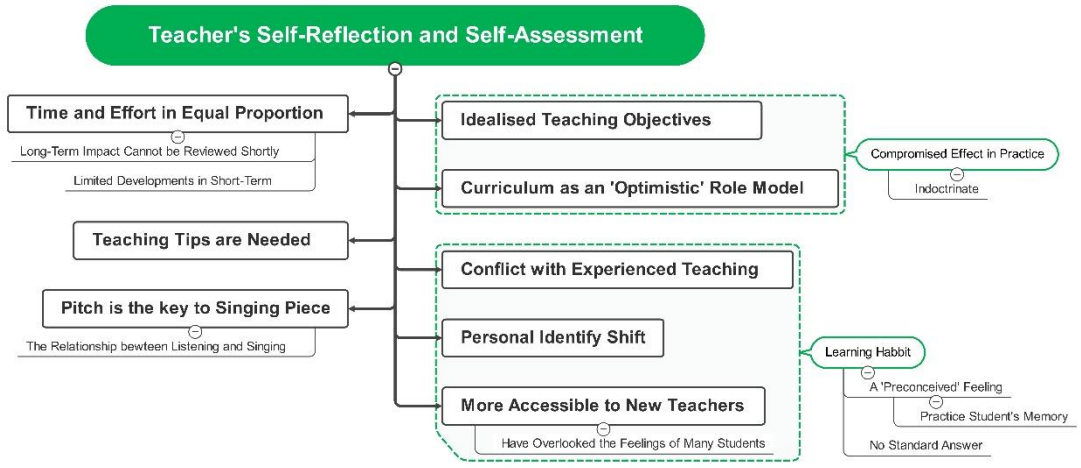


Figure 4.4-1: Teacher’s Self-Reflection and Self- Assessment

In Figure 4.4-1, teachers gave general feedback on their feelings about applying IBL in the pedagogical practices. This also pointed out teachers’ concerns about general issues in traditional teaching and the philosophy of the National Curriculum.

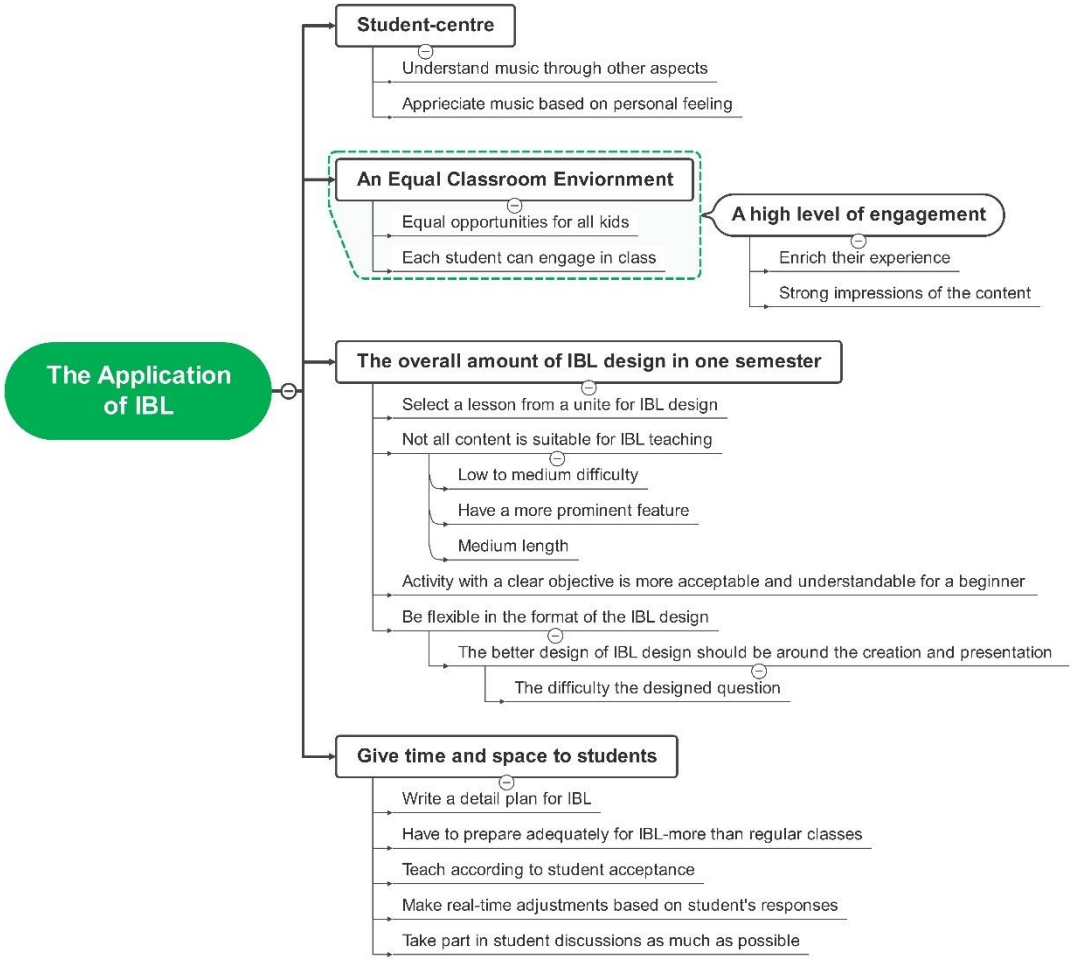


Figure 4.4-2: Conditions of Applying the IBL in Design

In the interviews, teachers stated the conditions of applying the IBL in the music classroom concerning the philosophy, duration, and the chosen content. This was then combined with the codes in the observation to answer the sub-research question in section 4.5.1 (p. 156-159).

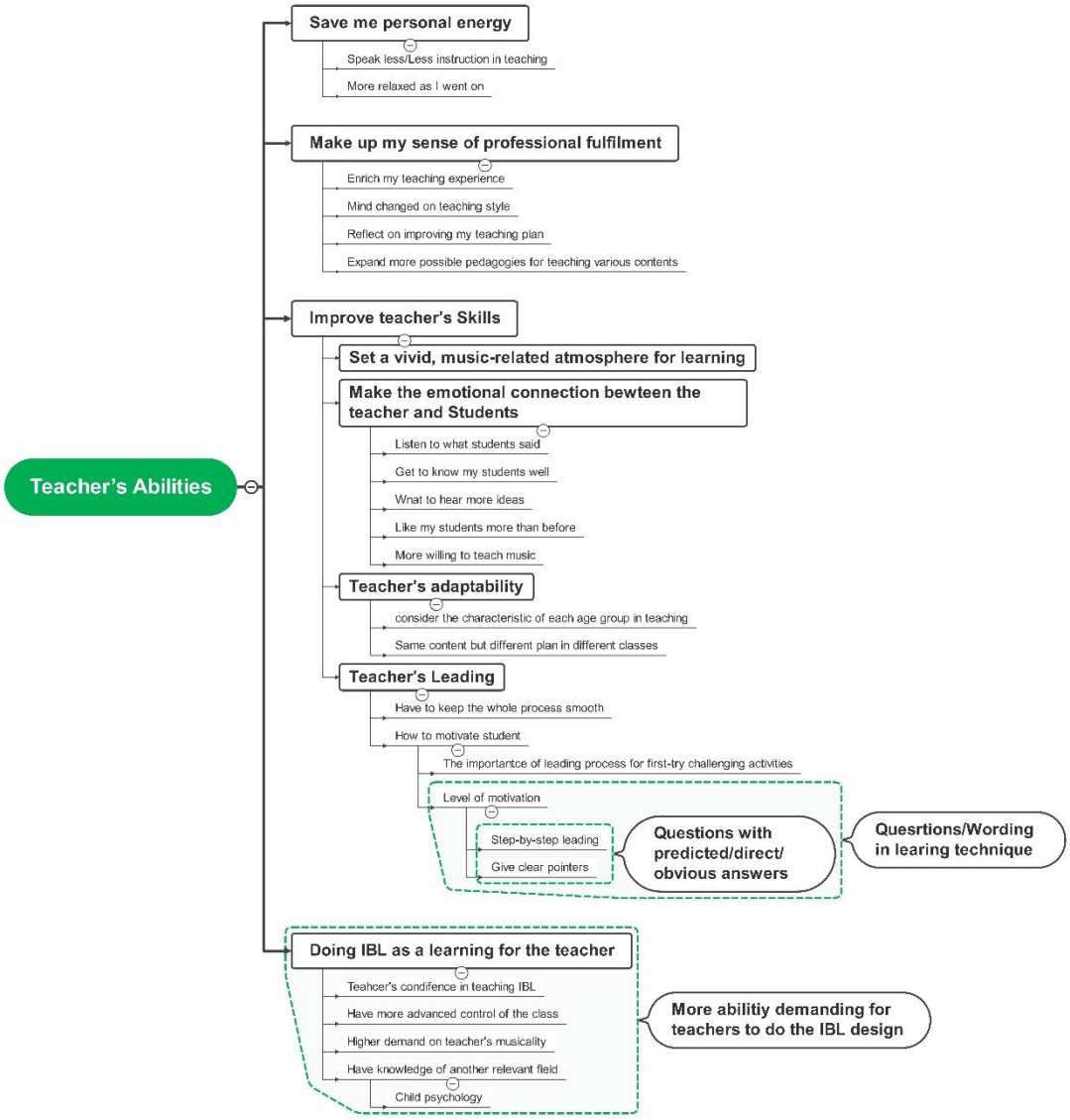


Figure 4.4-3: Teacher's Abilities

The coding in the figure above can be divided into what teachers have already developed in the IBL classroom and what they thought that they should also develop.

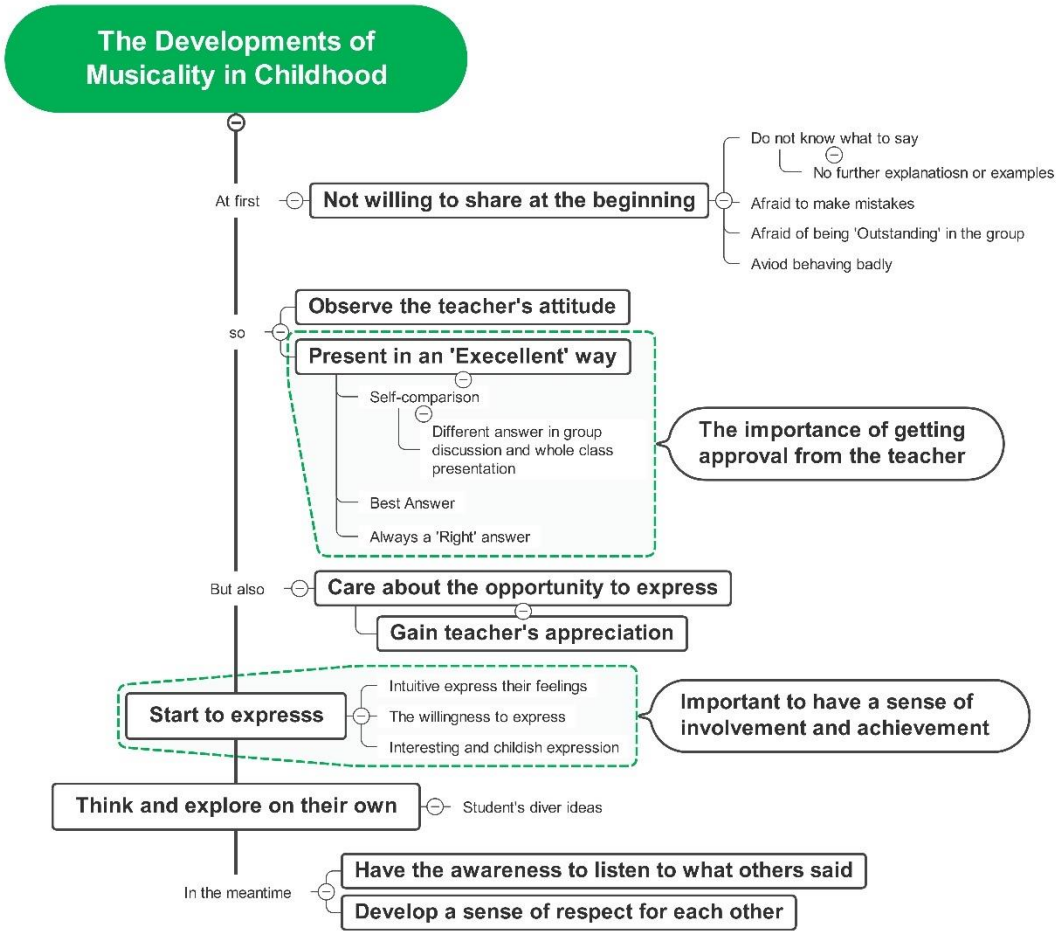


Figure 4.4-4: The Developments of Musicality in Childhood-Part 1

Make progress in appreciating music

Before	After
• Superficial understanding • 'Artificially added' emotions • Control their 'musical emotions' by their volume	• Expand their capabilities • Develop their own musical aesthetic • Show student's creativity
• No well-trained listening skill • Weak at sight-reading and ear-training skills • Insensitive to pitch • Unstable pitch • Do not know what to listen to music without instructions	• Practice student's listening skill • Avoid only mechanically listening to the teacher • Build up their sensitivities in listening Listening skills for students-both music and others
• 'Complete a collaborative task'	• Practice collaborative skills through activities

Figure 4.4-5: The Developments of Musicality in Childhood-Part 2

Figures 4.4-4 and 4.4-5 classified the developments in children's musicality in two aspects. Coding in part 1 shows a process of how students changed their minds in expression. Then, coding in part 2 illustrated the development of potential musicality in childhood.

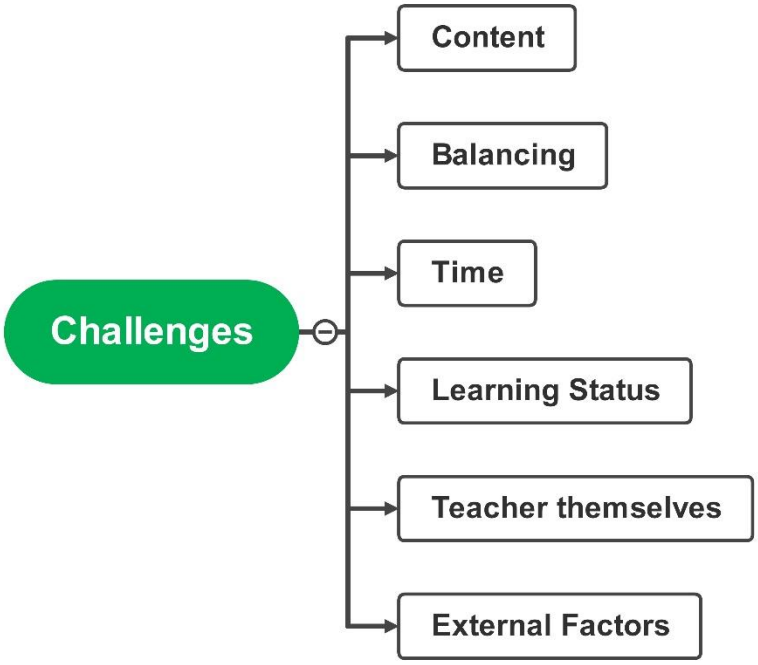


Figure 4.4-6: Challenges in Pedagogical Practice

During the interviews, teachers mentioned the challenges several times and gave specific descriptions of them. These challenges were matched with 'Issues in general teaching process' and 'Unexpected findings' from classroom observations (see Figure 4.3-5 and 4.3-6, p. 145-146). The above diagram summarises the six challenges, while the specific details will be presented in session 4.5.4 (p. 164-173).

4.5 Theoretical Codes

Theoretical codes combine the focus codes, demonstrate their relationships from these three datasets, and generate the theory to answer the main research question. Therefore, four theoretical codes will be generated from answering each sub-research question based on the research design elements (See table 4-1, p. 117).

4.5.1 Sub-question 1: How can Inquiry-Based Learning be applied and adopted in the Chinese primary music classroom?

Participating teachers believed this was a student-centred approach as it provided equal opportunities for all students to express their emotions. The Chinese Music National Curriculum expects students to acquire the ability to communicate with/through music (see Figure 4.1-6, p. 129). Under these circumstances, primary music education in China emphasised that teachers should act as a bridge of communication and facilitate emotional empathy (see Figure 4.3-3, p. 143). IBL in the traditional classroom was designed to make those high-demanding learning objectives more attainable (see Figure 4.2-1, p. 134). Therefore, the implementation of IBL considered the following aspects: length, content, and the format of activities (Codes see Figure 4.4-2, p. 152).

Length. It referred to the duration of the IBL-designed activities. Data from classroom observations showed that the length of IBL activities ranged from 7-14 minutes to 10-22 minutes for the two grades. Teachers' feedback in the interviews concluded that a 10–15-minute range was the most appropriate. Meanwhile, they believed that the duration of IBL activities can be increased or reduced depending on the student's engagement.

For example, the IBL-designed activity took only 7 minutes in the first two lessons in year 4. The participating teacher explained that the questions in the first two lessons were too difficult, leading to students not knowing what to discuss. The Y4 teacher stated, ' *They could only answer the questions based on what the teacher had asked them*.' Therefore, she did not leave the students with a lengthy discussion time. In addition, the discussion activity in lesson 9 took only 9 minutes. This was due to some unforeseen circumstances in the earlier teaching activities. The student's accuracy of pitch took longer to develop than she expected. She, therefore, had to reduce the duration of the IBL activity to ensure that she could finally achieve the 'Knowledge and Skills' objective.

In contrast, students in Year 5 spent 22 minutes in Lesson 6 engaged in an IBL-designed activity. Due to the coherence of the material in Lessons 5 and 6, students spend less time learning the main piece in Lesson 6. According to the observation sheet, students showed great interest and energy in learning the piece and participating in the IBL-designed activity. The Y5 teacher explained in the interview:

> '*The songs are smaller in length and can be tried out in their entirety during the initial appreciation……Also, they learn to sing quickly as they have had the previous lesson to build on. Plus, the rhythm and overall style were more upbeat, and they just loved the creation.*'

As a result, four groups in that lesson presented their creation. Students attentively listened while enjoying other students' presentations as they understood the importance of respecting others.

Content. Interviews indicated that both participating teachers felt that choosing one song from each unit was the maximum capacity they could accept as beginners for the IBL design. Although there are 4-5 pieces in a unit, not all of them are suitable for teaching. Based on the data from the action and feedback phases, pieces suitable for the IBL design should have a prominent music-related pedagogical character and be of low to medium difficulty as well as medium length.

Take Peter and the Wolf in Year 4 and The Blue Danube in Year 5 as examples, both of which were large and difficult to teach. Although both pieces have distinctive musical characters, the length of the pieces made it difficult to listen to them fully, and students gradually lost patience and concentration during the listening process. After the lesson, the feedback from participating teachers agreed that the lesson plan was not the best proposal, and that further improvements and preparations were necessary for them to complete such content.

Conversely, when a piece is 3-5 minutes in length, it is more accessible to students in terms of pedagogical practice. As the pieces are short, it is possible to listen to them several times during the regular teaching in the early stages to allow students to familiarise the pieces. Repeated listening will not only strengthen students' memory of the music but will also further stimulate their resonance with it.

The Format of activities. Regular teaching usually started with an introductory section that led to the topic of teaching and extension activities and ended with a conclusion. Therefore, the IBL design was ultimately considered to accomplish extended teaching. As the pilot study considered the possibility of P4C, the pattern of question discussion was designed as the initial form of IBL in the first 1-2 lessons in both grades. However, actual teaching demonstrated the difficulty of this format. The main difficulty was that students did not know how to support their views. From classroom observations, it was noted that effective discussions only lasted about five minutes in this situation. Subsequently, we modified and expanded the IBL format in the following lessons, primarily including:

- Topic-related question
- Picture the music
- Play the song with other instruments.
- Mini musicals
- Improvisation and Composition
- Storytelling the music

The purpose of these activities was to provide a platform for students to express their feelings about music. Teachers proposed that the most appropriate design for such activities was to have a clear learning objective for beginners. It is important to note that the same format was not very suitable to be used several times in a short period as it may reduce the students' interest in the activity. For example, in Lesson 6 in Year 4, when the IBL was still designed around the music and its associated images, the students showed some boredom. Teachers also suggested that the IBL activity format used in this study was not the only option

and that the design of IBL could be adapted to be more flexible and varied depending on the content. Based on the existing data, it can be found that students preferred to be involved in activities that required creation and presentation.

Therefore, the theoretical code generated from the sub-research question was ‘Give time and space to students. The IBL activities were designed to give students sufficient space and time to express their own understanding of music. During this time, the teacher needed to be well prepared to guide the students to deepen their perception of music and build their own personal aesthetic through creativity.

4.5.2 Sub-question 2: How does this pedagogical approach impact teachers' ability to teach musicality within the primary Curriculum?

According to Figure 4.4-3 (p. 153), the impacts on a teacher's ability to teach musicality were discussed in the acquired and that need to be developed in the long term. Through the ‘Plan-Act-Reflect’ research cycle, teachers have experienced and reflected deeply on their teaching skills. Teachers reviewed it as a personal energy-saving teaching practice and a high sense of professional achievement over time. In the application of IBL design, the teacher not only established communication between the students and the music but also created a deeper emotional connection between themselves and the students. In response, the teacher made the following expressions:

‘Get to know my students well.’

‘Want to hear more ideas’.

‘Like my students more than before.’

‘More willing to teach music.’

The Y5 teacher had mentioned in her post-lesson feedback and final interview that it was because of the IBL-designed activity that she heard a response from a student who had never

expressed his personal ideas in music class. This led her to reflect on whether her previous teaching had neglected students' individual learning needs.

In the meantime, teachers saw the use of IBL as changing their perception of teaching style. According to the Chinese Music National Curriculum and documents in the planning stage, the teacher was considered as an organiser and facilitator. The teacher's leading skill was then examined in the pedagogical practices. The first point in the leading skill was to keep the implementation of the IBL design smooth. The teacher has pointed out that for those first-try activities, it was important to have an example before students' practice. The teacher stated in the interview that giving clear pointers or step-by-step leading was sometimes necessary.

However, the teacher's example can also limit students' creativity to some extent. For example, in Y4 Lesson 2, the teacher asked the students to add their own musical notations to the scale, while students were limited by the example on the sheet. Therefore, it is important to decide the level of motivation. Therefore, the teacher used several teaching reminders (see Figure 4.3-4, p. 144). Regarding the IBL design, the most essential tip for teachers was to remind students that there is 'No right answer'.

The language used in questions also influenced the teacher's leading ability. Teachers demonstrated that due to traditional lecture-style teaching, students were very good at providing the 'teacher expected' answers through questioning or language. Through those designed lessons, teachers believed that it was essential for them to avoid these questions with predictable or obvious answers.

Adaptability was considered by the participated teachers as another ability they gained from the IBL design. It referred to how teachers can apply the influence of age-related characteristics in their teaching, different teaching methods required for different classroom learning atmospheres and some pedagogical adjustments to deal with unforeseen situations. In her interview after the fifth lesson, the Year 4 teacher mentioned that she had made some

temporary changes to her lesson plan, considering that the students were generally in a high-spirited mood and could not settle down to enjoy the music. She also mentioned that the same content had been taught in other classes before with completely different results. In this case, the teacher needs to set the music-related learning atmosphere. The codes in Figure 4.3-2 (p. 142) also provide evidence of teachers' development of adaptability.

Teachers also commented that carrying out IBL in the traditional Chinese primary music classroom requires more time and thus pedagogical investment for teachers themselves. It was initially a learning and confidence-building process. Teachers felt that they had to gain a high level of control in the classroom to reduce the number of unexpected situations. Accordingly, teachers must acquire knowledge in another related field, such as child psychology. As students develop their personal aesthetics and creativity, teachers also need to further develop their musicality to take on the role of 'teaching'.

Documents such as the 2011 version of the National Music Curriculum emphasise the position of the teacher as a facilitator, and the teaching objectives addressed in the teacher's guidebook were predominantly didactic. However, the data from observation and feedback showed that teachers' teaching and learning were developing in parallel. It demonstrated the fundamental of listening in music teaching and learning. Listening in teaching does not simply mean teaching students how to listen to music from the teacher's perspective. With the appropriate time and space given to students, teachers realised the importance of listening to students and learnt to listen to their students.

To sum up, during the process of this research, teachers have developed their abilities in classroom management and diversified teaching techniques. Alongside this, they have also reflected on the skills they should develop as learners. These include the intellectual skills associated with teaching and learning and the teacher's own musicality. Therefore, the theoretical code in this answer to sub-question 2 is ‘As a teacher, as a learner’. It summarised the position of a teacher in applying the IBL design in traditional Chinese primary music

classrooms.

4.5.3 Sub-Question 3: What are the relative impacts of this approach in enhancing musicality in childhood education?

It was a dynamic process that first demonstrated student communication skills development from the teacher's perspective. Figure 4.4-4 (p. 154) it showed the process of how this communication skill improved. From the teacher's perspective, having no further explanations or support examples was the first reason that limited students' expressions. Also, students were scared about making mistakes and behaving badly, that further reduced students' confidence in personal expressions. Then, they started to react correspondingly to the teacher's attitude. It was observed by the Y4 teacher in the previous lessons that students' answers differed from their group discussion and the whole class presentation. Students did not readily express their ideas until they had the 'perfect' answer.

Interestingly, students at this age extremely cared about the teacher's appreciation. They were naturally seeking the teacher's approval all the time. In fact, they are concerned about the chance to speak. At this point, the teacher realised the importance of giving the students a sense of involvement and achievement. For students, the first step in the development of their abilities under the IBL design was to attempt to express, albeit some very interesting and childish expressions. The most important development of students' musicality at this stage was showing their creativity (See Figure 4.4-5, p. 154).

With the progression of time and constant practice, the students' musicality developed in a more logical way. In other words, their communication skills at this level were meant to communicate with/through music, which is the concept of musicality in the National Curriculum. The most significant change was the shift in their perception of listening. Teachers compared students' listening behaviours and stated that students actually '*Do not know what to listen to music without instructions*' at the beginning. Instead, students developed

sensitivity in listening skills within the IBL-designed activities. In lesson 4, the Y5 teacher commented in the interview and said,

> *'Through our training in these sessions, they are improving in their appreciation and listening skills. They might not really understand how many parts the music can have even after listening to it. But after one activity, they will think, 'why are there these distinctions? Did the rhythm change, or did the melody change? You can see now that I do not need to ask them whether the music is three or four parts. They are more often thinking and exploring on their own.'*

Not only did the students show a change in sensitivity in their listening skills, but they also attempted to apply this sensitivity to their singing skills. In lesson 7, the Y4 teacher used several different sets of sound comparisons to support students in correcting their pitch. Students eventually achieved a harmonious diatonic exercise in the third major interval. Most importantly, the teacher asked one student as the examiner, and the student commented that, finally, 'the human voice sounds particularly harmonious.' Also, in some activities requiring duet choral or composition work, the students' awareness changed from 'completing a collaborative task' to exercising their collaborative skills. As ultimately, they wanted to present a more perfect work, they began to learn to coordinate and work with each other. Corresponding to the 'Plan' stage, listening was converted into a skill rather than a simple act by students who avoid listening to their teacher's instruction mechanically.

In addition, they developed their listening skill by listening to each other. After the 8 lessons in their grades, students have the awareness to listen to what others say. The teacher believed that the biggest influencing factor for this change, apart from the constant reminders, was that students realised that to ensure more opportunities to express themselves, they must keep quiet while others present. So that they would not be disturbed during their own

presentations. As they maintained respect for others, they gradually began to think about the content and meaning of others' responses.

Ultimately, a handout was given to the students to collect their comments on the music for the semester. Two questions were asked: 1. what they thought were the three most interesting or impressive things about their music lessons this term. 2. Draw a self-portrait of themselves in their music lessons. In both grades, over 90% of students mentioned at least one lesson related to a classroom designed by the IBL. The two most mentioned lessons in Year 4 were 'Spring Excursion' and 'Peter and the Wolf', and 'HiBingYinShi' (Lesson 5) was the lesson that Year 5 students found most interesting. The reason for choosing ‘Peter and Wolf’ and ‘HiBingYinShi’ was the design connected pictures and music to give students space to create. While during the singing of 'Spring Excursion' clearly showed how the students became aware of the difference in pitch and corrected it. One student even commented that learning how to play #F on the flute was like a 'little treat' for them.

The theoretical code that emerged from summing up the above responses was 'A long-term, upward development'. Through informal feedback, teachers were confident that students would be impressed with the IBL-designed activities and the content. Despite only one semester of experience, students have developed their expression and musicality. However, teachers also noted that the development of such abilities was very limited in the short term. Teachers proposed that if the long-term application was to be considered, it would be necessary to consider the overall planning and design of music instruction at the primary level. In advance, the difficulties and challenges of its practical application must be addressed.

4.5.4 Sub-question 4: What are the challenges in the implementation of this pedagogy in the Chinese primary music classroom?

Two teachers narrated their feelings about the concerns and challenges of implementing IBL in the traditional music classroom. Generally, there were six categories of challenges based

on the interview data (see Figure 4.4-6, p. 155). Teachers also indicated that some issues were caused by traditional teaching. While some of them can be solved by IBL, others need more improvement and research from the current situation. Each category was discussed in detail in the following paragraphs.

- *Content*

Teachers commented on some content that not all the pieces were practical, especially given the age and characteristics of the students. In the post-class interviews, they raised three challenges regarding the content: the suitability, the capacity of the content and the difficulty of the song itself. Teachers considered that most of the content-related challenges were inherently problematic. For the implementation of IBL design, they indicated that it would be a more difficult challenge to adopt collaborative-related content in the short term. The codes in the figure below represent some of their thoughts.

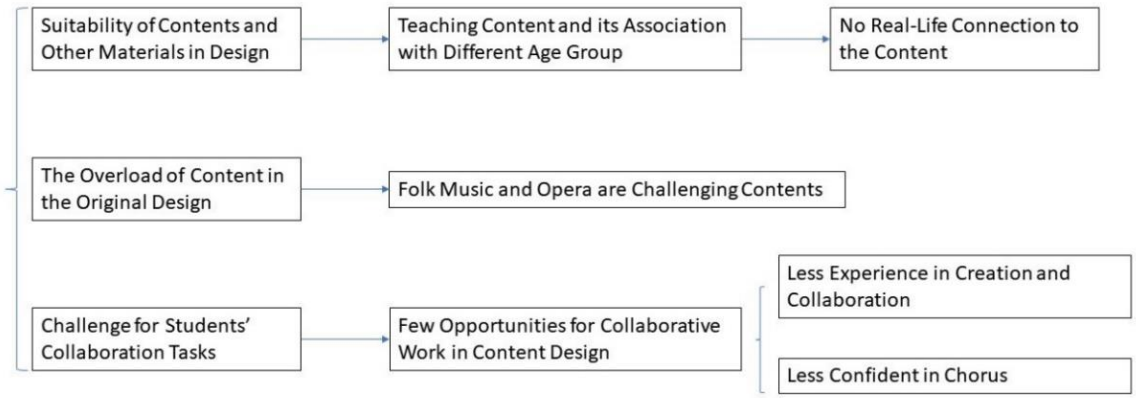


Figure 4.5-1: Details in the Challenge 'Content'

In terms of suitability, the Y4 teacher took lesson 2 as an example and said in the interview:

> '*Today's piece contains a stronger national sentiment. In fact, I think it might be more appropriate to place it at a more advanced level or even at a high school level……Because the melodies are soothing and even a bit miserable, it is difficult for them to get into is. Their engagement is more superficial and 'Action-oriented*".

Likewise, in lesson 6, the Year 4 teacher temporarily chose to teach another song from the unit. She explained afterwards that the original content was about the forest and the birds. The reality was that this generation does not have a lot of access to nature, and then it would be difficult for them to empathise with the song.

Teachers found that folk music or opera-related pieces could only be accepted and appreciated in a 40-minute class. However, the corresponding teaching requirements suggest that students should 'master' the relevant knowledge, which is very difficult to achieve. The problem of actual teaching could not fully meet the objectives also emerged in the collaborative content. The overall content was designed to include only a small percentage of collaborative work, which further reduced the opportunities and confidence of students to practice. The teacher also stated that it was a challenge to translate actions into skills in a limited duration.

- *Time*

Teachers referred to the challenge of 'time' as a pedagogical restriction, and two main aspects related to time were mentioned in the interviews: the total amount of music lessons and the time spent in class, see the diagram below.

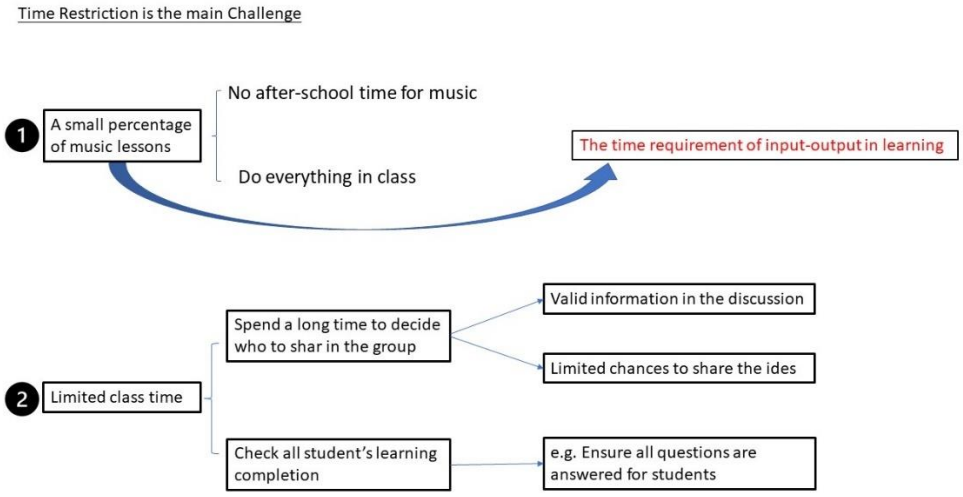


Figure 4.5-2: Details in the Challenge 'Time'

As a non-core subject, music was taught only twice a week, meaning there were only 80-90 minutes of music teaching in the school. However, the input and output of teaching and learning is a time-consuming process. With only 80-90 minutes a week in the classroom, this was certainly a very significant challenge for teachers. In parallel, precious classroom time cannot be guaranteed to be fully concentrated on teaching and learning. Teachers found that students might be easily distracted during the discussion or spend a long time deciding who to present the idea to. The design of IBL in teaching offered more space to ask questions or express students' thoughts. This also meant that teachers had to consider questions from students that might arise at any time during the class.

Teachers also noted that the thing they regretted most about the IBL-designed classes was that not all students could present their work due to time restrictions. All of this made teachers feel that the limited classroom time needed to be more thoughtfully planned, including considering whether to collect those works that could not be shown after class.

- *Balancing*

For teachers, the content, objectives, and time were fixed. Therefore, the most important challenge for teachers in this study was how to ensure that the set learning objectives could be completed as scheduled with the implementation of IBL. This involved three balanced sets of relationships: traditional teaching and IBL pedagogy, developing musicality and maintaining self-discipline, and individual and group learning. For details, see the figure below.

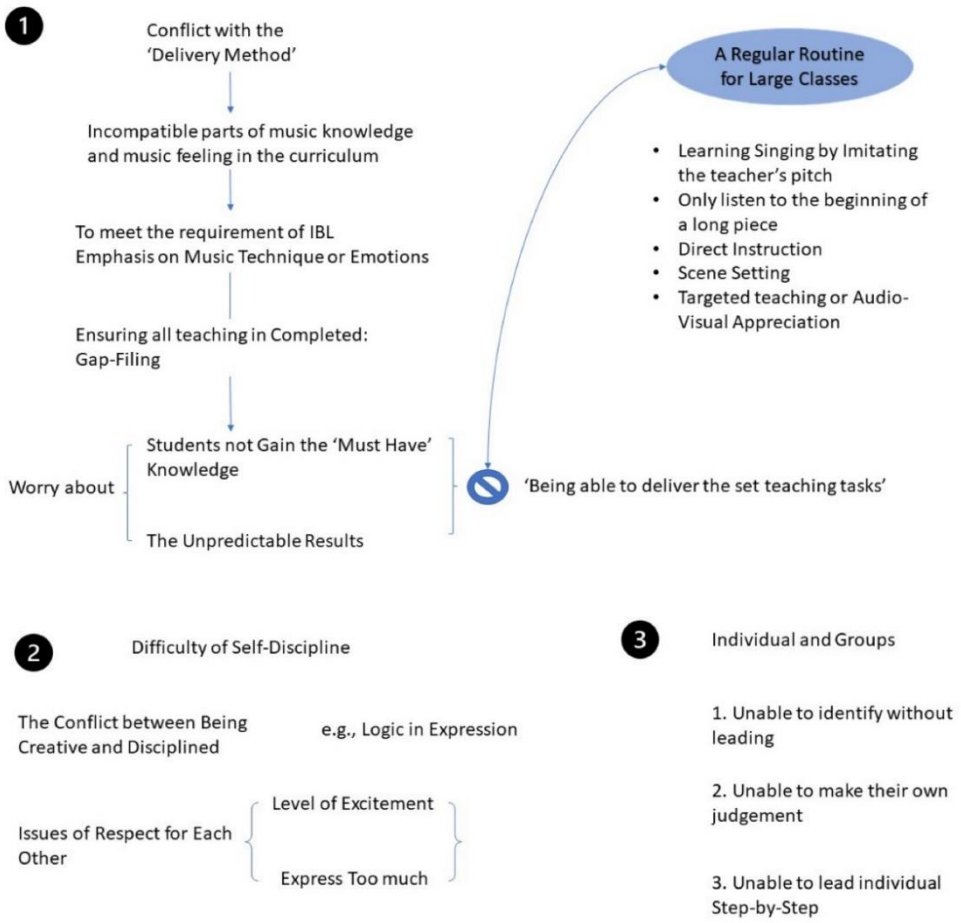


Figure 4.5-3: Details in the Challenge 'Balancing'

Teachers stated that the learning objectives set by the National Curriculum as being the most idealised outcome. Balancing teaching the basics of music or technique with musicality in the traditional music classroom can be challenging. With the involvement of the IBL design, the first concern was whether they managed to complete the teaching schedule, as both teachers said. The unpredictable results of the IBL application caused concern in the early stages about whether the original 'mandatory teaching objectives' would be attained. Therefore, the main thing teachers required was the balance between achieving the original teaching objectives and implementing the IBL design.

In the final interviews, teachers mentioned that their concerns about 'being able to deliver the set teaching tasks' gradually diminished as the course progressed. Instead, they identified some additional balancing relationships.

The problem of self-disciplined was caused by the teacher's leading, to some extent. Figure 4.4-4 (p. 154) shows the progression of students' development of musicality; however, the code of 'Reminder: Be Quiet' reflected in reverse the over-excitement of the student in the developmental process. This is the reason why teachers mentioned the level of leading when it comes to their ability development.

The time factor mainly influenced the balance between individual and group learning. With the application of IBL, teachers must spend more or less time in the classroom to facilitate individual learning, especially at the early stage, which can delay the overall pace of teaching and learning. Conversely, teachers also felt that traditional teaching also somehow ignored individual learning needs.

- **Students' Learning Status**

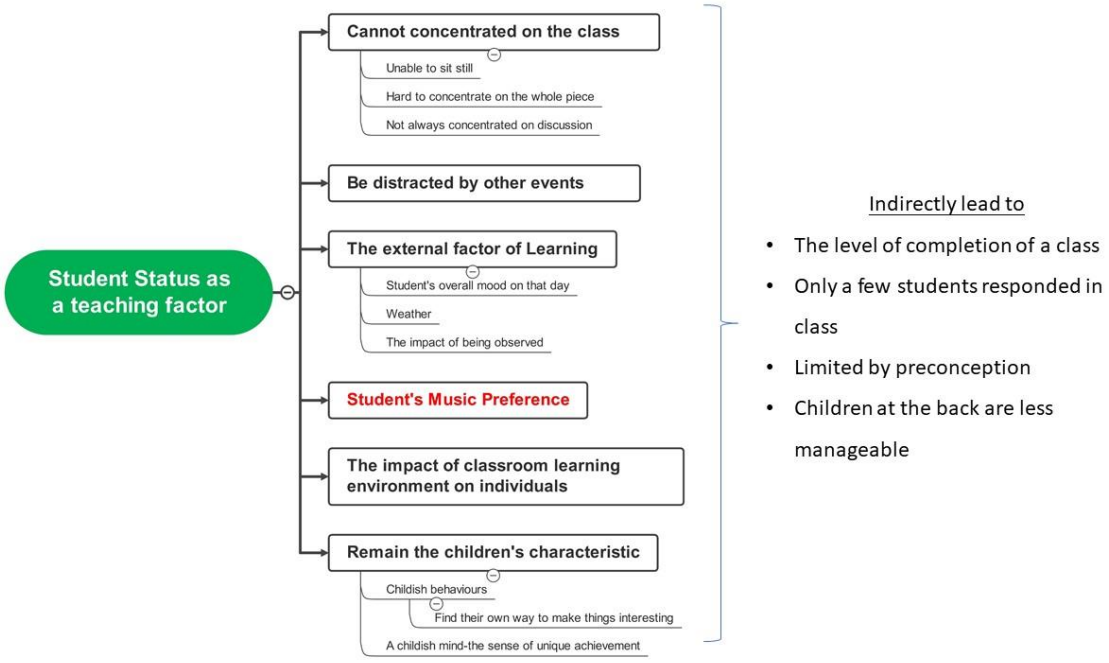


Figure 4.5-4: Details in the Challenge 'Learning Status'

As the main subject in teaching and learning, the status of the students was a direct factor in their own learning outcomes. From the teacher's perspective, students' attention span, resistance to distractions, overall classroom learning atmosphere and some external factors were also uncertainties in traditional teaching. In fact, implementing IBL in the music class could somehow reduce those uncertainties as the activities designed were attractive to students. Classroom management problems can also be somewhat avoided by involving all students in the designed activities.

Students' musical preference was linked to the challenge of content. It also affected their engagement with the class and the depth of their understanding of the music. As discussed before, students showed less interest in those smooth, miserable tracks. In most cases, students tried to make the lesson interesting in their own way, which affected the teacher's overall progress to some degree. This directly influences students' in-class learning status and further challenges the choice of content and the design of the IBL activities.

- *Teachers themselves*

Teachers identified the challenges of their work as arising from ‘physical and mental fatigue’. See the diagram below:

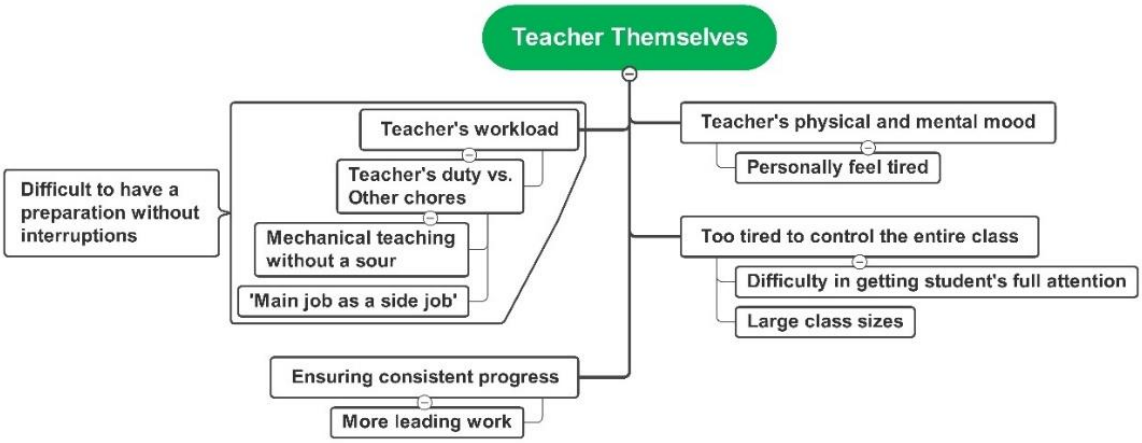


Figure 4.5-5: Details in the Challenge 'Teachers Themselves'

The heavy teaching workload was the significant reason that caused their physical tiredness. Both teachers took on other roles in the school, except for teaching at least five groups of music classes. It was difficult for them to find a full period of undisturbed lesson preparation during working hours. The application of IBL involved more leading on individual learning, which was also more energy intensive for the teacher considering the large size of the class in Chinese primary schools. Although teachers felt that the time required to prepare was shortening in the later stages of the study, this would be a challenge for any teacher new to IBL.

- External Factors

This classification incorporated some of the factors that teachers have suggested would affect the application of IBL in practice. See the figure below.

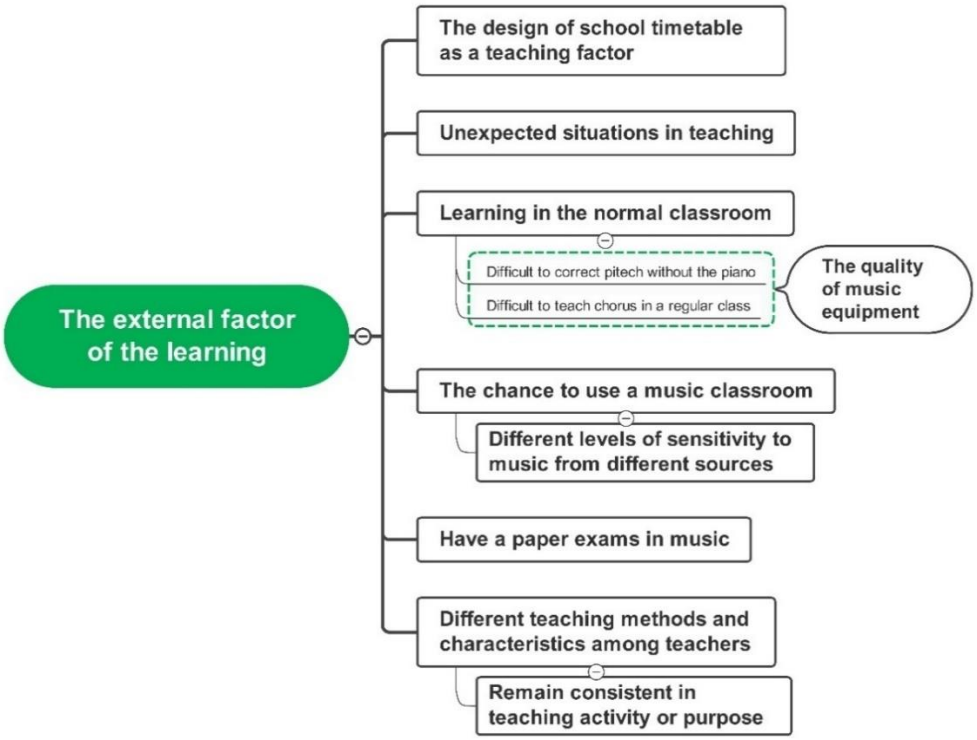


Figure 4.5-6: Details in the Challenge 'External Factors'

Teachers explained that if music lessons followed PE lessons, which was a common 'default' schedule that it would take more time for students to settle into the class from a heavy sport. Apart from this, teachers identified the possibility of having classes in a dedicated classroom for music lessons as a challenge to the implementation of IBL. For example, in Lesson 3 in Y5, the IBL design activity required students to rehearse a mini-musical. Due to the large class size, the original classroom was stuffed with desks and chairs so that movement or improvisation was very difficult. The teacher mentioned that if the lesson could be conducted in the music classroom, then the students would have a much freer range of activities.

Teachers calculated that there were four music teachers and about 30-35 classes in this school, and one group had two music lessons per week. This also means that more than two classes

have music lessons simultaneously. But the school only has two music rooms, so the teachers coordinate with each other to ensure that each class gets one lesson every week in the music room. They also mentioned that the equipment in the music room was not up to date and that the piano was used very frequently but only adjusted approximately annually.

Teachers acknowledged that these external factors were inherently present in traditional teaching and did not constitute a major challenge to the use of IBL. Instead, the final paper exams and the constantly adjusting teaching classes were the two most important external influences they identified. They demonstrated that the key points in teaching the 'Must-Have' knowledge were paper exams and other evaluations for teachers. They were rarely responsible for a class for years 1-6. The teaching habits or patterns of different teachers, or even the teachers' personal musical aesthetics, can require constant adaptation by the students. They argued that this could somehow interfere with the overall development of students' musicality, especially in the implementation of IBL in Chinese primary music classrooms.

Based on the answer above, the theoretical code that emerged from this sub-question is 'Effective and precise music teaching'. The challenges teachers' perceptions in implementing IBL include the content and timing of the teaching itself, the students and teachers that are the subject of the teaching, and some external objective limitations. Most importantly, teachers need to balance these factors to deliver more effective teaching. Thus, those ambitious goals proposed by the National Curriculum were no longer 'idealistic'.

4.5.5 The 'Theory': 'How might teachers adopt Inquiry-Based Learning as a pedagogical method within the teaching of musicality within the Chinese primary music classroom under the auspices of the National Curriculum?'

Ultimately, four theoretical codes emerged from the answers to the sub-research questions and the above section answers the four sub questions in theoretical and practical aspects. It

is feasible for teachers to adopt IBL as a pedagogical method in musicality teaching. The answer to this main research question is to 'Make Music Visualisable'. This code was mentioned by the Y4 teacher in the final interview. This code translated the concept of musicality in the National Curriculum into the pedagogical practices in this research. The figure below captures the relationship.

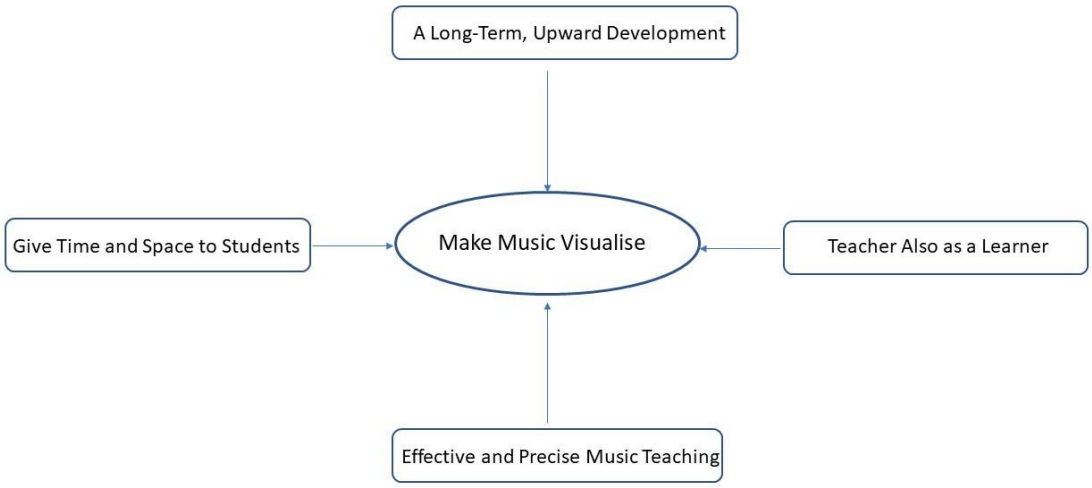


Figure 4.5-7: The Structure of the Theory

That is to say, and teachers utilise the IBL method in classroom teaching by giving proper time and space to students for the development of musicality, which is a long-term upward progression accompanied by students' social skill development. The constraint of time is hard to change but manageable to some extent. And it can be important depending on how creative the teacher can be in designing, operating, and changing their original plan correspondingly in classroom teaching. Students can demonstrate their perception of aesthetic and creative aspects of music in such a developmental space. Empathising with the music proposed in the National Curriculum becomes visible to both teachers and students. The content needs to be chosen sensitively, and the format of the IBL design can be flexible. The engagement of a new approach requires effective and precise music teaching, and that implementation should be considered in both school education and teacher education. The teacher fulfils the teaching role by serving as an organiser and, facilitator and even a curriculum maker. Simultaneously, they are also 'learning' in the process.

4.5.6 Summary of this chapter

In this chapter, the data from the three datasets were first analysed at the initial coding and focus coding levels. It was then combined to answer the sub-research questions by generating the theoretical codes. The four theoretical codes resulted in the theory used to answer the main research question. In conclusion, the centre of implementing IBL as a pedagogical method within the teaching of musicality under the auspices of the National Curriculum in the Chinese context is to visualise the students' musical expressions or feelings, as the 'generated theory' in this study.

Chapter 5. Discussion

In this Chapter, I will discuss the study's findings in relation to current literature around five aspects: teaching musicality in music education, implementing the IBL approach in the Chinese music education context, the alignment between school education and teacher education, listening skills for children and further implications of this study, namely the importance of training teaching musicality in music teacher education.

To begin, within Section 5.1, I will discuss the concept of musicality as an independent skill along with its pedagogical practices in the school education system, particularly its significance and guidance in the latest Chinese Music National Curriculum. In section 5.2, I will elaborate on the findings explicitly as conditions for implementing IBL in Chinese music education. Then, the following section 5.3 and 5.4 will discuss the role and skills obtained in the teaching and learning process by teachers and students, respectively. In section 5.5, I will demonstrate the implications of this study for teacher education, school music teaching and other music studies, particularly in the areas of curriculum development and cultural concepts of music. Most importantly, I will answer the research question in connecting the theory to practices in section 5.6.

5.1 Teaching Musicality in the Music Education

In this section, musicality will initially be conceptualised as a domain-specific skill in music education and discussed in its three levels. I will discuss the pedagogical practices based on my findings in the classroom. Most importantly, the concept of musicality will be related to the latest Chinese Music National Curriculum, indicating the focus on further primary school music teaching.

5.1.1 Musicality as a domain-specific skill

Musicality, as a term used in everyday language, refers to someone being a musical or professional musician. It is often used synonymously with a selection of different terms in

specialist music and other literature, such as music literacy, musicianship or musical ability (Hallam, 2015). In this thesis, the term ability refers to skills acquired through systematic learning or training. However, musicality has also been discussed in infants as they naturally respond to music, for example, lullabies (Trehub et al., 2015). Musicality at this level cannot be viewed as a skill trained in education but instead viewed as an innate disposition. Therefore, based on the literature and my findings, musicality is systematically conceptualised in three hierarchies for training in different age groups or education levels in the Chinese context. This diagram's structure was adapted to Bloom's taxonomy as each element was built up for the next concepts. See the diagram below.

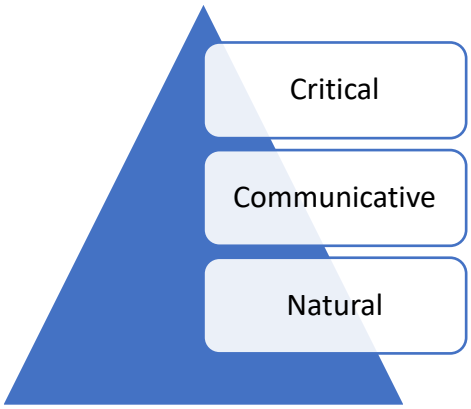


Figure 5.1-1: Three Levels of Musicality

Natural. For new-borns or infants, music or sound is the touch visual communication between them and others and is generally used to comfort them through aural perceptions (Hallam, 2015; Trehub et al., 2015). Some children at this stage may show extraordinary musical ability and then an innate sense of musicality. However, this does not mean that children without such musicality do not have the developmental potential for musicality in the early years. Therefore, natural musicality will not determine a person's opportunities to engage in musical activities or learning as they grow. Arguably, education can nurture musicality by developing internal hearing ability (Dalladay, 2012). At this point, musicality transforms from an instinct or characteristic of a species to a skill that can be obtained by systematic learning. This also

means that the opportunity to develop musicality should be equitable for all, even if each person's musicality is gifted differently at an individual level.

Communicative. When an individual begins to receive systematic music education, the concept of musicality will vary according to the requirements of the National Curriculum. In the 2011 version of the Chinese music National Curriculum, the concept of musicality is designed around aesthetics, creativity, and sensitivity. All musical teaching is based on aural activity- listening. The first thing for students in listening to music is to understand the culture, identify the different musical elements and respond to the emotions behind the music. Pflederer (1963) believed that music has its own expressive intent; it communicates with the audience through aural perception, and then the audience responds to the music through their movements or language. Thus, Chinese music education's musicality emphasises communicative musicality in its compulsory stage.

Critical. The original concept of critical musicality was generated by Green, as she considers this a more advanced goal against music appreciation in informal music learning, for example, peer learning (Green, 2008). On this basis, Costes-Onishi & Caleon (2018) established criteria to assess critical musicality in education. Those standards generally started with 'I can…' or 'I am aware of …' as they focused on the 'critical' aspect. Compared to the Chinese Music National Curriculum, the requirements for musicality do not overextend its criticality for elementary school students. Instead, such critical standards are more applicable to music-major students or pre-service music teachers when trained to be professional musicians. Therefore, the concept of critical musicality employed in this diagram lies on the continuum between communicative and original criticality. Students at compulsory stage have the capacity to listen to the music analytically, and somehow be aware that listening is not a simple, passive action.

To sum up, these three concepts of musicality integrated with the specific teaching contexts would form a valuable, higher-ordered music education system. The communicative

musicality would generate the unique power of music, somehow replacing the capability of language in transmitting the cultural, economic or social meaning underpinning the music (Trehub et al., 2015). In some literature (Cores-Bilbao et al., 2019; Johnson et al., 2019; Miendlarzewska & Trost, 2014), it is common to discuss the positive outcomes of boosting cognition and student engagement in music learning. However, Sala & Gobet (2017) have indicated that a wide range of variables in the learning process may influence and challenge these known positive outcomes. Such complex research design may not explicitly reveal the positive role that music plays in the learning process. In other words, music was defined as an extracurricular or a tool for other subjects learning rather than the emphasis on its own learning. Therefore, musicality is only viewed as a domain-specific skill in the music education system and will be discussed in relation to its importance and pedagogical practices in the school music classroom in the following section.

5.1.2 Teaching musicality in the school music education

The Chinese Compulsory Music National Curriculum is aimed at all school-aged children to access music activities rather than particularly developing professional musicians. With this motivation, music teachers or educators are supposed to provide sufficient, equal opportunities for their students to have a long-term development of musicality (Hallam, 2015). The concept of musicality remains at the communicative level, with some encounters with critical musicality in my research. In the following section, I will demonstrate musicality in relation to various musical activities that I carried out within this research.

Listening is fundamental to all music activities. In terms of natural musicality, listening is simply an experienced action as it initially provides an aural experience. Music listening for students at this level is a reflective and expressive means of emotional feelings and occurs in various daily situations (Woody & Burns, 2001). In my research, listening skill taught in school is then distinguished from the action of 'hearing' based on the musician's perspective (Hargreaves et al., 2011). School music education is intended to develop communicative and critical

musicality. Thus, the instruction of transferring listening action to skill is significant to discuss in the context of music education (Todd & Mishra, 2013).

Students are not instructed to become reactive robots to sound. Instead, there are generally two expected aspects from their listening practices: professional musical ability and emotional and sensitivity-related goals. Initially, they are supposed to develop their listening sensitivities and enrich their listening enjoyment through music education (Anderson, 2016). In fact, it is confirmed that musical listening does not exist independently of the classes but is developed through a variety of activities in the audio, kinesthetic and visual domains (Boal-Palheiros & Hargreaves, 2004). The primary aspect developed in music learning is the student's musical knowledge and corresponding musical expressions. The Chinese Music National Curriculum stated that a large percentage of the musical elements of expressions, including tempo, rhythm, tones, genres, and the background knowledge of the music (see Appendix C, p. 295-299 and Appendix I, p. 309-312 for details).

In the Findings Chapter, the results show that teachers often ask open-ended questions about those musical elements and help students understand or memorise that knowledge (see Table 4.2-1 for details in coding, p. 132). Todd & Mishra (2013) believed that listening is hard to assess due to its cognitive and natural characteristics. That is also called the process of developing an inner ear (Dalladay, 2012).The design of Chinese music textbooks generally contains four types of music activities, including singing, appreciation, movements or performances and creations. These four main activities in the textbook manifest the development of students' listening skills through different modes of output. In this research, students engaged in music activities and generate personal interpretations of music physically, verbally, or visually. I believe, and this finding is supported in the literature, that those activities can directly promote students' musical listening experiences and creatively develop their musical and emotional experiences (Johnson, 2013). Within these designs, singing and appreciation are the two prioritised activities in music education.

Singing. Building up such musical understandings in musical listening was then reflected in precisely singing the piece. Each piece of music will have a singing requirement corresponding to the song's atmosphere. Students' living experiences are then applied as the stimuli for learning that song (Tan, 2017). In this research, in learning process, students are asked to sit in a proper gesture and learn how to vocalise, especially when they are in the voice change. That is to say, the singing activity should directly reflect students' understanding of musical elements and their functions in that piece. Due to classroom size and time constraints, most of the singing activities are class-based choral singing in this research. Therefore, singing practice in the school classroom is not able to accomplish more professional vocal skill development. Debates here are often around whether music teachers should act as musicians so they can more insightfully understand and transfer professional skills (Atkinson, 2018; Fautley, 2018).

For this reason, the musicality developed through singing activities will be more concerned with sensitivity to music. Ideally, teachers should be convinced that every student in the music classroom can sing and believe that singing is an important mode of expressing the personal voice (Biddulph & Wheeler, 2013). Students should not be excluded from singing activities simply because they developed less proficient technical skills or were without a qualitatively pleasing voice. Under equal opportunities, they can then demonstrate their aesthetic and creative understanding of music with specific activities. For example, creating an accompaniment to a song or performing the song in a different singing style.

Appreciation. Music listening refers to a learning skill; in actual practice, it also combines with music appreciation. In fact, appreciating music happens before all music learning; even before singing, students will either listen to the teacher or the audio. Therefore, appreciation should be understood as both a listening action and a learning process. In this research, it was clear that In the Chinese music National Curriculum, listening was not clearly stated as a learning objective. However, it was potentially replaced by the word '*XinShang*' (music appreciation). Unlike the direct output in singing activities, appreciation activities are more about verbal

understanding and communication, and they should be viewed as the key component of listening experiences (Dunn, 2011). Music appreciation is a pure listening activity involving the composer trying to communicate with the listener through various musical notes (Hargreaves et al., 2011).This research has confirmed that this type of verbal communication reflects the listener's emotions and can assist the teacher in deciding whether students understand the music or achieve the targeted learning objectives (Flowers, 1990). Students can construct their own musical world and become better listeners with long-term, efficient practices in school music learning (Burnard & Murphy, 2013).

Findings in this study suggest that appreciation activities in school music education have a greater importance on listening skills development than extracurricular or home listening activities (Todd & Mishra, 2013). The instruction of the music appreciation activity is not just on 'listening' but on listening with questions. In other words, it is elevated to an elementary form of 'critical listening'. Researchers have then challenged the quality of music appreciation courses in schools. Dirkse (2011) mentions that 'music appreciation' cannot be measured as a complex concept in a visual or exam-orientated way. He also stated that the success of a course should look at the teaching materials, teachers' beliefs and strategies aligned with the learning objectives. To deal with the effectiveness of music appreciation, most music teachers have reached a consensus on a clear task for their students before the appreciation (Svalina & Sukop, 2021). One of the significant reasons is that the teacher believes students will lose their focus during listening, especially when it is a longer piece, which is mentioned by the participant teachers. In other words, engaging in such activity can ensure students actively listen (Sims & Nolker, 2002).

In fact, the observational data revealed such results in this thesis. In the interview, the participating teachers explained that they usually conducted one or two questions that linked to the teaching objectives when students were asked to listen to the music. However, a very common problem in practice, and one that has arisen in the pilot phase and in other early sessions, is that such teacher-directed questions have obvious directions or pre-determined

answers. This can greatly limit students' independent expression (Johnson, 2013). This then gives rise to the issue of questioning skills, and this is further discussed in section 5.2.2 (p. 193-197).

Music is often viewed as a unique language that communicates with listeners through its quality and tone (Wallerstedt, 2013). Findings of this research indicate strongly that music appreciated outside school mainly serves as emotional empathy or as a background, while music chosen in the educational setting is functional. The content of chosen pieces in the school materials varies in, for example, the singing forms and styles and songs with different cultures. Students will then subconsciously relate the musical elements, for example, the tempo or melody, to elaborate their emotions when listening. It can be viewed positively a training outcome of recognising or distinguishing different musical elements in the National Music Curriculum. In this way, listening is a form of sensitivity scaffolding that may be achieved through the teacher systematically drawing pupils' attention to increasingly subtle and complex elements of the music's quality.

However, in many practical cases in this study, the over-emphasis on listening sensitivity leads to a process in which listening enjoyment is neglected, and that is the second standard to consider the quality of a music appreciation course. The enjoyment gained from music learning activities within this study can nourish students for a lifelong term, and such enjoyment naturally starts from their leisure music listening from the teacher's perspective (Woody, 2004). Few studies have considered the difference between the chosen pieces and functions in listening in schools and at home (Boal-Palheiros & Hargreaves, 2004; Woody, 2004). Students explained that in classroom listening, they have to objectively respond or analytically listen to the music, which is unattractive to them, especially considering that the outcomes are confusing for them – in other words, an emotional response but assessed through a cognitive outcome (Woody, 2004).

In addition, children are considered naive listeners who may not be able to respond to the authentic feel of the composer. This is why, in most music appreciation lessons, students' expressions only remain associated with musical elements. Participating teachers noted that students at this stage could only express their intuitive feelings verbally rather than communicating musically and professionally (Harry & Salvador, 2021). To some extent, students' responses will then simply alternate to the choice of 'like or dislike', 'peaceful or dramatic' (Vitale, 2011). Kellett (2000) claimed that it may be due to the limited vocabulary that restricted students' expression. In other words, a student's potential musicality might be underestimated.

Instead, students can absorb the inner feelings of the composer and express such feelings based on their personal experiences (Elkoshi, 2015). Then, other methods, such as drawing backgrounds or adding storylines to the music adopted in this research design, were also added as stimuli to assess students' aesthetics and sensitivity to the piece. With the aid of such stimuli, students' qualitative, personal listening experiences are subjectively and vividly constructed (Dunn, 2008; Han, 2016). It was confirmed by the results and findings that visual tools or design would assist the concentration of listening (Sims, 2005). Such methods offer further opportunities for students to make sense of music and then gradually form analytical listening (Anderson, 2016).

Han (2016) further claimed that students' cognitive response to music, creativity and sensitivity will also be boosted with such design in class, again supporting the notion of listening scaffolding in practice. One study discussed whether listeners only perceive emotions or whether music actually induces emotions in listeners (Corrigall & Schellenberg, 2013). They concluded and claimed that emotions induced by music are a complex feeling that the audience often mixes the perceived emotions and personal knowledge through a series of validations. Interestingly, they discussed that fearful sound music does not elicit the same fear level as actually confronting a wild, predatory animal, and yet some emotionally rousing music may well elicit a waterfall of feelings that had not been experienced for many years. However,

the emotions induced by such frightening music can be echoed anywhere relevant. Commonly, people who have seen a horror film would easily reflash a similar scene or sound before they fall asleep. In the educational setting, induced emotions would have a long-term impact on students' listening abilities. For example, the participant school used the 'Peter and Wolf' as the school ring bell. When Y4 students was listening to that piece, they immediately whispered that this is a 'startlingly familiar' song. In this case, students started to show their developments of the cognitive responses.

Movements and Performance. Movements and performances engaged in music learning are the most direct responses to listening (Todd & Mishra, 2013) and are also sometimes considered as the aid of concentrating on music appreciation. Body movements are more vivid and visible than the verbal interpretation of musical elements after listening (Fortuna & Nijs, 2020). Specific pedagogies, such as Orff or Dalcroze, address the significant connection between music and body movements (Fortuna & Nijs, 2022). Teachers can give simple instructions, asking students to clap their hands or move their bodies when listening to the music. But it is also argued that this connection between perception and music is a natural physical response that sometimes does not represent the development and creation of students' musicality (Cartagena, 2021). Thus, movement activity in classroom learning is generally viewed as an aid of learning activity or a warm-up section in music lessons. In contrast, performance is seen as a large-scale, professional musical activity that is difficult to fully practice in the classroom. Despite that, both activities would be equally accessible to all students in the classroom and allow students to be the masters of the classroom and creatively engage in learning (Burnard & Murphy, 2013).

Music-Making. Creation and Composition is another sound-based output that reflects the advanced level of student thinking in music learning. This type of activity demonstrates theoretical learning and knowledge and concentrates on learning outcomes (Cooke, 2022). Such music-making activities are classified as higher-level, advanced learning content that requires learners to train in the relevant formal academic field (Burnard et al., 2013).

Therefore, composing or improvising seems to be viewed as a less valuable activity at the primary learning level. Researchers, however, have disagreed that primary school music education should also involve such design in learning to develop children's cognition and musical expressions (Burnard & Boyack, 2013). In this way, composition or improvisation should not be constrained by the conventional rules of making a score but can be more creative with its design format (Burnard et al., 2013). In the case of my study, the participating teacher noted that such activity with a higher learning ability was rarely implemented in general classroom teaching as it is time-consuming. They preferred to engage students with a small-scale creation that was frequently designed as an 'adding movements to the song' activity. The philosophical idea underlying the design is that they believed such activity would somehow practice student creativity and would not be against the time restrictions in teaching. Under this circumstance, creating an encouraging environment for students to develop their confidence in composing is the key. The teacher should then continuously foster in their students a belief that that everyone could handle such a task.

In summary, music is a listening-based subject and is principally assessed by its learning outcomes. Singing and appreciation activity generally engages with verbal outcomes, while movements, performance, creation, and composition generate sound-based products. Students' aesthetics, creativity and sensitivity are merged into their musicality and are enhanced by these teaching practices. The key to this development is that the teacher gives precise instructions to convert students' passive listening actions or habits into listening skills (Todd & Mishra, 2013). However, there were some constraints that obstacle the implementation of those designs, which will be deeply discussed in section 5.2.3 (p. 197-207).

5.1.3 Musicality in the 2022 version of the Chinese music National Curriculum

In April 2022, the MoE in China published the new version of its National Curriculum for all subjects at the compulsory stage. Since the announcement of the National Curriculum in 2001, China's curriculum has followed a decade-by-decade reform pattern. In the following sections,

I will compare the latest version with the 2011 version and demonstrate the changes in teaching musicality in school education. I will also address the intentions of Chinese curriculum reform underlying internationalisation.

The most significate change was that the guidance for all art-related subjects, including Music, Fine Arts, Dance, Drama/Opera and Film, were combined into one document, and the percentage of each discipline at different stages is explicitly stated in the overview document. During the whole compulsory education, music and fine arts are the two main art-related subjects taught in schools. The overall outline of musical activities in design is summarised in the tables below.

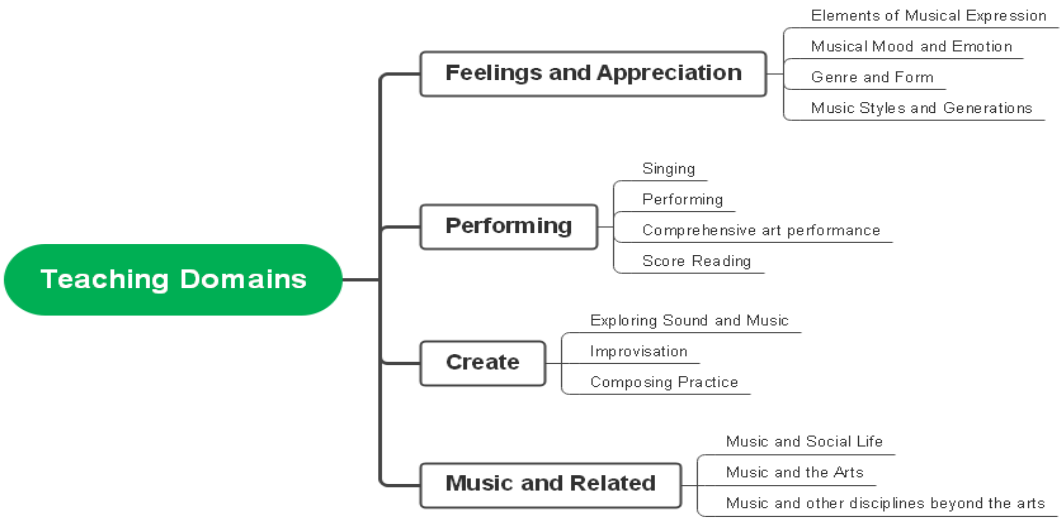


Figure 5.1-2: Outline in 2011 Version of Chinese Music National Curriculum

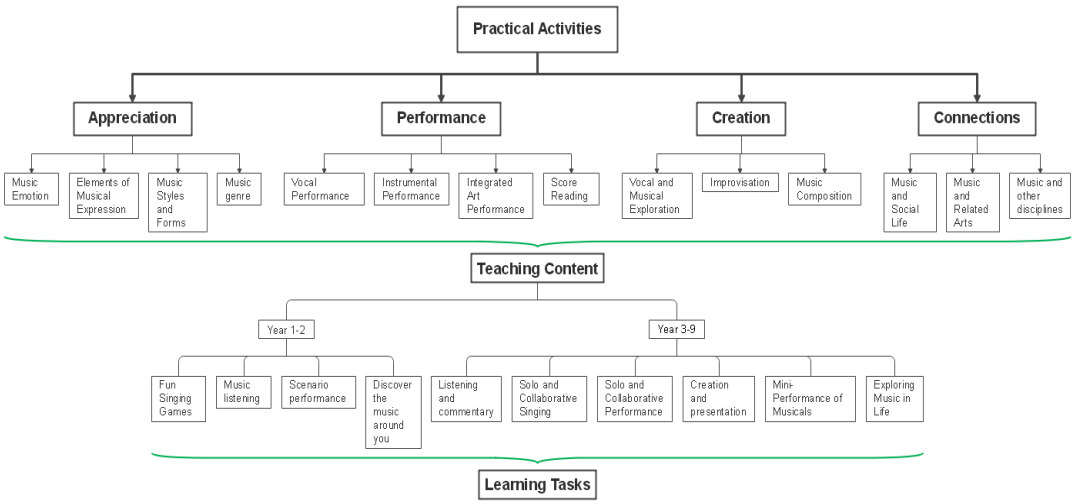


Figure 5.1-3: Outline in 2022 Version of Chinese Music National Curriculum

Compared to the 2011 version, the 2022 National Curriculum modified the teaching content and its associated learning tasks. It explicitly demonstrated the main teaching activities in each grade that teachers should emphasise in their teaching. In terms of textual content, the latest version added a separate section named 'Teaching Reminders' after each learning task, including suggestions, such as strategies, resources, and practical activities for teaching.

It is then critical to consider that the Chinese music educators and policymakers realised the importance of teachers working as facilitators to assist in the development of student-centred learning in the 21st century. Teachers should construct an equal learning environment and consider individual learning needs in their teaching plans (Tan, 2017). In the meantime, teachers still must prioritise the idea of 'For all students' in Chinese music education. Previous literature has provided some tentative insights into the importance of this objective. Music classifies students, particularly in higher education, while music becomes a limited source of people who can afford private lessons in some countries (Howe, 2022). This will cause a shortage of music teachers and further lead to insufficient or marginalisation of some activities in practice (Suomi et al., 2022).

Curriculum reforms in the past decade started to evaluate the connection between higher education teacher education and primary school curriculum in practice (Georgii-Hemming & Westvall, 2010). It will be deeply addressed in section 5.3.2 (p. 212-218) about teacher training in Higher Education and section 5.6.2 (p. 234-235) about the further implications on Chinese music teacher education.

5.2 The Implementation of the IBL Approach in Teaching Musicality in Chinese Primary School

In this section, I will discuss the reason for choosing IBL as the approach to teaching musicality in Chinese primary music classrooms and its conditions and corresponding solutions in actual practices.

5.2.1 Why should IBL be in the Chinese primary music classroom?

IBL is believed to provide an inquiry-based environment for teaching and learning and is often employed in mathematics or science education. Such inquiry allows questions from students to independently explore the subject-relevant knowledge and challenge the given results (Ma et al., 2021). Inquiries in scientific education were commonly designed as an experiment followed by the process of predicting, designing, questioning and testing the hypothesis (Yang & Liu, 2016). In other words, scientific inquiry is about the exploration of the natural world. Through ongoing practice in inquiry, students are expected to achieve the targeted goal by the National Curriculum (Marshall et al., 2017). Costes-Onishi & Kwek (2022) also argued that although the philosophy of disciplines themselves do not share, the Implementation of IBL in other subjects shares commonalities; therefore, it is worth considering creating music inquiry. For example, developing critical thinking in music inquiry shares similar strategies with other scientific subjects as it provides rich experiences in verbal communication and thinking skills (Costes-Onishi & Kwek, 2022).

Inquiry activities are closely designed in connection to students' daily lives. It has been argued that the process of inquiry does not differ fundamentally according to the disciplinary background (Artigue & Blomhøj, 2013). For example, both mathematical and scientific inquiry involve the interplay of induction and deduction (*ibid.*). Anttila et al. (2014) researched using music-making as a means of scientific inquiry as they believed the core of inquiry in music and science education remains the same. Vitale (2011) challenged this by saying that music teachers should be clear that the primary principle of teaching music is for music education rather than ancillary benefits gained from music. From the example by Anttila et al. (2014), students communicated musically in discussing their scientific thoughts but showed less impact on music learning. They also pointed out that the significant difference in the inquiry within these two subjects is that musical inquiry emphasises emotional and aesthetic feelings (*ibid.*). This is to say, musical inquiry refers to a different meaning, creating a specific facilitatory learning environment for the experience. Thus, the implementation of musical inquiries should be separated from other subjects. Although music has such a subordinate place in the curriculum, music educators and teachers still adopt and adjust any developmental approach that is beneficial to the subject in terms of disciplinary principles.

Music inquiry is associated with critical thinking in traditions that have the ultimate intention to convert theoretical concepts into practical skills, particularly in relation to student values (Kokkidou, 2013). Joan served as a general music teacher and applied IBL in her music classroom to explore the stance for musical inquiry (Scott, 2008). The process of a music inquiry in her classroom was basically listening to a piece of music and then answering the provided questions (*ibid.*). She ultimately concluded that music inquiry is special and that interactions have emerged from the community, and teachers and students also take the role of a learner in learning (*ibid.*). Most importantly, music inquiry is unpredictable or without a hypothesis. Results and findings in this research reveal that emotions are personal and aesthetic and not a matter of right or wrong in the actual classroom.

After the discussion of the philosophy, we arrive at the contexts of music inquiry. With a student-centred learning environment, the IBL strategy clearly benefited our students' music learning. Teachers reported in the Findings Chapter that they understand their students more as the inquiry provided more chances to listen to the students and reflect deeply about strategies concerning students' individual learning needs. Within the inquiry cycle, the positive interactions affected students' motivation and engagement in music learning (Hallam, 2013). Most importantly, all skills and knowledge learned from the inquiry were music-based rather than developing other subjects or areas of learning through music (Laprise, 2018).

The length of inquiry in my project was around 10-20 minutes with a certain topic, question or activity based on music textbooks, which can be defined as a guided or structured inquiry (Huang et al., 2021). Or the classification of inquiry depends on teacher-directed, student-directed or mixed inquiry (Dobber et al., 2017). My project was mainly teacher-directed inquiry as the teacher designed and guided the activity. Goals set up by the National Curriculum and the student's learning needs determine the level of inquiry that should not be an open inquiry. Excessive expectations in implementing IBL might not match the educational needs in various contexts. If education aims to achieve higher scores on standardised tests, it is, therefore, inappropriate to use open-ended enquiry exclusively in the classroom (Bruder & Prescott, 2013). At this stage, the main aim of Chinese primary music education is general education, which is accessible to all students. The necessary knowledge delivery and assessment continue to be a major part of teaching. In consideration of the challenges in actual practice, the level of inquiry in the Chinese primary music classroom should, therefore, remain at the level of guided inquiry.

A high-quality, subject-based inquiry should allow students to learn the original concepts, understand the inquiry and practice the inquiry skills (Ma et al., 2021). Scientific inquiry was utilised by its design in textbooks, while the quality of the inquiry was measured by whether it served the original functions (Yang & Liu, 2016). Unlike science education, the teacher in this study has adapted the original activity from the textbook and created a music inquiry. To a

significant extent, my research turns the classroom into a musical community or so-called ‘Community of Enquiry’ in music where students socialise by exchanging their personal feelings with the music and its author underneath, with the teacher and with their peers (Wallerstedt, 2013). The musical inquiries applied were a new challenge for teachers as there are few examples of musical inquiries in practice in the past literature. A detailed example of how teachers teach and facilitate in this special community should be investigated and provided. The research design offered opportunities for teachers to self-reflect on their teaching strategies and learning needs as teachers (Johnson et al., 2019).

Most notably, the teachers mentioned in the interviews that some of the inquiries had previously seemed to them to be only an experience-based activity in the textbook. In other words, these activities are intended to be purely experiential, without exploring the construction of students' individual musical understandings (Anttila et al., 2014). However, the inquiry design in my study was integrated with the four main activities in the original design that combines listening, expressing, and analysing the music instead of hearing the sound. With such a design, teachers could consider promoting aesthetics in music learning (Kertz-Welzel, 2008). Most importantly, sufficient opportunities offered by this platform can extend students' musicality in pedagogical practices (Georgii-Hemming & Westvall, 2010). This also reflected the changes in teachers' beliefs about music and musicality, a revision of the teacher's role in teaching and learning (Dobber et al., 2017), which will be discussed in-depth in section 5.3.1 (p. 208-211).

Consistency between different educational sources should be prioritised in developing inquiry skills for teachers and students (Yang, 2022). However, it was reported by music teachers that relevant sources and support were lacking in Chinese music education (Yang & Welch, 2022). These resources refer to financial and technical support and feedback from superiors or at the social level (Bakker, 2005). Results in Chapter 4 proved that utilising a music inquiry in a Chinese primary music classroom was feasible. However, these findings clarified the specific 'conditions' for implementing such an inquiry-based approach in the classroom. Figure 4.3-5

(p. 142) presents some general teaching issues based on classroom observations, whilst section 4.5.4 (p. 164-173) answers the research question about the challenges in implementing such pedagogy in the classroom from the participating teachers' perspectives. The following section will define and further classify those conditions as constraints or real challenges.

5.2.2 Preparation for actual teaching

As mentioned in section 5.1.2 (p. 179-186), listening is an essential component of music learning and should be taught actively as a skill. Bresler (2005, p. 172) explains that '*Sound does not have the stability that colour does; it fades as soon as it is created*'. Therefore, sound-based activities, including singing, movements, performance or creation, are either physical or verbal to make sense of musical meanings to the audience (Fortuna & Nijs, 2022). That is to say, the teacher's class plan should emphasise how students may absorb and construct knowledge (Broomhead, 2005). Vidulin et al. (2022) then expose the notion that active listening in classrooms is taught with intentional analysis and cognitive and emotional instructions. It is a dynamic and reflective learning process in which students reflect on what they listened to while the teacher reflects on the quality of their instructions (Johnson et al., 2019). Indeed, the level of creativity in the activity design will determine the development of creativity in student's learning (Hallam, 2010b).

'Make Music Visualisable' is generated from the analysis in this thesis and can be considered the main theme in building the pedagogy through the IBL approach in the future. Both verbal and visual tools, activities, and design works for developing musicality were revealed in this thesis. The fixed content was not limited to the freedom of activity designs. Instead, the IBL approach allows teachers to give their students a certain amount of time and space in all four main purposive learning activities designed by the textbook and facilitate their development as creative learners in the 21st Century (Russell-Bowie, 2009).

Listening as the first front, and fundamental activity is prioritised in music learning. Studies suggested that the design of activities for listening could be set as individual target listening or collaborative group work (Smialek & Boburka, 2006). Intentions underpin the design are stimuli that cause emotional reactions so that students can better understand the music (Vidulin et al., 2022). Then, researchers addressed the difference between listening to music at school and at home. Boal-Palheiros & Hargreaves (2001) claimed that music at home served as a leisure activity that can easily resonate with students' emotions, while music at school focused on concepts and cognitive development (*ibid.*). Students tend to choose their preferred genres or content. Musical preference will result in different levels of learning interests in various pieces, or the unfamiliarity will cause the surficial description of the listener's feelings (Vidulin et al., 2022). Students' musical preference did affect their learning in the classroom and resulted in a challenge to the teachers, and more details will be discussed in section 5.2.3. However, emotional listening is trainable. It is not only related to the content of the piece but rather to instruct students on how to interpret the meaning of the music (Todd & Mishra, 2013).

The most common means of teaching active musical listening is to ask questions before listening and then answer them so that students may recognise and learn different elements in the piece (Vidulin et al., 2022). It is believed that the quality of such questions will decide the status of children's in-class listening (Johnson, 2011). In this study, this strategy was also commonly utilised in almost every piece of learning. However, in the early stages of the fieldwork, it revealed a significant phenomenon that those questions asked before listening was often with a more obvious or predictable answer. Participating teachers stated in the interviews that such designed questions were to give students more direct instruction on what to listen to and, to some extent, to save limited class time. It is part of the constraints in teaching and will be further discussed in the following section 5.2.3 (p. 197-207).

Notably, when the issue of questioning skills was raised, the participating teachers also made some changes to their lesson plans. For example, students were asked to draw a picture of

the work according to its segments but were not instructed how many parts there were in total. Students were then divided into two groups and debated their answers. When we reviewed the lesson afterwards, we found that the students' controversy about the segmentation came from whether the melody in the very middle of the music, which has a lot of ups and downs, should be divided into two sections. In this case, students gave evidence and stated their thoughts and understandings, which can be described as active listening and learning. Such a change was necessary. Listening with a clear cognitive purpose potentially distinguishes listening at school and listening at home. This arguably devalues the meaning of the intuitive music-listening experience as a whole; in the long-term view, this lack of attention prevents students from having the capacity to improve their musical abilities (Dunn, 2011). However, it does not mean the original design of close-type questions was incorrect. Rather, attention should be given to students' in-class responses. Teachers should always be open-minded to students' creative understandings, valuing their interpretations of the music and helping students to contribute different meanings to others in the class (Murphy, 2017).

Those creative efforts made by the teacher through the whole learning process were integrated with other learning activities in the music classroom. During that time, students were the masters of that musical community, sharing live experiences that differed from only listening to recorded music (Vitale, 2011). Teachers attempted to maintain the greatest possible balance between listening sensitivity and listening enjoyment. In this way, the research cycle in my project allows the participant teacher to make real-time, in-class adjustments and reflections on the teaching plan. There were several meaningful examples to present.

Singing. There are commonly two foci in the singing activities: pitch corrections and the matched voice in singing the song. For pitch correction, teachers, in the past, either repeatedly played the recorded music or corrected the student's pitch with the piano. Rather, in my project, the Y4 teachers utilized the multiple combinations of the human voice, flute and piano in Lesson 7 to instruct singing the Triadic Harmonies. Also, she added the practice of #F on the

flute to inspire students' learning motivation (in Lesson 8). Students, therefore, can intuitively recognise the difference between half notes. During the learning process, students were required to describe their listening or feelings musically by asking questions such as 'How do you feel about this note?' - in other words, giving meanings to their auditory experience (Flowers, 2002). The above two examples show how teachers creatively deal with unattractive teaching situations and potentially assist their students in forming their musical brains (Burnard, 2013).

Appreciation. The most frequent teaching mode of music appreciation was discussed in the above paragraphs. Questions or small tasks have always been given before listening to the music. However, follow-up questions, such as why you did that or how you think, were then inherently asked by the teachers. It encourages more familiar and advanced musical descriptions through students' personal understandings (Flowers, 1990). In brief, the participant teacher would not simply stop when they had heard what they wanted to hear. Students' storylines or interpretations of their images in the later sessions were more complex and related to their other life experiences.

With the IBL approach's involvement, teachers modified their set tasks to further meet the learning objectives. For example, in Lesson 4 in Y5, the original teaching plan was simply to ask students to describe the images that they thought of when listening to the music. The structure of the violin was then integrated with a blank background since the learning objectives also require students to learn the basic knowledge of the violin, including its shape, tone, and representative repertoire. This modification theoretically involves the idea of drawing the melody line, expressing emotions about the song, and learning the compulsory content. Compared to verbal communication, it can offer enough space to learn, and all students have equally expressed their thoughts; most importantly, such design saves paperwork that can be recorded in their music learning progress.

Movements and Performance. These two activities were connected to the music-making activities as a vigorous attempt by the participating teachers. Y4 students successfully completed a chorus in 40 40-minute sessions, and Y5 students attempted to work in their four-peers group to conduct a short collaboration in different singing formats. The philosophy of these designs is dynamically to develop students' collaborative working abilities and confidence in performing for students either through the given example or students' original musical works (Burnard & Murphy, 2013).

Composition and Improvisation. They were the activities that the teacher would either avoid spending much time on or lead students to practice the example in the textbook in the past. However, with the integration of music listening and performing in the creation, teachers first changed their minds about students' capacity to do such design. Y5 teacher commented after the session that she was also surprised that one group of students tried to sing in a two-part chorus with two-part percussion accompaniment even though the pitch was not stable. The spirit of risk-taking that comes with a change in teacher perception is most rewarding, and there is a spontaneous atmosphere of peer encouragement and mutual learning among students (Burnard et al., 2013).

In addition, assessment is another essential component to consider in teaching preparation. Learning outcomes were not only assessed by the final, exam-orientated evaluation. The in-class feedback was initially turned by the teacher into an observer and a learner position, while teachers could review and reflect on their teaching plan (Burnard & Boyack, 2013). Teachers are expected to prioritise meeting the student's learning needs, not just achieving higher marks in paper tests (Burnard, 2013).

5.2.3 'Conditions' of implementing this approach- constraints or challenges

The term' constraints' is commonly discussed in educational timetabling issues. It is generally categorised into hard and soft constraints (Pillay, 2014b). Hard constraints mean the 'must-

have' requirements in solving a problem while maximising the satisfaction of soft constraints (Pillay, 2014a). Transferred from these views, hard constraints in this research represent the real obstacles in the implementation of the IBL approach. Soft constraints represent the real challenges, which, in turn, refer to knowledge or skills that require long-term practices but are manageable. Based on this criterion, the challenges discussed in section 4.5.4 will be further elaborated in the following section. See the figure below.

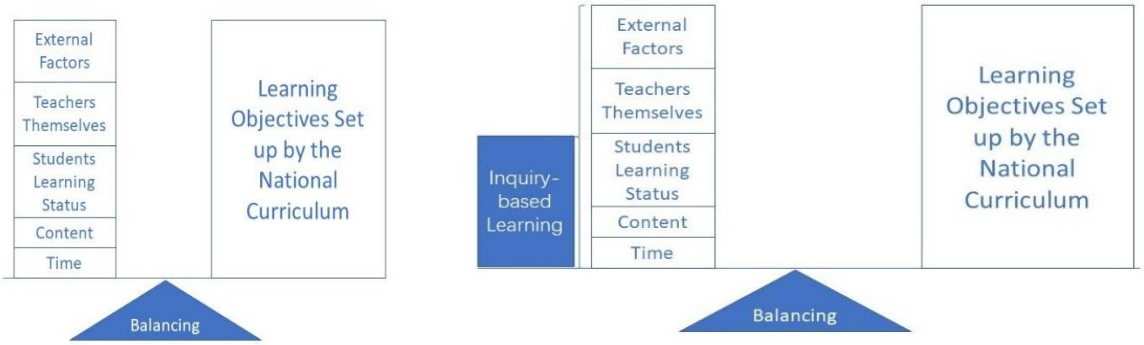


Figure 5.2-1: Balancing the Constraints and Challenges in the Implementation of the IBL Approach in Classroom

Figure 5.2-1 objectively shows the balance between constraints and challenges in the implementation of the IBL approach and the targeted learning goals in the National Curriculum. Based on the results, there were several relationships of balancing in the teaching process: content and time, teachers' main job and their other responsibilities in school (side job), content and students' learning status. All these factors influence teaching effectiveness, and it is a dynamic process. Therefore, I construct the below diagram that stands for a teacher's view. Worthy noticed here that the assistance from the IBL approach that could leave teachers lighter from the ground is based on the results and the fact that the participant teachers believed the IBL approach is beneficial in their teaching in this study. In fact, it might be the case that the 'Balloon' of this IBL approach can overweight the teachers far from the ground and cause other issues depending on the various teaching contexts.

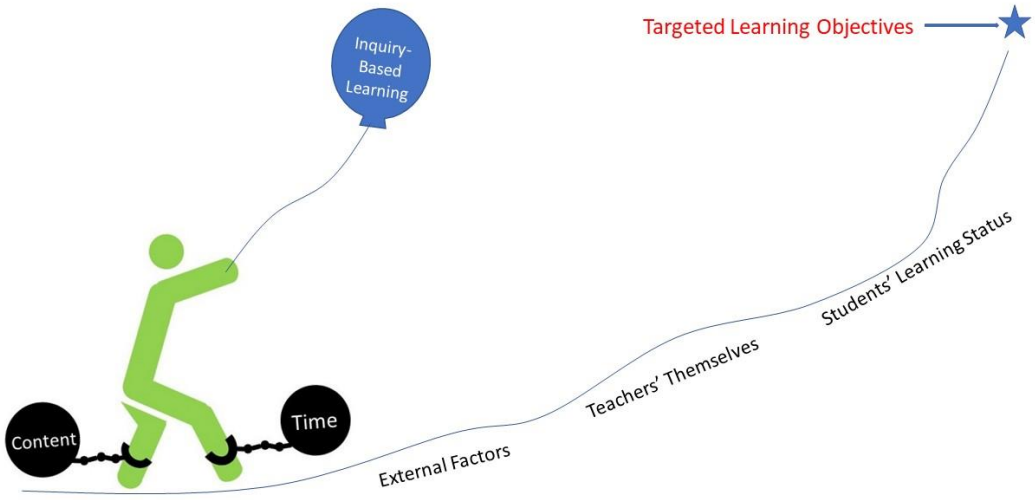


Figure 5.2-2: The Balancing in Teaching from a Teacher's Perspective

A. *Content and Time*

As a complete observer and a music teacher, applying the IBL approach in Chinese music education can somehow assist in teaching. However, it does not mean teachers are relieved from their structural difficulties. Based on the interview data, I would describe the whole teaching process as a journey characterised by surprising opportunities. The factors of 'Content' and 'Time' are the two main, basic hard constraints that affect the teachers' speed in the first place. These two factors are fixed, and teachers can only improve the efficiency and quality of their teaching. In the meantime, the factors of 'external factors', 'teachers themselves' and 'students' learning statuses acted as the mystery box on this journey. Teachers will never know when they will meet it and whether it is a bonus or a trap before opening it. As a result, the goals set for teaching and learning become more unattainable, and those advanced goals become unrealistic in actual teaching.

While these factors do bring challenges, teachers are still positively confronting and seeking to overcome them. Examples can be tracked in the Findings chapter. For example, the participant teachers found that the 20-minute duration might be too long for the inquiry as the students acted extremely excited and noised. They positively reflected on the after-class

interview to solve this problem, even though they were slightly frustrated in teaching and controlling such a large class size. National and local authorities determine teaching content, and primary school has less power to modify it. As opposed to being disheartened and feeling powerless about the heavy teaching workload, teachers seem to worry about the suitability of some content. They commented on the adjustment of the textbook that content such as nature or folk music is away from students' real life; thus, students cannot resonate with the music. It further challenges their teaching efficiency and quality to some extent. However, the examination is equal to all subjects, especially in some provinces in China nowadays added Music and Fine Arts as part of both high school and university entrance examinations. Therefore, some primary schools and the participating school in this thesis recently combined the paper exam and other types of assessment as the final assessment in music.

In this case, 'Time' became the second catalyst to complete their previously 'mechanized' teaching. This is a major reason they were very worried about their capacity to complete the teaching task before participating in my research. No after-school time and hurrying to finish all the teaching content in one semester further raise the issue of giving students enough time to understand the knowledge and present thoughts. This is the most immediate challenge imposed by time as a hard constraint. The application of the IBL approach in the classroom has practically resolved some parts of this issue. Both teachers stated in their final interview that they are now confident to give students property time and space because they can see the visible improvements by students in the learning process. And that is not a conflict with challenges caused by the combination of two constraints. Rather, the involvement of IBL in music classrooms can somehow reduce the negative impact of these two constraints on the development of a student's musicality.

However, the negative effects of time constraints are not exclusive to this aspect. Based on the participant teachers' experiences, they mentioned that music only takes a small amount of time in the school timetable. This means that the potentially efficacious and impactful competencies learnt in the designed lessons will not impact students' abilities to learn for long,

as other core subjects do not follow the same learning track. In addition, music teachers cannot guarantee a long-term application of the IBL approach in teaching due to the direct disadvantage- limited class time. They must balance the traditional teaching methods to ensure the compulsory knowledge is memorised by students so that students can deal with the most important examination. For example, in Lesson 3 in Year 5, the participants explained in the after-classroom interview that the last few minutes for students to write notes is mainly because those knowledge points will be in the final paper examination and that memorising work is potentially a 'compulsory work' for every lesson.

All the mentioned influences have a direct effect on student learning outcomes. Apart from this, the marginalisation and low priority in music subjects have combined with these two constraints and led to a few more issues in music teaching and learning (Burnard, 2013; O'Flynn et al., 2022; Russell-Bowie, 2009). This inequality also led to the issue of music lessons in the whole school timetables. The participating teachers explained that non-core subject teachers always have no time slot preference. The music lesson will always be in the last session in the morning when students are eager to have lunch or after the PE lesson. The following issue is that students are more easily distracted or need more time to calm down and concentrate on the lesson. Besides that, anything might happen during the class, as the teacher said. In short, this deeply caused the issue of unstable learning status by students.

Additionally, they must teach in several different year groups, which causes inconsistency in teaching styles for the same group. Although music teacher in China is specialist teachers, time as a constraint in this consistent issue has negatively affected teachers' familiarity with children and their abilities to obtain students' individual learning needs. Research conducted by Gubbins (2021) compared the generalist teacher and music specialist teaching mode in primary music education and stated that the most obvious advantage of the generalist teaching mode was that teachers could spend almost the whole day with students. By contrast, the specialist teachers respond miserably that such limited time can also decide students'

views about music lessons. Students, therefore, treat music classes as a special period in that they can behave differently or even badly (*ibid.*).

In parallel, the marginalisation and low priority in music education developed some new challenges, and they were categorised as external factors. Those challenges are mainly financially relevant issues worldwide, with or without implementing the IBL approach, particularly in the resources, teacher deployment, and availability. For example, in this thesis, both participating teachers mentioned the lack of a specific music classroom, so they must arrange to ensure each group will have at least one lesson taking place in that room. Similar compromises are not unforeseen in music education. Vitale (2011) researched the new paradigm in music education concerning the financial and marketing of music education. Music teachers reluctantly stated that they would accept financial support for any reason in music education, although much of it was given the complementary role of music to other subjects, particularly mathematics or science. The lack of funding support further caused the issue of fewer music teachers recruited to the labour market and the more class groups they must charge of compared to other main subjects' teachers in the Chinese education system.

B. Teachers themselves and conflicts with External Factors

Towards the second half of the project, the Year 4 teacher made an exclamation in a daily conversation that she only really felt like a music teacher when she was working on the design lesson each week. Behind this, the constraints and challenges discussed above continuously influenced the quality of teaching and learning from the teacher's perspective. The low status of the music discipline directly contributes to the inequality of resources in the discipline, including staff shortages, lack of allocation of resources and heavy workloads (Jellison, 2004). Music teachers in school undertake more work than the community expected. Take the latest National Curriculum as an example; music is operated twice weekly while Chinese is taught daily (Ministry of Education, 2022). Generally, one Chinese teacher takes charge of two groups and one music teacher teaches in the whole year groups, which normally contain 5 to 6 groups. Corresponding to the total lesson hours to the teacher's schedule, it is apparent that the

number of hours taught per week is roughly the same for both subject teachers. In addition, any art-related activities in school require the involvement of music teachers in planning and organising, as commented by the participant teachers. These music-related activities, such as choral singing or performance, often require more time for practice or rehearsal, which further compresses the availability of music teachers after scheduled teaching.

Such a tremendous time demand means they do not have adequate preparation time, directly affecting their attitudes, pedagogical practices and even their long-term teaching motivations (Kim, 2022; Pellegrino et al., 2018; Russell-Bowie, 2009). In this case, school music teachers often must balance their teaching position and other side jobs. Under the circumstances, music teachers often negotiate or are vague about their status as teachers or administrators (Liyanage & Walker, 2023). Those non-music-related tasks or identities can further lead to professional burnout and negative employment intentions in this field (Mateos-Moreno, 2022).

Constraints are forced to be accepted by music teachers while they construct a mechanical teaching approach to teaching the National Curriculum that has been critically reviewed for decades. It is discussed in music teaching and other subjects, as researchers believe how teachers dynamically react to the National Curriculum would decisively affect teaching and learning in this generation (Liyanage & Walker, 2023). Even in teaching the music subject, the participant teacher initially expressed their worries about implementing the IBL approach in classes due to the time-consuming and incompatibility with the exam-oriented assessment. Students, parents and schools want a higher mark or a visible improvement quickly, and the quality of teaching is largely assessed by their students' scores (Yan, 2015). Yan (2015) further explained that teachers' evaluation ratings, such as teaching ability and payment, are almost entirely linked to student performance; teachers must adapt to the circumstances to avoid further blame. These external factors drive teachers to choose and adhere to the teacher-centred approach, creating a 'safe zone' for teaching. The traditional teaching style can allow teachers to fully control the peace of the classroom and guarantee the completion of teaching

content (Wang, 2011). It matches the participant teacher's comments that teachers can at least ensure to reach the fundamental requirements of the National Curriculum.

However, succeeding in getting higher marks does not mean the teacher offers high-quality teaching, particularly for music as an experience-based subject (Allsup, 2015). The teacher then simplified or evolved the process of students' input and output information. Questions with a direct or predictable answer were given, and answer by students does not mean students have actually mastered the knowledge or skills (Wang, 2011). The underlying reason for this implementation gap is that the contradictions in the education system as a whole, which should be improved at the macro level, have been shifted to the micro level of teachers and students, while schools and educational institutions, which can play a decisive role in the middle, are unable to reconcile the incompatibility between the National Curriculum and pedagogical practices (Yan, 2015). Thus, teachers become so conflicted: on the one hand, they desire a more comfortable teaching and learning environment, and on the other hand, they must compromise with reality. A great score can reduce the teacher's guilt about not training their students as active learners (Yan, 2015). To a certain extent, teachers are even glad that they compromised and that such a teaching model has been maintained. For example, this has led to a pattern of students learning to sing by mainly imitating the teacher or the audio in music learning (Christophersen, 2021).

Another key factor affecting the teaching quality is the teacher's self-evaluation and reflection. Reflection afterwards is the post-stage of the whole teaching process and is as important as preparation (Kenny, 2017). Indeed, the importance of reflection in the teaching process has been proven by researchers (Kim, 2022). Kim's research was conducted with student teachers and concluded the benefits of mentor's assessment and reflection for novice teachers. Any uncertainties or necessary improvements can be recorded in the reflection section and tracked as evidence of the teacher's development. However, the time constraint also influences the amount of time spent on after-class reflections for music teachers. In other words, music teachers may not have enough time for self-reflection and, therefore, must

gravitate towards more secure and proven-effective teaching methods. In this study's preparation stage, I observed those teachers' daily schedules and working practices. Not surprisingly, they matched my personal experiences and were also reported by the Year 4 teachers that the reflection phase in this study is extremely cherished and less possible for their everyday teaching. This would instead secure the safety and success of the traditional teaching method but further deepen the issue of the curriculum implementation gap.

By discussing the development of teachers' teaching abilities and children's potential in musicality, we can confirm the benefits of implementing IBL in Chinese music education. However, such benefits were somehow based on the research design of this project. Underlying the teacher's expositions, it was clear that the research cycle of 'Plan-Action-Reflection' provided sufficient time to reflect, communicate and revise the teaching plan as a team. In fact, it is difficult for teachers to fully overcome the constraints or challenges mentioned above, regardless of whether the IBL approach is implemented in a Chinese primary music education setting. The emotional expressions of the participant teachers (see section 4.5.2, p. 159-162), however, provide new insights into the benefits of implementing IBL in primary music classrooms. It is understood that the enjoyment and satisfaction of teaching in the designed lessons can filter out work tiredness or relieve burnout that has been mentioned by the participant teachers after some lessons and in the final interview (See details in the Findings Chapter, in section 4.4, p. 146-155). And vividly, that is why the IBL Balloon can lightweight the teachers from that heavy ground in Figure 5.2-2 (p. 199).

C. Students' learning status.

Students are the object of education and also the most significant external element driving the educational circumstance (Wang, 2011). In common with the above factors, the student factor presents some of the original challenges in teaching, whether the IBL approach is adopted. A common belief about music education is generally for fun (Thompson, 2007). Students' attitudes to this subject are then affected by this belief (Hardcastle et al., 2017), which is confirmed by actual examples. One day in the designed class overlapped with the

school's 'Praise Day', and a prize ceremony was held at the end of the timetable. It was noticeable that students were less concentrated, and the participant teacher explained that the initial appeal of music lessons is greatly diminished as soon as there is an activity or subject matter for the day that is more appealing to their interests. The participant teacher then commented that, fortunately, the piece has a lively tone. Otherwise, the students would not have been able to listen to it quietly. Therefore, students as the external factor do significantly challenge the teacher's teaching skills and strategies.

The 'Students Learning Status' factor is more demanding of the teacher's experience in teaching than any other influential factor, given its incomplete controllability and complex variability. Regarding teachers' subjective perceptions, their existing experiences do not contribute immediately to adopting the new approach. At the early stage of this project, they identified themselves as novice teachers when asked to apply the IBL approach and believed that may create further challenges. For example, due to the large class size, the teacher may not ensure all students are engaged in in-task group discussions (Hasnain & Halder, 2023). However, with more one-to-one interactions between teacher and student, the teacher begins to address the student's individual learning needs and make timely and appropriate changes in their teaching (Hanson, 2022). Hence, the existing experience that the teacher had previously considered useless serves a valuable purpose. The central point here is how teachers can make the appropriate adjustments both in class and to their teaching plan.

Based on students' learning needs and status, modifying the teaching plan requires a teacher's teaching skills and a good knowledge base. For example, Year 4 teachers pass out targeted materials to keep the students' attention and the class flowing smoothly. Year 5 teachers turn off classroom lights to create an atmosphere of silence to enjoy the music, considering the weather's external factors. Both participating teachers were able to respond to student situations in a timely manner in terms of their skills despite the difference in their teaching experience. However, the participating teachers were not very confident in their knowledge base, especially when engaging in improvision or composition-related activities.

On the one hand, these creative activities were less frequently adopted at the primary school level, and the participant teachers feel a bit unskilled in this thesis. On the other hand, as the participant teacher continues to practice, students' musicality is revealed, making them feel an urgent need to expand their knowledge base. As the learning needs are more evident and richer at this point, good in-depth communication makes teachers seek to enrich the learning experience to a greater extent. The challenge brought by this factor in the implementation of the IBL approach has thus changed from controlling students' attention and completing the lesson to specifying appropriate plans for the uncertainty of teaching and striving to achieve higher-order learning needs.

5.2.4 Summary of the section

The implementation of the IBL approach is proven to be feasible in Chinese primary school music education. This approach can be integrated with the traditional teaching methods to obtain the most significant goals of the Music National Curriculum. It can also potentially provide developmental space for both teachers' teaching abilities and children's musicality. Despite the content and time as the two main hard constraints, other factors can dynamically form challenges in the teaching process, individually or in combination. Notably, the details discussed above demonstrated some of the possibilities of how the IBL approach can be adopted and applied in the plan and actual pedagogical practices. Due to the limitation of this research design, the conditions of implementing the IBL approach in the Chinese educational context can vary depending on the school situation or local financial status.

Music teachers still master the pace of teaching due to the entire Chinese education system in place. Teachers' communicative languages and beliefs about the subject can directly contribute to their behaviours in the classroom and profoundly change their students' beliefs and behaviours in learning music (Sims, 1986). Therefore, the following section will discuss

the role of teachers in the teaching process, their beliefs about music and musicality for both themselves and students and listening as a social skill for the 21st Century classroom.

5.3 Teaching in the 21st Century - A 'Student-centred' Classroom

In the current context of Chinese education, teachers are still expected to take primary responsibility for teaching in the student-centred classroom. Teaching is their priority role, alongside the facilitators that emerge from the 21st Century skills concept. People who commit to this identity are supposed to have a profound perception of what is teaching (Goodwin et al., 2014). Belief is the crucial factor that determines the teacher's actions, but it has to rely on the context of that subject (Kos, 2018). Teachers interrupt the goals of the National Curriculum and offer the corresponding learning experiences to students, which is the fundamental task in the role of teaching (Georgii-Hemming & Westvall, 2010). It is not only about the pedagogies or techniques; teachers emotionally change their beliefs through teacher programs and observational practice in the subject they teach (Loughran, 2014). The concept of belief is often interchanged with other ideals, such as values or attitudes, in the literature (Pajares, 1992). The subject the teacher learns in their perception is distinct from the subject they teach(Johansen, 2007). Likely, the way they were taught will ultimately affect their beliefs about their teachers' ability to teach and their students' ability to learn (Kos, 2018). Thus, it is significant to elaborate on how identities were shifted and what and why beliefs changed. Most importantly, it somehow reflects the quality of change in the pedagogical practices (Christophersen, 2021).

5.3.1 Beliefs about teaching music and students' musicality

As discussed above, beliefs or attitudes about the music subject at the macro level are relevant to the status of this subject in school (Russell-Bowie, 2009). It is vital to address the relationships between multiple identities in teaching as it might related to any possible conflicts in the workplace, such as communicating with parents about their children, dealing with their job burnout and keeping motivated in their positions (Mateos-Moreno, 2022).

Beliefs and attitudes have initially impacted the teachers' confidence and autonomy in teaching, and that can be directly relevant to making independent and essential decisions and gaining job satisfaction (Spruce et al., 2021). It is believed that even the different wording may cause the distinguish in self-identifying their position in school teaching. For example, Kemmis et al. (2014, p. 156) developed various names for classifying the new teachers, including 'Beginning Teachers, Early Career Teachers (ECTs), Newly Qualified Teachers (NQTs), or New Scheme Teachers'. This term can be further expanded into novice teachers or even inexperienced teachers. Tones under those names can be either positive and friendly or negative and mean. Naming those new teachers is arguably important to impact their teacher identities in future teaching, as teachers' beliefs can further determine students' beliefs and self-efficacy in making music activities, especially for musical performances (Lewis et al., 2022).

The concept of belief is frequently discussed in relation to the teacher's identity in teaching music, followed by the relationship between teachers and students, learning motivations and classroom management (Thompson, 2007). Researchers have debated the core identity of the music teacher between the teacher and musician for decades (Ballantyne et al., 2012; Conway et al., 2010; Kenny & Morrissey, 2021; Kos, 2018; Siw Graabræk Nielsen & Inger-Anne Westby, 2012).

However, Chinese music teachers are in a slightly different situation in identifying their role in teaching. They firmly endorse the identity of a teacher prior to their identity as a musician. The foremost reason is the positive reinforcement brought by the way in which they were called by others at school. In the Chinese culture, teachers are often greeted by their surname plus 'Teacher' instead of 'Miss/Mr/Mrs'. For novice teachers particularly, repeated media coverage and practice-led research bulletins have led to a strengthening of their identity as teachers. As mentioned in section 5.2.3, they more often blurred teachers' identities with that of administrators. Besides that, most Chinese public school music teachers at the compulsory level graduated from the official teacher education programme. Teacher education, as a preliminary stage to their pedagogical practice, also reinforces the identity of the pre-service

teacher as the teacher through multiple modules. No matter whether novice teachers, generalist teachers in Western contexts or experienced teachers such as participant teachers in this thesis, they are all expected to hold the refreshed, positive belief that they, as the first agency of the curriculum, would transfer that knowledge and skills successfully to their students (Stallions et al., 2012).

This does not mean, however, that the identity of the musician is not present in the perception of the Chinese music teacher as a musician. They are relatively unsure of their identities as musicians or believe they are not as professional in music playing. The teach-about-teaching modules do take time away from their learning in music vocal, instrumental or other skills compared to other music major students (Conway et al., 2010; Mateos-Moreno, 2022). For example, both participating teachers hesitated in composing-related activities because neither had graduated in composition. Chinese music teachers may come to the consensus that they are insufficiently musical to teach such concepts or activities as professional musicians. Such low self-efficacy can further lead to scepticism about their student's learning abilities, which in turn leads to avoidance of similar activities, ultimately affecting student learning outcomes (De Vries, 2013). The teacher in this situation is in the same position as the Western classroom generalist teacher. If they perceive themselves as outstanding in musical performance or professional skills, they will identify themselves more as musicians; by contrast, they would themselves more like music teachers (Ballantyne et al., 2012). And such an identity shift is necessary because pre-service teachers are not directly transformed from being students into two split identities. The identification of the musician and the teacher must develop concertedly in teaching (Kenny et al., 2015).

Another critical teacher identity that emerges from this process is that of a learner. Changes accepted from the beliefs discussed above have led teachers to begin reflecting on learning from their own teaching processes. Having a critical understanding of theories and pedagogies plays a vital role in the teaching and learning process (Chung, 2022b). That understanding and reflections on practices can primarily be developed through the teacher's learner identity, and

that is why reflection should be an unavoidable and important part of teaching. The space offered by the IBL approach also allows the teacher to learn from their students. It is suggested that teachers can either posit themselves as learners or observational researchers in teaching (Jellison, 2004). And the implementation of the IBL approach no whether in teaching preparations, in-class teaching or after-class reflections, requires a huge amount of input from the teacher's perspective (Spruce et al., 2021). Teachers' learning outcomes would ultimately respond to students' individual learning needs. Likewise, teachers can better cope with the challenges associated with new pedagogy or concepts (De Vries, 2013).

The philosophical concept of the IBL approach requires teachers to work as facilitators. According to the characteristics of aesthetics and creativity in music, teachers should then emphasise the role of facilitators in the inquiry (Burnard, 2013). The involvement of the IBL approach in the Chinese primary music classroom somehow breaks the deadlock on less motivation in the teaching and learning process due to the traditional performance-based learning environment (Policy at the Intersection of Curriculum and Music Teacher Agency, 2022). The focus of this facilitator identity in compulsory education is to enable all students better to experience the music subject and thus fundamentally change their perceptions of this subject and build their self-efficacy in learning in further music education(Kenny et al., 2015).

Drawing on the discussion of requirements for implementing the IBL approach in the Chinese educational context, we would conclude that the role of the teacher still extends beyond that of the facilitator. In summary, beliefs about the teachers' roles can constantly change between teachers and in combination with musicians, facilitators, learners, or researchers. The music teacher's identities in the whole teaching process are complex, yet it has the benefit of contributing to an adequate musical experience, particularly in music making (Egger, 2019). Thus, this dynamically evolving cycle of teaching and learning would ideally lead to high-quality learning in students.

5.3.2 Aligning teacher education and school teaching

Curriculum reforms in compulsory education do not affect primary and secondary schools only. Arguably, solving practical problems in school teaching should commence with teacher education reform. Ideally, a utopian education system which planned for idealized practices and outcomes is like the ecological cycle in nature. See the diagram below.

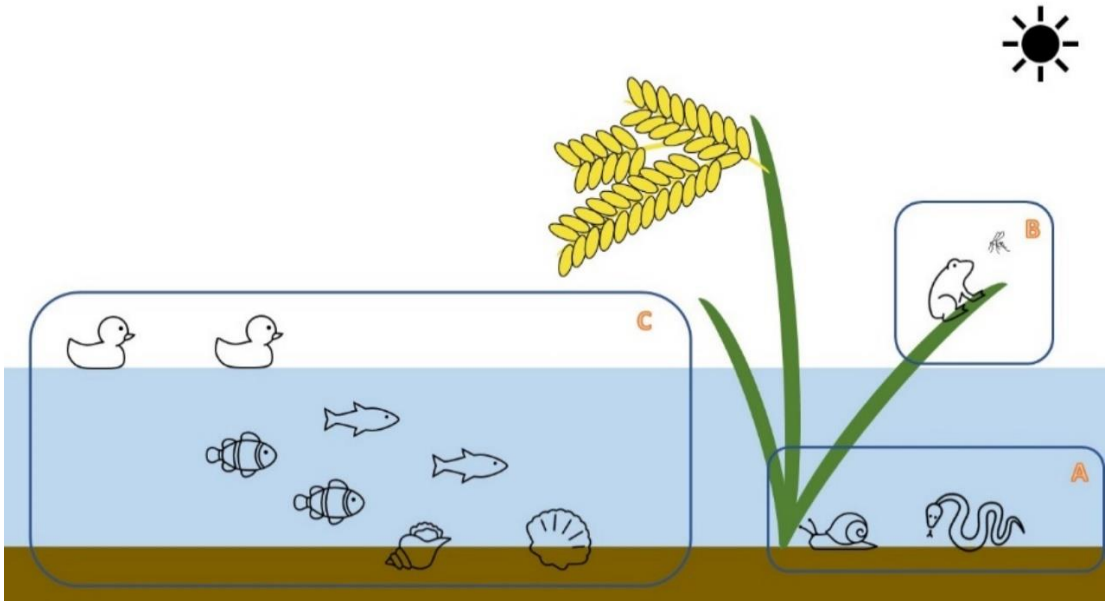


Figure 5.3-1: The Flow of Implementing the Curriculum Reform in the Whole Education System

In agriculture, planting paddy rice in ponds can naturally form a multi-branch development of a biological cycle system. To some extent, the various creatures in this system are labelled as different elements of the education system. The main plant grown in the ponds is paddy (*The Teacher*), while the main output is rice (*Students*). There are a total of four dynamic lines in the process of forming the rice grain.

a) The Main Task: *'Produce High-Quality Rice'*

The rice plant itself forms the rice grain by photosynthesis through the stems and leaves and by absorbing nutrients from the soil. Meanwhile, plants serve the additional function of maintaining the balance of nutrients in the water to inhibit the growth of harmful algae or other plants.

This analogy can be best understood as how the teacher learns to teach and how they teach. Most importantly, it can represent how teachers develop and balance their teaching in the continuously changing environment. This is the ecosystem's main and most significant task (education system).

b) Side Task 1: 'Threats from Nature'

Most creatures in nature have their natural enemies. Insects, including some specific species of snails, can cause direct damage to plants, including, but not limited to, attacking the plant itself and significantly reducing crop yields. However, other natural animals, such as frogs or water snakes, known as pest predators, live on insects, which in turn reduces the threat posed by pests to some extent (See A and B in the diagram).

When it comes to the education system, those pests can be labelled as the challenges or constraints which are formed by the authentic context, for example, views about music education by parents or the whole society. Then, the predator can be marked as the policymakers conducting curriculum reform and policy changes, for example, increasing funding or ensuring adequate teachers and other sources.

c) Side Task 2: '*Self-Regulation of the Paddy Fields'*

Besides the plants, the aquatic animals, such as fish, shrimp, and shellfish, in the pond also regulate the ecological balance of the paddy fields. They clean up the dead leaves the plants produce, converting inorganic compounds into organic compounds to provide soil nutrients. Throughout the entire procedure, they also reproduce themselves. It is common for such rice fields to be accompanied by animals, such as ducks, to feed on the fish and prawns in the water (See C in the diagram).

The fundamental purpose of this self-regulation is to maintain the quality of the main plant. In other words, those aquatic animals can be labelled as teacher educators. It, therefore, can

be understood as the teacher training or professional development process for both pre-service and in-service teachers. Based on the above explanations, all elements naturally run together in this biological ecosystem to finally produce the 'outcome' – rice (*Students*), demonstrating how policymakers, educators and teachers take responsibility in the education system and implement the curriculum reform. However, modern agriculture cannot expect this natural cycle for large-scale cultivation production. Some interventions are necessary. Thus, side task 3 should also be involved in this biological ecosystem.

d) Side Task 3: 'Extra Helps Made by the Artificial intervention'

In general, different types of pesticides or fertilizers, for example, are put on paddy fields to deal with specific pest-like problems. In the educational field, educators investigate various issues in different contexts and settings and explore the corresponding methods or interventions to improve the teachers' teaching abilities or overall teaching qualities.

In my research project, implementing the IBL approach can be understood as this 'intervention' that maximises the efficiency of the cycle of the entire system. Details provided in the previous two chapters demonstrate how this intervention should be adopted contexts and how specifically this intervention can resolve issues in Chinese primary music teaching. This also means that the same 'fertiliser' may not be appropriate for other 'paddy fields', as the proportions of each ingredient may need to be modified.

In summary, the above biological ecosystem represents the best possible positive education system. Each element regulates itself at the most appropriate time to offer prompt resources. Thus, the implementation of compulsory curriculum reform should be then reacted by the whole education system. Each section is intimately connected throughout the cycle without any hierarchical distinction.

In the ecosystem of the education system, it is understood that all elements in the education fields work in collaboration to ensure the high quality of students' learning outcomes.

However, in the real educational setting, changes made for compulsory education by adopting the national policy are in various hierarchies, commonly understood as macro, meso and micro levels, and include plans at the national level, implemented at schools and integrated with local culture (Liu & Hallinger, 2017). From teachers' perspectives, there are two completely different emphases in the education system for the implementation of curriculum reforms. Ideally, they are expected to operate the curriculum guidance and create a beautifully imaged future in education (Rowe & Skourdoumbis, 2019). This is a forward, interactive teaching flow between people involved in the education system and the curriculum and contents set up to teach.

Unfortunately, the current situation of actual teaching does not act dynamically as the ecosystem presented. This is significantly caused by the block of positive interactions between educators at the upper two levels and teachers. Firstly, the design of the curriculum should consider the combination of subject contents, education system and the teachers. Instead, researchers comment on that design that '*The authors of these curricular documents and policy frameworks seem to stand at a distance and just outside the frame of the daily flow of teaching and learning*' (Barrett, 2020, p.38). Unsurprisingly, the way teachers describe the terms of curriculum policy or documents might be too objective in the education flow (Barrett, 2020). Allsup & Nicholson (2019) posit the concept of market-based reform to summarise the current situation.

However, it is important that teachers view themselves as the creative implementors of the curriculum, especially since the concept of creativity is explicitly stated in the national music curriculum in both China and worldwide (Abramo & Reynolds, 2015). Again, the tone of naming the teachers can critically influence teachers' beliefs and self-efficacy. The term mentioned in the Literature Review chapter is that the teacher is the first agent of the curriculum, which is intended to be a beautiful honorific from the teachers' perspectives. They are more often identified as the full receivers of reforms, implementors of government policy and the deliverer of the curriculum (Schweisfurth, 2011; Stavrou & O'Connell, 2022). Guidance

provided by the upper two levels is the determining factor directing school music teaching (Zhang & Leung, 2023).

More commonly, because actions or communications between the three hierarchies are not always coherent, those ambitious pedagogical goals are like a ‘pie in the sky’ for schoolteachers (Schweisfurth, 2011). The large and lofty statements in those policy changes and curriculum reforms and its official documents further complicate the difficulties in implementing curriculum goals in actual teaching (Schweisfurth, 2011). Indeed, in-service school teachers’ voices in the curriculum design are hidden in the curriculum, and it is even risky that the assessment of the quality of curriculum implementation can be simplified, standardised, and performance-based only (Spruce et al., 2021). This might contribute to neglecting the development of the teachers’ responsive actions in pedagogical practices when facing unthought changes (Abramo & Reynolds, 2015).

Fundamentally, teacher educators should also consider and improve the quality of teacher education considering the requirements of curriculum reform. In fact, this incoherency might be a common issue in many other educational contexts. The ecosystem of an education system can then be simplified in relation to the current teaching situation and illustrated in the diagram below

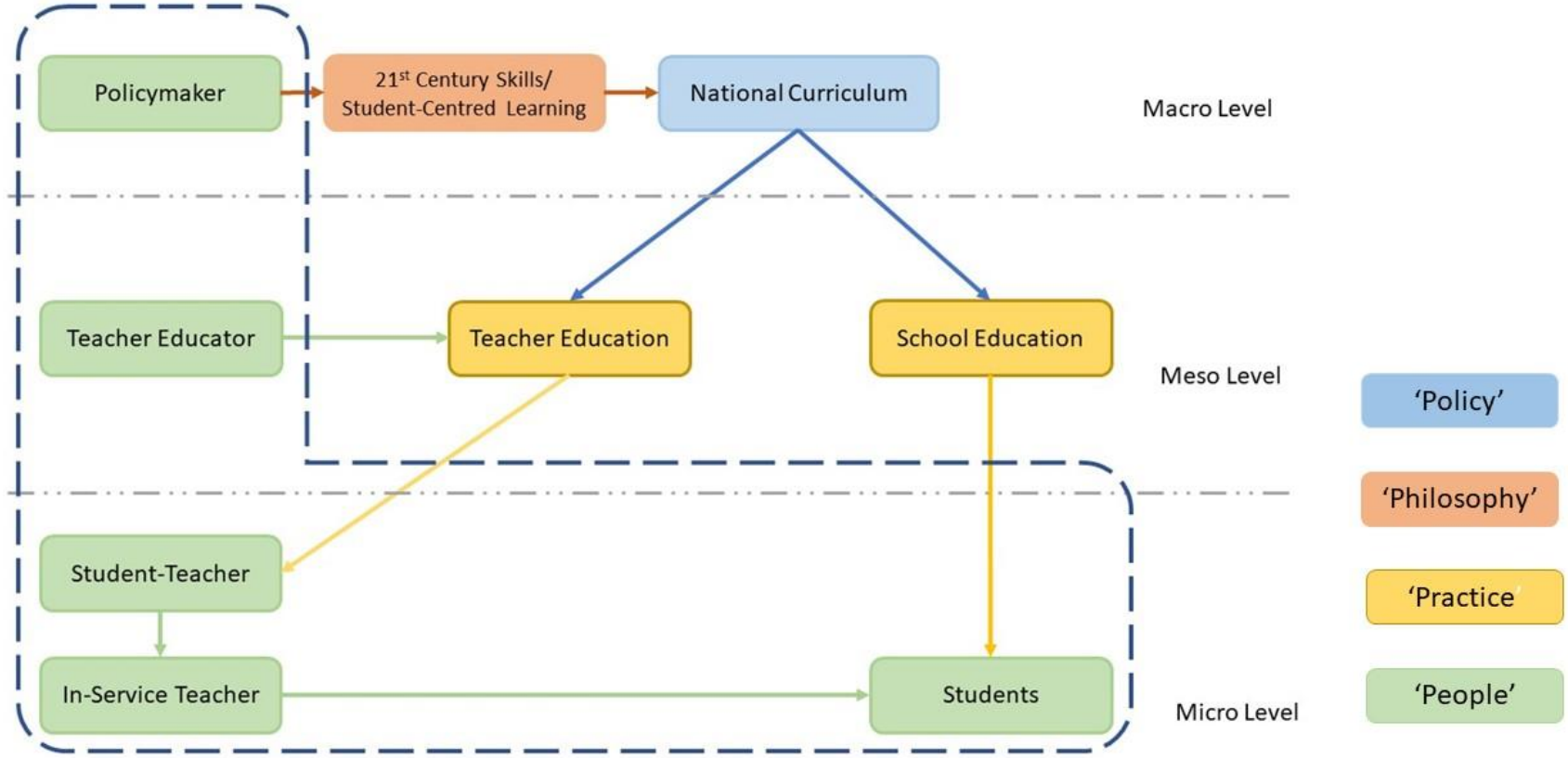


Figure 5.3-2: Different Elements in the Implementation of the Curriculum Reform

The concept of 'Policy, Philosophy, Practices and People' (4P) is adopted in the theoretical framework by Walker-Gleaves (2023) to explain different elements in the above figure. Within the concept of 4P, people as the main concept takes a large amount in that diagram; the other three concepts can only be created and operated by people in the educational context. The crucial point here, in my view, is both pre-service and in-service teachers' understanding of the curriculum and sufficient practice in the actual educational settings would significantly determine the quality of school education (Kenny, 2017; Patton & Parker, 2017). Then, I present responses to my research questions in both theoretical and practical aspects.

5.4 Answers to the Four Sub-Questions

Considering the large population and region differences, the distance between these three levels is discussed in-depth, as it can vary depending on the complexity of the Chinese education situation. I therefore draw out the answers to the research questions in this thesis into a broader view in both theoretical and practical aspects.

5.4.1 Details and requirements of the implementing the IBL approach in the Chinese primary music classroom

Implementing the IBL approach in Chinese primary music education is feasible considering two key points: less than 20 minutes of music inquiry in the classroom and an appropriate lesson plan according to the characteristics of that music. In fact, the format of the music activities involved in the music inquiry is not limited. It is precisely because expressions on music can be presented in various ways that musicality as a domain-specific skill is then learnt and integrated with the concept of 'Quality Education' in practice. One of the outstanding features of the research design in this thesis is that the action research cycle provides music teachers with sufficient time in preparation and reflection, and coding and constant comparison in the grounded theory allows the researcher to generate the teaching pattern. Thus, the participant teachers are more supported to balance their traditional teaching goals with the IBL approach. However, it is noted that although the implementation of such an approach is only at the

school education level, it does not mean that considering the details and plans of the implementation can only occur at this level or only by the school music teachers.

Policymakers involve the philosophical idea of 21st Century skills in the revised curriculum document at the macro level. Then, the school education will make relative reactions to those changes at the micro level, which is the most important practice within the compulsory education system. However, as another part of the practice section, teacher education seems to be a separate component outside the system. The power and the level of control by policymakers at the top level invisibly distance teacher education from school education (Fredriksen et al., 2023). An efficient curriculum implementation depends on the completeness of the vertical and horizontal alignments in the stage of planning. Yang (2022) explains that horizontal alignment reflects the agreement made by policymakers at the macro level, and vertical alignment connects all parties involved in teaching practices.

Policy sociologists argue that policymakers, standing outside the 'Plan-Action-Reflection' cycle and merely concentrating on the planning phase, should be the first agents to self-reflect and self-review (Schweisfurth, 2011). In between, the relationship between teachers educating and developing student-teachers converting to teachers educating students seems to have been neglected. Yang (2022) indicates this issue as the lack of vertical alignment in the curriculum design before implementation. Therefore, the section on 'People' in this educational flow is incoherent and, as a result, consequentially leads to the teacher's struggle in teaching.

In parallel, the voice of experienced in-service teachers may not be heard by the policymaker or the academy, who are detached from the practical teaching experiences (Loughran, 2014). These can both be the reasons that lead to the solid, unsolved implementation gap of an idealistic curriculum (Yang & Welch, 2022). For example, statistics confirm that the enormous market has brought in sufficient students to enroll, but resource bias and regional disparities continue to make the implementation of the new curriculum an unrealistic proposition in rural

areas (Yang & Welch, 2022). Arguably, in-service teachers can be identified as the curriculum marker that their reflections on the document can be precisely awarded concerning students' individual learning needs and draw the policymakers and teacher educators' attention to the relevant educational reforms (Stavrou & O'Connell, 2022). Thus, the current flow of the curriculum reform (Figure 5.3-2, p. 217) cannot be viewed as a dynamic ecosystem.

Teacher educators should be the role models of any curriculum policy changes for their student teachers. In other words, teacher education should remain the same as school education in managing the solutions of the curriculum reforms at the compulsory education stage (Lunenberg et al., 2007). The teacher education program should also make relevant reflections and changes for the student teachers to adjust their teaching strategies in dealing with the challenges (Christophersen, 2021). Unfortunately, school music teachers have some significant challenges or constraints, around teacher education programs and in-service training, in which issues in actual implementation are caused.

The first thing is that teachers' early exposure to the implementation of curriculum change remains theoretical in teacher education. Student teachers learn the complex nature of education, principles and regulations in policy, the curriculum in design and corresponding methods and practice in their training program (Loughran, 2014), and are supposed to transfer that knowledge and skills to pupils' learning in school. However, student teachers have difficulty translating the techniques learned into teaching skills to meet the curriculum requirements because they are also learning in the complex nature of the education environment. These student teachers are expected to be experienced teachers once they are in school, which is extremely challenging for novice teachers (Fantilli & McDougall, 2009). This is possibly caused by three aspects of practical issues in school education: incongruous modules and teaching pedagogy in the program, a scarcity of pre-service teacher practice and a lack of long-term professional development. Those aspects discussed are around the central topic of the effectiveness of education in the 4P concepts.

In the Chinese education context, reflection and response to curriculum reform should be synchronised by schooling and teacher education at the meso level. As discussed in the Literature Review chapter, teacher education itself does not hold the philosophical idea of training student-teachers in a student-centred learning environment. It is a demanding change, whether learning as a student-teacher or teaching in their professional careers, in which people at upper hierarchies should monitor the whole curriculum reform process and react properly (Schweisfurth, 2011). In-service teachers are forced to 'translate' the new ideas and make changes in their teaching (Wang et al., 2021), which enmeshes them back to the teaching loop discussed in section 5.2.3 (p. 197-207). A similar situation occurred in generalist classroom teacher education, and trainees or in-service teachers in this teaching mode had more complaints even due to the lack of professional musical knowledge (Julia et al., 2020).

Under this circumstance, any curriculum reforms or changes the artificial intervention, equal to the 'fertilisers' to the paddy field, while in the ecosystem, each element would make appropriate modifications according to the natural environment. Teachers, as the growing plant, can either overreact or underreact, resulting in the balance of the whole ecosystem being disrupted. That explains why the involvement of the IBL approach raises new challenges, even though we have already made the contextual qualification adjustments in practice. Thus, it is no surprise that in-service teachers view themselves as the victim of curriculum reform as they retain the old knowledge structure and insufficient understanding of the continuous wave of curriculum reform (Sun & Leung, 2014).

However, the effectiveness of education should be considered with continuously changing social backgrounds; the way teacher training and the contents of that training should always be synchronised with curriculum changes in school education as the teachers are the individual and most direct parties involved in the ecosystem. Teachers are not the 'String puppets' of the policymakers, and the curriculum guidance does not warrant what to teach in classrooms (Allsup & Nicholson, 2019). It is not problematic with theoretical knowledge learning in university programs, but most importantly, that knowledge should be theoretical-

applied knowledge for teacher education as they are the foundation of knowledge and skills that will be transferred directly to future students (Chung, 2022a). Then, the focus of the problem has shifted to what contents and how it should be taught in the teacher education program.

5.4.2 Impacts on teachers' ability to teach musicality and pupils' development of the musicality in the school education

At the micro level, children's development of musicality cannot be separated from the teacher's ability to teach musicality since at this early development, teachers are the core of operating such student-centred learning in Chinese primary music classrooms. Therefore, the sub-questions two and three are primarily linked to each other. Theoretically, in this case, the teacher practitioner in action research reflects on their own teaching, while with the grounded theory involved, it expands the reflections to a wider context that the impact on in-service teachers can also influence the contents and pedagogies in teacher training from the researcher's perspective. Again, the understanding of these two questions cannot remain at the school education level but also correlated to the teacher education in alignment.

Learning specific music knowledge, instruments, theories, and relevant skills in teaching music is the primary content in music teacher education. It is routinely expected and commonplace that having previous music learning experiences, such as instrumental learning, is fundamental for entrancing the music teacher program (Moore, 2014). Students in the music teacher program, when they were learning music subjects, have still been treated as music learners. These pre-service teachers can hardly separate them from learning music as a habit or as a musician to learning as a professional music teacher (Zabanal, 2022). The teaching content and approaches offered by university lectures did not align with how student teachers are supposed to deliver in schools (Georgii-Hemming & Westvall, 2010). This might harm the school music education, especially when student teachers' learning experiences are unsatisfied. Surprisingly, various music learners have reported a similar negative learning

experience, particularly for music major students (Policy at the Intersection of Curriculum and Music Teacher Agency, 2022).

Under these circumstances, unbalancing musical knowledge subjects and teaching relevant subjects causes an uneven teacher's knowledge and skills (Meng & Goopy, 2023). There is no evidence to prove that better musical performance skills are positively linked to student-teacher teaching strategies, even in instrumental teaching (Bennett & Chong, 2018). Overall, it is against the positive development of teachers' self-efficacies and initially breaks down their confidence during their pre-service training (Battersby & Cave, 2014). Engaging the IBL approach in the Chinese primary music classroom aims to develop students as 21st Century learners. Social skills, at any point, are essential for students learning in a classroom environment and working in collaboration (McArthur, 2002). The results of the study confirm the function of social skills in an individual's academic performance (Özbey & KöyceğiZ, 2020). Turned into collaborative learning, another research supports this argument by showing that useful social skills are beneficial to student's academic and social achievements in parallel (McArthur, 2002). The importance of social skills in students' music learning did not attract attention as the participant teachers explained those invisible skills were not stated explicitly in the National Curriculum. Thus, they would not pay particular attention to training in those skills. Until we discussed and compared the frequencies of saying 'Respect to each other' or 'Be quiet when others are speaking', we understood and focused on the development of students' social skills.

During this thesis research, both I and the participant teachers realised the vital role of social skills in the teaching and learning process. Learning in music is not exclusive to students' musicality but also prepares students to be emotionally, cognitively, and socially healthy adults (Váradi, 2022). Social skills, generally, is considered including but are not limited to time management, decision-making, communicative and collaborative working skills, and problem-solving skills (Özbey & KöyceğiZ, 2020). Corresponding, those social skills can be transformed

as personal characteristics, such as self-disciplined, responsibility, friendship and cooperation (McArthur, 2002).

Listening is the preliminary step of music learning and, therefore, can also be understood as a social skill for students' lifelong experiences that should be developed in parallel in music classrooms when implementing the IBL approach. Under the circumstances, developing social skills in the Chinese primary music classroom with the IBL approach adopted comprises two pathways in both musical and social significance.

Listening is a social skill for students in music learning, initially beginning in infancy. Before developing their verbal skills, babies usually use sounds to communicate and develop their social cognitions (Nome, 2020). Similar to the music appreciation activity, observing is the first thing to do before social communication. Reaching the school age, students learn to listen before expressing. Through the invisible process of trust establishment, students are supposed to observe, understand, and interpret others' intentions, behaviours, and languages, which can be an important reflection on their levels of engagement, the quality of that teaching and learning process and also students' advanced thinking skills and problem-solving skills in that inquiry (Soto-Icaza et al., 2015). This is matched to the imitation behaviours in learning singing that, in fact, represents complex social interactions (Soto-Icaza et al., 2015).

The development of listening as a social skill is significantly associated with both the development of musicality and skills in the IBL approach, which can be referred to Figure 5.1-1 (p. 177). This development instinctively emerges from trust and respect in group collaborations, and those features were initially based on listening to each other (Váradi, 2022). In student-centred learning, the responsibility of learning is appropriately transferred to the learners that is dynamically distributed to each student in the classroom (Wang, 2023). For example, in group performance activities, students are preparing to be aware of their surrounding noises and the correctness of their group members' pitches without being easily interrupted and controlling their voices without distracting others. Ideally, each action and

slight change during that process can develop students' skills in recognising emotions (Váradi, 2022).

The musical meaning of developing social skills is beautifully connected with the three domains of musicality (See the Figure 4-1, p. 116 in the Findings chapter). Students can then learn music in a more sensitive and creative way to develop their aesthetics. In the meantime, listening as a skill itself could be categorised as a form of social skill as it represents respect, caring and manner. The sense of community can be developed through various musical activities in daily learning, whilst teachers assume that expectations as a role model (McArthur, 2002). Under a broader context, people generally realised the importance of music in dealing with conflict, love and peace and providing a more cheerful and joyful social life (Barrett et al., 2017). Therefore, listening as a social skill is also a vital part of implementing the IBL approach in teaching musicality in Chinese primary music education and this can be expanded to not only include pupils' listening skills, but also the listening of the teacher to what is happening in the music classroom, as part of a larger learning experience of the teacher development process.

However, it does not mean the learning experience formalized as a music student in the teacher education program is unnecessary. The value of teachers' self-direct ability is acknowledged and essential to their classroom as the student teachers are trained in the professions (Spruce et al., 2021). Arguably, modules designed in teacher education should be compatible with the needs of primary or secondary education music learning. Prioritising student teachers' orientations by valuing their experiences as both students and student teachers in the teacher education program is vital (Fredriksen et al., 2023). Meng & Goopy (2023) further indicate in their research that modules such as classroom management are expected in the teacher education program. In suggestion, operating a learner-centred approach in teacher education in line with classroom teaching might be a feasible solution for the discussed challenges and constraints in section 5.2.3 (p. 197-207).

Again, the problem does not only emerge from the program design but also reflects the disconnection between learnt skills in university and required skills in future school education (C. Conway, 2022). There are two directions for considering the solution: improving the field experiences in teacher education and promoting in-service teachers' training, in other words, by enacting sustained professional development.

5.4.3 Challenges and affordances in implementing this pedagogical approach in the Chinese primary music classroom

It is common that any pedagogies implemented in a novel context will encounter new challenges or difficulties. Details of the constraints and challenges are discussed in section 4.5.4 (p. 164-173). However, the findings and discussions in this thesis are specifically draw attention on the urgent needs for teacher education. Based on the results and reports from the participant teachers, the requirements of teacher training can be divided into two parts: pre-service teacher's training and professional developments for in-service teachers.

a) Pre-service Teachers' Training

Although the teacher educators held a positive and supportive perception of pre-service teachers' professional development in general, they did not have a clear picture of what professional development would entail in real-life context practice (Maaranen et al., 2023). Student teachers have passively copied their role models' behaviours instead of experiencing, understanding and reflecting (Lunenberg et al., 2007). New concepts or pedagogies will be presented directly to schoolteachers without providing the basic theoretical learning of these concepts in the pre-service training stage. This is echoed by the findings in section 5.2.3 (p. 197-207); those experienced teachers also do not know where and how to start when facing a new pedagogy.

Therefore, the value of field experience in teacher education programs is extremely important and emphasised by in-service teachers. Typical fieldwork includes the module of curriculum

design or teaching plan writing in the training program, observation and practices in school settings, and most importantly, communications with other experienced teachers and in other reflections (Welch & Henley, 2014). Field experiences are expected to be the most direct method in self-evaluating the quality of that teaching and reflecting the distances between curriculum in written and in praxis (Lunenberg et al., 2007). The resistance to learning and implementing the theory or theoretical knowledge might be realized by exploring the effective relationship between theory and pedagogical practices in actual teaching (Korthagen, 2010). Kemmis et al. (2014) post that the complexity of theories may contribute to that resistance in teachers' beliefs.

As discussed in section 2.4.1 (p.60-66), the pre-service teacher training is a test site that is highly mistakes tolerant compared to other educational workplaces. Teachers suggest that student teachers experience the more complex conditions or educational settings, the more experience dealing with unexpected situations (Legette, 2013). This type of training can be understood as the core of a pre-service training program, and Conway (2022) highly supports this but states that it is very limited opportunities offered as it has to fit into student teachers' busy schedules.

What is more, the experience gained from the fieldwork is the most significant period of identity switch for those pre-service teachers as professionals (Powell, 2019). The researcher agrees that no matter whether working with individuals or in collaboration with experienced teachers or their peers, fieldwork seems to be the best activator to develop student teachers' professional identity (Draves, 2014). Indeed, teachers conclude several practical issues that they experienced in fieldwork, such as being too abstracted in the content design and relevant teaching methods, and are eager to learn (Legette, 2013). Besides that, student teachers would be prepared to manage multi-identities in balancing their social and professional lives (Abramo & Reynolds, 2015). Interestingly, student teachers would normally have an expectation of a good, successful teacher by identifying what positive characteristics that teacher should earn. The criteria for assessing teachers' qualities is, of course, multi-

dimensional, including personal characteristics, social skills and inspiration and motivation for the teaching career (Powell & Parker, 2017).

It is worth noticing that the fieldwork does not occur independently as an experience-based activity in the teacher training program; it is theoretically the quality inspection of pre-service teachers' quality and skills in teaching by both teacher educators and others in the school education (Kemmis et al., 2014; Rowe & Skourdoumbis, 2019). However, several issues are reported by teacher educators and pre- and in-service teachers in assessing the outcome of fieldwork. As mentioned above, time remains the first constraint for both pre-service teachers in setting the time slots in their campus timetable and for in-service teachers to be interrupted and distracted from their already busy work (Powell, 2019). In the meantime, the subjectivity in guiding pedagogical practices by teacher educators might be conflicted with the schoolteachers in charge of the fieldwork, and this can further contribute to student teachers' confusion about the relationship between theories and practices.

However, the main issue lies in the recognition of teachers' identity for those pre-service teachers in the fieldwork. The multiple identities in actual work make student teachers confused, and they choose to return to the most basic identity recognition. Those student teachers might still view themselves as the student who are attending some outside campus activities (Powell, 2019). Until now, this issue has not been resolved, and in fact, the issue occurred at least two decades ago without significant improvements in practice, which is disappointing (Conway, 2022). Assessing pre-service teachers' identity changes and growth during fieldwork is essentially and critically important to individuals and the educational field (Powell & Parker, 2017).

b) Professional Developments for In-service Teachers

Novice teachers have reported that the urgent need for training in real-life contexts should be considered by teacher educators (Fantilli & McDougall, 2009). For new teachers, in particular, the early stages of teaching can be seen as a post-stage to their role as student teachers.

During this stage, the establishment of motivation, confidence, professional identity, and self-efficacy is vital (Barrett et al., 2019; Draves, 2021; Sepp et al., 2023). It is, therefore, especially important to know what knowledge and competencies they can acquire in teacher education. University teacher education links the theory to the pedagogical practice, and it has become clear in the recent literature that extra training for pre-service and in-service teachers is needed (Russell-Bowie, 2009; Shin, 2019). Otherwise, in-service teachers can be the victim of the ongoing curriculum reform (Meng & Goopy, 2023). The most significant solution for in-service teachers is to provide them with effective, long-term professional support. This includes professional academic support and personal and well-being considerations in their daily work.

Pre-service and in-service teachers initially value the outcome of community in professional development. A community of peers can offer spaces for student teachers to share, reflect and improve (Shin, 2019). It is also common for novice in-service teachers in China that a mentor or a supervisor will positively assist them, especially in the first few years of teaching (Barrett et al., 2019). That is the academic aspect of professional development that is adopted to assess the qualification of a teacher (Kemmis et al., 2014).

However, this was not always the case, and some novice teachers might find it stressful to observe (Patton & Parker, 2017). student-teachers or early new teachers, in their early exposure to school teaching, have commonly been criticised as underqualified. Negative experiences from learning professional musical knowledge were proven to have a long-term, detrimental impact on these student teachers' future work. These problems, which are frequently explicit and not merely subjective to the student teacher, can cause a setback to their professional self-confidence (De Vries, 2013; Onsrud et al., 2022). By contrast, the more positive learning experiences student teachers obtain, the more logic and accountability that student-teachers can build up, especially in music – a commonly viewed subject concerning personal talent (Lewis et al., 2022). In this case, novice teachers may feel more comfortable

and confident collaborating with their peers (McCann & Johannessen, 2004). Novice teachers and their peers can be equally placed within that structure of communication.

It may be conceptualized as safe zone, and it seems that some new teachers are free to share without upper pressure from their supervised teachers and think reflectively with a concentration on their own (Patton & Parker, 2017). However, Kemmis et al. (2014) argued that the supervisor mode of community support is more critical and professional for novice teachers entering the field. The fear of novice teachers, especially music teachers, is also understandable in relation to their negative learning experiences, and unexpected feedback from some particularly harsh supervisors can potentially contribute to their avoidance of such mentoring support (Fredriksen et al., 2023).

In a similar vein, a teacher's self-care development, including the balance between work and family or personal well-being, should also be considered part of professional development (Zabanal, 2022). Worryingly, the reality is that music educators or teachers were not viewed as professionally as other fields of educators or even by their colleagues in a border education context, which can be seen from the low status of music subjects in schooling (Grimsby, 2022). Researchers pointed out that a self-care plan should be offered as fuel, especially for first-year novice teachers, to reduce stress and revitalise the current and future music teacher's motivation in the long-term run (Fantilli & McDougall, 2009; Kuebel, 2019; Stavrou & O'Connell, 2022; Zabanal, 2022).

In terms of the content of the professional development in relation to each discipline, it is strongly associated with the specific education context. This is particularly important for Chinese school education in providing such training to teachers from all areas. A unique issue should be considered by Chinese policymakers and teacher educators that working environments and professional development for rural teachers are completely different based on some findings revealed in this thesis and previous literature. In fact, some teachers teach music under appalling and therefore emotionally draining and difficult working conditions.

First, the teacher who takes charge of the music subject may have no music training in their teacher education or even in their lives (Li et al., 2020). What is more, Sun & Leung (2014) pointed out that parents and students have low expectations as music seems to have less meaning in students' further education and future careers. Training received by those rural teachers was often out-of-date content and unstable frequency. The discussed professional development community or self-care plan is even unrealistic for those rural teachers. This reinforces the need to include these regional resource differences in teacher education to enable student teachers to respond to different conditions of teaching.

In general, teacher educators should be fully aware that opportunities for professional development ought to be equally and comprehensively accessible to all teachers in the education system (Kyaw et al., 2021) and throughout their whole teaching career when facing any new challenges or concepts in teaching in the 21st Century classroom (Ballantyne & Canham, 2022). Researchers in the music education field have also confirmed the outcome of professional development for both new and experienced teachers (Conway et al., 2018). The language utilized by experienced teachers remarkably distinguishes the experienced teachers from new teachers, and that indicates the direction for novice teachers' professional development in future.

Such professional support should prioritise the student teacher's practices in the teacher education program, introducing and valuing their beliefs about the teacher's identity (Fredriksen et al., 2023). Exposing to enough complex cases in the early stage of teaching and discussing such cases in detail with teacher educators or experienced teachers is particularly beneficial to developing a new teacher's creativity in this era (Abramo & Reynolds, 2015). School teachers are not working with the curriculum documents or policies in a vacuum; the implementation of the curriculum reform or intervention in teaching should permanently consider both teacher education and school education. It is worth pointing out that teacher educators have difficulties in negotiation and cooperation between all three levels in the education system (Ribaeus & Löfdahl Hultman, 2022). Therefore, they are not the people who

should be blamed for all faults in inconsistency in implementing the theory to the practices. No matter what, all parties involved in the education system should work in parallel and share any meaningful changes at every change reform.

5.5 Further Implications

In this section, I will discuss the associated impacts on the Chinese music teacher's education in relation to the implementation of the IBL approach in primary school teaching. And then, the research design in this project will suggest the possibilities of implementing a similar design in other educational contexts or subjects teaching. Finally, it will elaborate on any indications of other musical studies.

5.5.1 Considerations of possibilities of implementing such pedagogy in similar contexts or subjects

Results and discussed findings confirm the possibilities of implementing the IBL approach in part of China. Confidence is built up through the teaching and learning process, and it is largely due to the positive feedback and language in communication. This is extremely important for learners during the entire learning and development process by achieving higher expectations as they can think about themselves (Lewis et al., 2022). It has been supported empirically by the Year 4 participant teacher in her final interview that she believed that she might have underestimated her students' potential musicality in the past. She admires that the variety of learning activities designed in the intervention of the IBL approach do consider the students' preference in music activity and expand students' engagement in the class. Direct reflections by children approve of the value of musicality as a domain-specific skill that is not limited to technical or aural aspects but also includes emotional experiences and meanings (MacGlone et al., 2022). MacGlone et al. (2022) further support the importance of such learning because it does not simply pass teachers' beliefs onto students; it comprises students' views and values of music and musicality.

However, the wider implementation of such pedagogy has not been sufficiently approved by enough empirical studies in the Chinese primary music education research field. The key point is that the context matters (Zhang & Leung, 2023). The regional differences and financial inequality should be prioritised within the other Chinese context for this implementation. The most important factor is the development of Chinese rural education, taking the lack of teachers into account, and that initially contributed to a weak and uneven development of all art-related subjects, including music. The main issue in Chinese rural music education is that music subjects might not be taught by music specialist teachers as expected, and the drawback of teaching conditions in rural areas might highly possibly cause the failure of many interventions in pedagogical practices due to the mismatched teaching expectations and actual achievements (Li et al., 2020; Qin et al., 2022).

On the other hand, Zhang et al. (2023) further explained that ensuring the basic standard is still the primary focus of content-driven teaching classrooms. Time continues to be the foremost constraint in whether teachers employ the method (Teig et al., 2019). Therefore, the philosophical idea of a 'student-centred classroom' should be understood as a collective learning environment in such an educational setting. Fieldwork in my project was conducted in the urban area, which is a relatively financially well-off area. However, the details in the classroom design show that teachers without technology or other expensive equipment can still practically offer such important musical inquiries in practice.

The implementation of such pedagogy can be considered in similar educational contexts in different countries or areas with issues such as large class sizes and lack of support in music learning (Zhang et al., 2023). The positive outcomes of implementing the IBL approach in primary music classroom is keen. 'A never responded student' (initial code mentioned in section 4.3.2, p. 137) does not mean that the student has no reactions in music classrooms at all. Instead, it reflects the participant teacher's surprise in seeing the difference after the pedagogy implementation to her students. It is somehow worthy of teaching students to disagree with a common view on what great music should be by exploring the various

examples and sharing ideas (Abramo & Reynolds, 2015). To be explicit, the students here can be both students in school education and teachers as a learner in the process and in teacher training. The crucial point is still how teachers are trained in their initial teacher preparation and in-service professional development.

There is one thing that can be considered without the restrictions of educational context is that musical experiences, feelings, and emotions should always be prioritised in music learning. The ability of musicality, or other theoretical and technical skills, is a concept of growth that should occur inductively through the whole teaching and learning process (Sepp et al., 2015). The modification of any intervention into a similar or even different context is to take children's emotions and reflective feedback in the first place. Music teachers' beliefs can significantly impact the quantity and quality of school music education (Battersby & Cave, 2014).

5.5.2 Implications for the future Chinese music education aligned with teacher education program

The two most important things for the future of Chinese music are how to promote the teacher education programs in line with the school education for future teacher training and consider the possible solutions for school music teachers. It is important to mention here that the National Curriculum was updated within the period of conducting this study. Therefore, the implication for further Chinese school music should be addressed with the 2022 version of the National Curriculum. Although the National Curriculum is revised for actual teaching, the philosophy underneath this official document remains the same is that musicality is prioritized in the music primary school learning (See details of the latest music National Curriculum in section 5.1.3, p. 186-189). Thus, the focus of school education and corresponding teacher training in university is clearly stated in the new curriculum documents for the next decade. Music teacher educators should provide pre-service teachers with opportunities for practice and attempt to address these raised issues before approaching a

career (Conway, 2007). Within the research cycle of 'Plan-Action-Reflection', pre- and in-service teacher should always ensure the largest proportion of reflection phase in their teaching and learning when responding to every challenge or constraint (Stallions et al., 2012).

5.5.3 Implication for other musical studies

Firstly, future studies can inquire further about how to access students' musicality gained in school learning, in which to reflect on the teaching quality. Clear definitions and categorisations of students' musicality can assist the teacher in understanding their interests in music learning and then conduct a more efficient teaching plan (Buren et al., 2021).

The second thing to consider in the implementation of the IBL approach within the Chinese music education context is to expand the research to different regions in China. Research conducted in urban areas or private schools hardly references rural music teachers (see the example in North America International School, Shanghai, China (Mamedov,2022)). The experimental design in a more conventional teaching and learning environment is the key to generalising the approach to the national level.

Finally, relevant longitudinal studies can be designed to explore the effectiveness of student-teacher training in teacher education and those skills and knowledge can be adopted and applied to school education. Commonly, studies emphasise a particular section in the education system, leading to a reduction in the understanding of how transferable those skills and knowledge are (Li, 2023). However, student-centred learning managed in teacher education does not mean the traditional teaching mode should be cut down (Lee, 2023). Instead, the combination of both teaching patterns in teacher education, functionally the same as it in school education, is valued for solidifying the identities between music teachers and musicians and in any relevant sub-identity in the workplace (Ballantyne et al., 2012). Additionally, the Community of Practices offers the space for music teachers' reflections to be considered within the school culture (Patton & Parker, 2017). In this study, the participant

teachers and I formed a small collaboration in dealing with and reflecting on the teaching process. In the long run, music teachers could establish their own research group even though they oversee different year groups.

Overall, music education and music teacher education require more specific content-based professional development (Grimsby, 2022). Creativity in music education does not only refer to attractive ways of teaching but also aims for innovative pedagogy (Abramo & Reynolds, 2015). Subjectivity in defining some terms, such as musician or musicality, in school education, compared to teacher education, might build up the inconsistency in the philosophy of teacher education in training future teachers (Li, 2023). Alignment of the curriculum reform between those three levels aims to link all sources, materials, philosophy and people in all possible considerations (Barrett, 2020). The connection between the pre-and post-stage teaching practices is essential to investigate, and this is a limitation in my research design. Parents can be invited in that alignment, either, as their views and expectations on school music education would change the marketing of the field to some extent (Chung, 2022a).

Achievements of the purpose of teacher education are convincing (Mäkinen et al., 2020; Ribaeus & Löfdahl Hultman, 2022), and success must be supported by all parties in the education settings. By taking the teachers' perspectives in this thesis, the place of the teacher in the teaching and learning flow is centred, as they are the person who directly follows the guidance and acts in the classroom teaching. Therefore, the value of teacher education is addressed in this discussion.

5.6 Reflections on the 'Generated Theory' in Practice

Conducting this research has changed my mind in understanding the role of music teachers, the function of music education, and views on music learning as the music teacher and as the researcher. During the researching process, I was able to act as both an insider and outsider in this conversation, observing the musical and education practices in music learning. The first step in addressing the implementation of IBL in teaching musicality in the school music

program is to understand that theories cannot be isolated from musical practices (Swanwick, 2012). The word 'recognising' frequently mentioned in the national curriculum does not simply mean knowing those musical elements but more intentionally refers to acquiring the knowledge and being able to appreciate and engage in music activities musically (Wayne, 2002).

Most importantly, it should be realized that currently, it is not urgent for the majority of Chinese primary music teachers, or in a broader context, primary music teachers worldwide, to address the gaps between curriculum in written and practice, like professional researchers (Finney, 2013). Referring to that, I attempted to address the theoretical gap to adopt a more creative way of teaching my students. My students and I shared the joyful and achievement in music learning activities. In fact, this is the central point of my inspiration of researching this project. However, the process and practice of music education remains the same outside the classroom environment when I viewed it as a researcher, in which I realized the importance of raising the primary music teachers' voices to a higher educational level and the difficulties for raising this voice as a primary school music teacher at all.

Instead, it is proposed that school music teachers consider the implemental issues in their daily teaching and possible solutions more frequently. In this case, it is considerable and meaningful for them to take charge of their pedagogical practices and change their mind about music teaching and learning. they should understand the concept and philosophy of music education more broadly. To some extent, it might be important if not crucial for them to involve with the music education research field, and it should be encouraged.

Through the literature and findings in this research, primary music teachers should be aware that music teaching and learning confer rewards in both musical and educational domains. They, as one of the most significant objects in this learning environment, should be rewarded with the joy of learning music with students as a life project (Bowman, 2012). In this case, findings in the implementation of IBL in teaching musicality in the Chinese primary music

education in this thesis have been approved by receiving the participating teacher's feedback on how she changed her views on her students and primary music school education. For example, presenting students' musical works in class is a practical approach to peer and self-assessing the quality of music actions in musical learning, and it was beyond the criteria of simply knowing or recognizing musical elements (Elliott, 1995). As is evidenced from my research, musical inquiry in classroom teaching allows the development of musicality through music in praxial and it should be further understood and applied into teaching training program (Swanwick, 1994). This study can only show some short-term impact positively on developing the school music education, while in the long-term, all parties including school educators, teacher educators and curriculum designers should work collaboratively in promoting school music education.

5.7 Summary of this Chapter

In this chapter, results from the findings chapter are discussed in depth, along with some literature to indicate their meanings in the Chinese education system. Topics include musicality as a domain-specific skill in teaching and learning in school education, reviews on the latest Chinese music National Curriculum documents, details in the implementation of the IBL approach in the Chinese primary music classroom, how teaching acts in the 21st Century student-centred classroom, companying the improvement of listening as a social skill that especially developed through the IBL approach in the music classroom.

Most importantly, the findings discussed the necessity and further implications of the alignment between teacher education and school education collaboratively dealing with the curriculum changes and reforms for the compulsory education stage. Further implications also draw attention to the possible consideration of the research design and the possible implementation of the IBL approach in the music classroom in another educational context. Moreover, this discussion addresses the results and findings in implying other music studies, such as further research on the relevant teacher education field. Finally, this chapter ends by

reflecting the main research question about the generated theory in this study and in the border Chinese music education context.

The mission of music education as a critical force for learning, inclusion, empowerment, experimentation, and above all, self-fulfilment. Whilst understood in some countries, and some curricula, and some age groups, is not globally understood or accepted in this century however. Curriculum documents from a wide variety of national and international contexts testify to the centrality of music as a subject that is in elementary and senior subject structures. But although this is the case in theory, in practice, there is evidence that consistent and high-quality delivery is significantly lacking.

There are several reasons for this, and my research contributes to deeper understanding of what these reasons are, in a country, China, in which elementary teachers' music pedagogical practices are under-researched. For example, literature demonstrates that pupils' own musical interests and passions are not sufficiently important in teacher planning of classroom learning: my research shows that not only is this true in Chinese primary music, but that pupils may respond at a high level of musicality and aesthetics when their interests are taken into account and when teachers are able to respond with time and resources to their musical ability.

Furthermore, literature shows that teacher confidence and poor resourcing are a problem, and in many cases, schools capitulate by giving minimal resources on the basis that teachers will be unlikely to use them anyway. My research partly confirms and partly contradicts this: poor time resources are problem for many primary school teachers in China, but when there are adaptations made, teachers are not lacking in confidence, more likely they are lacking in practice and the conviction of their own decision making because they have rarely been in a position of power and control.

What my research shows very clearly, and this builds on and agrees with earlier research in many different countries, is that many school leaders are ambivalent or confused about arguments for investing in teacher development in music or prioritising it when there are curriculum pressures and financial difficulties, or when there are decisions to be made about how to satisfy parents and school district administrators. However, the research still shows – and my research backs this up and strengthens the arguments and evidence - that the failure to realise the profound impact and importance of music on children's lives continues to be a missed opportunity for all.

Chapter 6. Conclusion

In this chapter, I will review the research design, aims and research questions in this study first. And then, I will summary the main research findings according to the research question in relation to the topics of idealized teaching mode in pedagogical practices in classroom teaching and under the auspice of the Chinese National Curriculum. Relatively, the development and meaning of teachers' abilities in teaching musicality and students' potential musicality will be discussed either. Most importantly, challenges and significant constraints will be reviewed in the implementation of such pedagogy in the Chinese primary school education context. Finally, it will conclude the whole thesis by summarizing the overall contributions and limitations of this study and a summary of possible implications for further research.

6.1 Recap the Research Design in this Study

The research was originally conducted in a public Chinese primary school located in a well-developed area in the southeast of China. Participants, including two different year groups and two female teachers in Year 4 and Year 5, were chosen after the pilot study in that school. The research design adopted the combination of grounded theory and action research as the methodology in the fieldwork, followed by the 'Plan-Action-Reflection' research cycle. In detail, data was collected by video-recorded classroom observations and after-class interviews with the teachers. As a complete observer during the classroom observation, I have no direct contact with the students. Therefore, an informal evaluation sheet was designed to gain some feedback about this program from the students' perspectives. Finally, there is a final interview conducted with both participant teachers individually to discuss their views on the implementation of the IBL approach in the primary music classroom in teaching musicality.

The idea of this research was inspired by me, the researcher's personal interests in the academic field. Compared to the participant teacher, I have acknowledged the philosophy and theory of the IBL approach in advance. However, after a detailed discussion with both teachers, we both agreed that they are the best candidate to operate those designed lessons instead of

me. Thus, the participant teachers and I worked in collaboration primarily at the Plan and Reflection phases. Also, due to the practitioner in this fieldwork, it cannot be fully categorised as Action Research.

Based on previous teaching experiences, this study, therefore, stands on the teacher's perspective. And the purpose, the main and the four sub-research questions of this research can be found in the introduction chapter.

6.2 Summary of the Main Research Findings

According to the main research question and these four sub-questions, the results and findings are discussed around five aspects: the specific form of that pedagogy under the auspice of the Chinese music National Curriculum, details in implementing the IBL approach in the actual classroom setting, relatively how teachers' ability to teach musicality and children's potential musicality can be developed throughout the entire process and finally, the unavoidable constraints and meaningful challenges should be taken in consideration of the classroom implementation. The following section discusses those aspects respectively.

6.2.1 An idealized teaching mode of Implementing the IBL approach in teaching musicality under the auspices of the Chinese National Curriculum

The intention of implementing the IBL approach in Chinese primary music education is feasible. A unique view of the educational field is that students with formal music education should all be viewed as musicians. It is to build up their self-efficacy in learning music as professionals. Musicality has been defined as an ability to communicate with or through music and as a domain-specific skill stated in the National Curriculum document. The three levels of musicality categorized in this thesis are natural, communicative, and critical musicality. Again, the concept of musicality is slightly different from the general views on that term. Music educators and schoolteachers seem to be more kind in defining this term based on the most significant factor of 'For All Students' in Chinese compulsory education. In other words, music

education in China should be inclusive to all students, no matter their innate talents in music learning. Children are equally treated in the classroom. In fact, the involvement of IBL in traditional classes is to offer more space and opportunities for students to express and share their thoughts about music in various ways.

6.2.2 Details in teaching that pedagogy in school music education in the classroom settings

Worthy noticed that the adoption of the IBL approach should be considered in balance with the traditional teaching methods in the actual teaching. In fact, IBL can be integrated with the original teaching plan in setting the appropriate duration for doing that inquiry. Typically, a 10- minute to 20-minute inquiry is suitable for a 40 or 45-minute lesson in many Chinese primary schools. There is no need to choose extra-curricular materials instead of the official music textbooks. However, the participant teachers suggest that at this early stage, the adoption of this pedagogy could take 20% of their daily teaching, which is their limitation in considering the extra time needed in preparation. The design of activities can vary in format. Activities, such as storytelling, background drawing, chorus singing, and mini musicals, can also integrated within the classroom teaching. And such creativity in designing the lesson is based on the teacher's innovation. An important suggestion is that teachers can design the relevant activity in consideration of the characteristics of the music.

It needs to be addressed in advance that student-centred learning, or the IBL in Chinese primary music teaching, remains at the beginner level. Results and findings might not be completely copied and reproduced in other studies. And the example of activity in design is optional by teachers. However, the second main finding in discussing the details of that implementation provides insight into how this pedagogy can be applied to other educational contexts.

6.2.3 The development of teachers' pedagogical practices in the teaching and learning process

The teachers' direct reflection on the interview is explicitly to approve the teacher's development of the teaching ability to teach musicality. The participant teachers themselves are surprised to find that they are more familiar and love with their students. Verbally, the teachers prefer to call the students as their children. As the teachers see more about their children's achievements in learning, they themselves feel more joyful and self-efficacy in teaching success.

Although the teachers are both worried about the completeness of their original teaching goals and in doing the IBL in this study, they express willingness to conduct the IBL approach in their future teaching, or sometimes, they said they would use the same design in other classrooms to check any possible improvements in pedagogical practices. As a complete observer outside the learning community in the classroom, the development of the teacher's ability to teach musicality is more obvious to me. They are more creative in posting their ideas and thoughts in preparation for the later stage of this fieldwork, and most importantly, they are more able to deal with possible, unexpected situations in the classroom by modifying their plans or words. Indeed, the Year 4 teacher has more experience in teaching and can even generate the whole teaching plan immediately when she comes up with some amazing ideas in the last two sessions.

Of course, these teachers also value the phase of reflection. The Year 4 teacher has backed forward to a teaching material with a modified plan because she thought there was space for improvement in musical knowledge learning as she was inspired by implementing the IBL approach.

6.2.4 Potential musicality in childhood in the teaching and learning process

Due to the no direct connection between me and the students, the learning outcomes of students' potential musicality are mainly revealed by in-class observation and teacher feedback. Examples can be found in Appendices E. During classroom learning, students are highly engaged in those designed activities and eager to express and show their outcomes to the whole classroom. Teachers, therefore, must keep reminding them about being quiet and being respectful when others are speaking. Furthermore, listening as a social skill has been especially viewed by schoolteachers in their future teaching.

In the quality of students' learning outcomes, it is interesting to point out that students are more confident in showing and explaining their thoughts about their work. This is highly associated with teachers' encouragement throughout the learning process. A never-reacted student in the Year 5 classroom remarkably impressed the teacher. To some extent, students' in-class reactions are better reflections of teachers' quality of teaching. And through the informal evaluation sheet, children also express their interest in joining such groups of learning.

6.2.5 Important challenges and constraints in actual teaching

The implementation of this pedagogy raises several concerns in relation to challenges and constraints in actual teaching, primarily reported by the participant teachers. From both academic and practical views, the constraints mean conditions that must be accepted, whilst the challenges mean manageable issues that require long-term practice to resolve. The most outstanding challenges and constraints are summarized into five topics, including content and time as the two main constraints, teachers themselves, students' learning statutes and other external factors as challenges. Teachers describe that those challenges can occur in combination or individually and that the journey of teaching can be an interesting and tiring journey with unknown mysteries boxed on the way. It is challenging but also rewarding for the teacher to enjoy that journey, as they state. However, in Chinese primary schools, teachers

are confused about teacher or musician identity and even more conflicted with their teacher identity and administrator identity in their daily work. This is largely affected by the uneven number of music teachers in one school in comparison to other subject teachers, and therefore, music teachers in the Chinese primary schools often took charge of other side jobs.

6.3 Overall Contribution to Knowledge, Limitation of the Study, and Possible Implication for Further Research

This study is based on the teacher's perspective and primarily has contributions to school music education, pedagogical practices, teaching and learning in musicality. It suggests the possibility of implementing the IBL approach in teaching musicality under the auspice of the Chinese music National Curriculum and addresses the details of how this pedagogy can be applied in the actual educational setting. In fact, due to the researcher's stance, the findings and discussion in this thesis addressed explicitly the importance of teacher education aligning with the curriculum reforms at compulsory education stages.

The limitation of the study is firstly considering the impact of COVID-19 in reducing the chances and length of teachers' training in the IBL approach. As the participant teachers comment, they will be well-prepared if the preparation time can be expanded. Besides that, due to the busy school schedule, the reflection phase in the research design is extremely important and valuable. The limitation here tends to be a regret if all music teachers in that school could be involved in the reflection phase.

From the academic side, the limitation of this study is that it is small-scale research in only three months, and it can positively impact the validity and reliability of this study. The unique context and participants might only draw attention to the transferability of this research design and the designed pedagogy. Further studies are suggested to carry out exploration of this pedagogy in the Chinese primary education field. In parallel, the relative actions in teacher education to deal with the changes in compulsory education are worth studying.

References

Abaniel, A. (2021). Enhanced conceptual understanding, 21st century skills and learning attitudes through an open inquiry learning model in Physics. *Journal of Technology and Science Education*, *11*(1), 30–43.

Abramo, J. M., & Reynolds, A. (2015). "Pedagogical Creativity" as a Framework for Music Teacher Education. *Journal of Music Teacher Education*, *25*(1), 37–51.

Adderley, C., Schneider, C., & Kirkland, N. (2006). *ELEMENTARY MUSIC TEACHER PREPARATION IN U.S. COLLEGES AND UNIVERSITIES RELATIVE TO THE NATIONAL STANDARDS--GOALS 2000*. 17.

Aditomo, A., & Klieme, E. (2020). Forms of inquiry-based science instruction and their relations with learning outcomes: Evidence from high and low-performing education systems. *International Journal of Science Education*, *42*(4), 504–525.

Alessandroni, N., Beltramone, C., & Sanguinetti, L. (2017). Singing pedagogy and contemporary vocal music: A troubled relationship. *ERAS: European Review of Artistic Studies*, *8*(2), 1–16.

Allen, B., Iain, F., & Timo, H. (2022). *Teacher recruitment, job attachment and career intentions after the COVID-19 pandemic | VOCEDplus, the international tertiary education and research database*. London, England Gatsby Charitable Foundation.

Allsup. (2015). Music Teacher Quality and the Problem of Routine Expertise. *Philosophy of Music Education Review*, *23*(1), 5–24.

Allsup, R. E., & Nicholson, G. (2019). School Change. In C. M. Conway, K. Pellegrino, A. M. Stanley, & C. West (Eds.), *The Oxford Handbook of Preservice Music Teacher Education in the United States* (pp. 23–43). Oxford University Press.

An, S. A., Kulm, G. O., & Ma, T. (2008). The Effects of a Music Composition Activity on Chinese Students' Attitudes and Beliefs towards Mathematics: An Exploratory Study. *Journal of Mathematics Education*, *1*(1), 96–113.

An, S. A., & Tillman, D. A. (2015). Music activities as a meaningful context for teaching elementary students mathematics: A quasi-experiment time series design with random assigned control group. *European Journal of Science and Mathematics Education*, *3*(1), 45–60.

Anderson, J. (Director). (2020, January 6). *The Lasting Impact of Multiple Intelligences*. https://www.youtube.com/watch?v=lIiU5KXBjBE

Anderson, W. M. (1992). Rethinking Teacher Education: The Multicultural Imperative. *Music Educators Journal*, *78*(9), 52–55.

Anderson, W. T. (2016). Mindful Music Listening Instruction Increases Listening Sensitivity and Enjoyment. *Update: Applications of Research in Music Education*, *34*(3), 48–55.

Announcement of Written Examination for Primary and Middle School Teacher Qualification Examination. (2019).

http://www.jseea.cn/contents/channel_39/2019/12/1912301009221.html

Anttila, E., Barrett, T., Doan, W. J., & Ruthmann, S. A. (2014). Deepening Inquiry: What Processes of Making Music Can Teach Us about Creativity and Ontology for Inquiry Based Science Education. *International Journal of Education & the Arts*, *15*(19), 1–37.

Aróstegui, J. L. (2016). Exploring the global decline of music education. *Arts Education Policy Review*, *117*(2), 96–103.

Artigue, M., & Blomhøj, M. (2013). Conceptualizing inquiry-based education in mathematics. *ZDM*, *45*(6), 797–810.

Atkinson, R. (2018). The Pedagogy of Primary Music Teaching: Talking about Not Talking. *Music Education Research*, *20*(3), 267–276.

Bakker, A. B. (2005). Flow among music teachers and their students: The crossover of peak experiences. *Journal of Vocational Behavior*, *66*(1), 26–44.

Ballantyne, J., & Canham, N. (2022). Understanding music teachers' perceptions of themselves and their work: An Importance–Confidence Analysis. *International Journal of Music Education*, 1–17.

Ballantyne, J., Kerchner, J. L., & Aróstegui, J. L. (2012). Developing music teacher identities: An international multi-site study. *International Journal of Music Education*, *30*(3), 211–226.

Barrett, J. R. (2005). Planning for Understanding: A Reconceptualized View of the Music Curriculum. *Music Educators Journal*, *91*(4), 21–25. https://doi.org/10.2307/3400154

Barrett, J. R. (2020). Policy at the Intersection of Curriculum and Music Teacher Agency. *Music Educators Journal*, *107*(1), 37–42.

Barrett, M. S., Zhukov, K., & Welch, G. F. (2019). Strengthening music provision in early childhood education: A collaborative self-development approach to music mentoring for generalist teachers. *Music Education Research*, *21*(5), 529–548.

Barrett, T., Webster, P., Anttila, E., & Haseman, B. (2017). The Role of the Arts in Education for Peacebuilding, Diversity and Intercultural Understanding: A Comparative Study of Educational Policies in Australia and Spain. *Journal of Education & the Arts*, *18*(11), 1–27.

Barry, N. H. (2008). The Role of Integrated Curriculum in Music Teacher Education. *Journal of Music Teacher Education*, *18*(1), 28–38.

Bassett, J. (2010). *A Philosophical Inquiry on the Valuation and Selection of Musical Materials for Culturally Diverse Learners in Global Environments*. 133.

Battersby, S. L., & Cave, A. (2014). Preservice Classroom Teachers' Preconceived Attitudes, Confidence, Beliefs, and Self-Efficacy Toward Integrating Music in the Elementary Curriculum. *Update: Applications of Research in Music Education*, *32*(2), 52–59.

Bennett, D., & Chong, E. K. M. (2018). Singaporean pre-service music teachers' identities, motivations and career intentions. *International Journal of Music Education*, *36*(1), 108–123.

Beswick, K., & Fraser, S. (2019). Developing mathematics teachers' 21st century competence for teaching in STEM contexts. *ZDM*, *51*(6), 955–965.

Biddulph, J., & Wheeler, J. (2013). Singing the primary curriculum. In P. Burnard & R. Murphy, *Teaching Music Creatively* (pp. 74–90). Routledge.

Birks, M., & Mills, J. (2015). *Grounded theory: A practical guide* (Second edition..). SAGE.

Blackburn, C. (2016). *Communicative Musicality: Sound, rhythm and pulse in communication and music*. 1–12.

Boal-Palheiros, G. M., & Hargreaves, D. J. (2001). Listening to music at home and at school. *British Journal of Music Education*, *18*(02), 103–118.

Boal-Palheiros, G. M., & Hargreaves, D. J. (2004). Children"s Modes of Listening to Music at Home and at School. *Bulletin of the Council for Research in Music Education*, *161/162,* 39–46.

Bowman, W. (2005). To what question(s) is music education advocacy the answer? *International Journal of Music Education*, *23*(2), 125–129.

Bowman, W. (2012). Practices, Virtue Ethics, and Music Education. *Action, Criticism, & Theory for Music Education*, *11*(2), 1-.

Bresler, L. (2005). What musicianship can teach educational research. *Music Education Research*, *7*(2), 169–183.

Broomhead, P. (2005). Shaping Expressive Performance: A Problem-Solving Approach. *Music Educators Journal*, *91*(5), 63–67.

Brown, J. K. (2008). Student-Centered Instruction: Involving Students in Their Own Education. *Music Educators Journal*, *94*(5), 30–35.

Bruder, R., & Prescott, A. (2013). Research evidence on the benefits of IBL. *ZDM*, *45*(6), 811–822.

Buren, V., Müllensiefen, D., Roeske, T., & Degé, F. (2021). What makes a child musical? Conceptions of musical ability in childhood. *Early Child Development and Care*, *191*(12), 1985–2000.

Burnard, P. (2013). Teaching music creatively. In P. Burnard & R. Murphy, *Teaching Music Creatively* (pp. 1–11). Routledge.

Burnard, P., Boyac, J., & Howell, G. (2013). Children composing: Creating communities of musical practice. In P. Burnard & R. Murphy, *Teaching Music Creatively* (pp. 39–59). Routledge.

Burnard, P., & Boyack, J. (2013). Engaging interactively with children's group improvisations. In P. Burnard & R. Murphy, *Teaching Music Creatively* (pp. 26–38). Routledge.

Burnard, P., & Murphy, R. (2013). Becoming performers: Creating participatory spaces collaboratively. In P. Burnard & R. Murphy, *Teaching Music Creatively* (pp. 60–73). Routledge.

Cai, Y., Bi, Y., Wang, L., Cravens, X. C., & Li, Y. (2018). The construct of teachers' pay satisfaction: A case study of primary and secondary schools in China. *Teachers and Teaching*, *24*(4), 431–449.

Calogero, J. M. (2002). Integrating Music and Children's Literature. *Music Educators Journal*, *88*(5), 23–30.

Cardany, A. B. (2012). Exploring Music Dynamics Through Children's Literature. *General Music Today*, *26*(1), 38–40.

Cartagena, H. F. (2021). *Developing Musical Sensitivity and Creativity through Various Forms of Play Activities*. *10*(2), 74–89.

Cassidy, C., & Christie, D. (2013). Philosophy with children: Talking, thinking and learning together. *Early Child Development and Care*, *183*(8), 1072–1083.

Cathy, K. (1998). Music and the Theory of Multiple Intelligences. *MUSIC EDUCATORS JOURNAL*, 6.

Charmaz, K. (1996). The search for Meanings-Gournded Theory. In J. A. Smith, R. Harré, & L. van Langenhove, *Rethinking methods in psychology* (pp. 27–49). Sage.

Charmaz, K. (2005). Grounded Theory in the Twenty First Century: Applications for Advancing Social Justice Studies. In *The Handbook of Qualitative Research* (pp. 507–535).

Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. SAGE Publications.

Charmaz, K. (2014). *Constructing grounded theory* (2nd edition.). Sage.

Choy, S. C., Sedhu, D. S., Liew, Y. L., Lee, M. Y., Malenee, A., & Anuar, N. (2015). *INFLUENCE OF CULTURE ON STUDENTS' AWARENESS OF HOW AND WHY THEY LEARN*. *12*, 49–67.

Christophersen, C. (2021). Educating Music Teachers for the Future: The Crafts of Change. In *Landscapes: The Arts, Aesthetics, and Education*.

Chun Tie, Y., Birks, M., & Francis, K. (2019). Grounded theory research: A design framework for novice researchers. *SAGE Open Medicine*, *7*, 1–8.

Chung, F. M. Y. (2022a). Conclusions and Implications: Toward a Conceptual Framework for Music Teacher Education. In F. M. Y. Chung, *Music and Play in Early Childhood Education* (pp. 201–229). Springer Nature Singapore.

Chung, F. M. Y. (2022b). Impacts of Music Teacher Education: Developing Generalists' Self-Efficacy Regarding Teaching Music to Young Children. In F. M. Y. Chung, *Music and Play in Early Childhood Education* (pp. 97–130). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-5033-9_4

Cohen, L., Manion, L., & Keith Morrison, K. (2018). *Research methods in education* (Eighth edition.). Routledge.

Compulsory Education Law. (2006). http://www.npc.gov.cn/wxzl/gongbao/2015-07/03/content_1942840.htm

Conway, C. (2007). Setting an Agenda for Professional Development Policy, Practice, and Research in Music Education. *Journal of Music Teacher Education*, *17*(1), 56–61.

Conway, C. (2022). Preservice Music Teacher Education: The View From 20 Years Later. *Journal of Music Teacher Education*, *31*(3), 10–23.

Conway, C., Eros, J., Pellegrino, K., & West, C. (2010). Instrumental Music Education Students' Perceptions of Tensions Experienced During Their Undergraduate Degree. *Journal of Research in Music Education*, *58*(3), 260–275.

Conway, C., Rawlings, J., & Hibbard, S. (2018). Music teachers' descriptions of their workplaces in relation to micropolitics. *Music Education Research*, *20*(3), 305–316.

Cooke, C. (2022). 'Making-With' in Music Education. *Cultural and Pedagogical Inquiry*, *14*(1), 101–116.

Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research (3rd ed.): Techniques and Procedures for Developing Grounded Theory*. SAGE Publications, Inc.

Cores-Bilbao, E., Fernández-Corbacho, A., Machancoses, F. H., & Fonseca-Mora, M. C. (2019). A Music-Mediated Language Learning Experience: Students' Awareness of Their Socio-Emotional Skills. *Frontiers in Psychology*, *10*, 1–10.

Corrigall, K. A., & Schellenberg, E. G. (2013). MUSIC: THE LANGUAGE OF EMOTION. In C. Mohiyeddini, M. Eysenck, & S. Bauer (Eds.), *Handbook of Psychology of Emotions* (pp. 299–325). Nova Science Publishers, Inc.

Coss, R. G. (2019). Creative Thinking in Music: Student-Centered Strategies for Implementing Exploration Into the Music Classroom. *General Music Today*, *33*(1), 29–37.

Costes-Onishi, P., & Caleon, I. S. (2018). Measuring critical musicality. *Music Education Research*, *20*(5), 531–545.

Costes-Onishi, P., & Kwek, D. (2022). Inquiry-based learning in music: Indicators and relationships between key pedagogical practices and the quality of critical thinking. *Research Studies in Music Education*, 1–17.

Costes-Onishi, P., & Kwek, D. (2023). Technical skills vs meaning-making: Teacher competencies and strength of inquiry-based learning in aesthetic inquiry. *Teaching and Teacher Education*, *130*, 104152.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (Fourth edition, international student edition..). SAGE.

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage Publications.

Dai, D. Y., Gerbino, K. A., & Daley, M. J. (2011). Inquiry-based learning in China: Do teachers practice what they preach, and why? *Frontiers of Education in China*, *6*(1), 139–157.

Dalladay, C. (2012). Musicianship in education: Ideology and practice. *RESEARCH IN TEACHER EDUCATION*, *2*(2), 9–18.

Davis, G. M., & Fan, W. (2016). English Vocabulary Acquisition Through Songs in Chinese Kindergarten Students. *Chinese Journal of Applied Linguistics*, *39*(1), 59–71.

De Vries, P. (2013). Generalist teachers' self-efficacy in primary school music teaching. *Music Education Research*, *15*(4), 375–391.

Dello-Iacovo, B. (2009). Curriculum reform and 'Quality Education' in China: An overview. *International Journal of Educational Development*, *29*(3), 241–249.

Delport, A., & Cloete, E. (2015). Music education in the Grade R classroom: How three teachers learned in a participatory action inquiry. *South African Journal of Childhood Education*, *5*(1), 21.

Deng, L., Wu, S., Chen, Y., & Peng, Z. (2020). Digital game-based learning in a Shanghai primary-school mathematics class: A case study. *Journal of Computer Assisted Learning*, *36*(5), 709–717.

Denscombe, M. (2003). *The good research guide: For small-scale social research projects* (2nd ed..). Open University Press.

Deparment of Education. (2019). *MUSIC FOR A WORLD CLASS EDUCATION Music Education Strategy 2019 to 2029*. Government of South Australia.

Dirkse, S. (2011). Encouraging Empirical Research: Findings from the Music Appreciation Classroom. *Journal of Music History Pedagogy*, *2*(1), 25–35.

Dobber, M., Zwart, R., Tanis, M., & van Oers, B. (2017). Literature review: The role of the teacher in inquiry-based education. *Educational Research Review*, *22*, 194–214.

Draves, T. J. (2014). Under construction: Undergraduates' perceptions of their music teacher role-identities. *Research Studies in Music Education*, *36*(2), 199–214.

Draves, T. J. (2021). Exploring music student teachers' professional identities. *Music Education Research*, *23*(1), 28–40.

Dunn, R. E. (2008). The Effect of Auditory, Visual or Kinesthetic Perceptual Strengths on Music Listening. *Contributions to Music Education*, *35*, 47–78.

Dunn, R. E. (2011). Contemporary Research on Music Listening. In R. Colwell & P. Webster (Eds.), *MENC Handbook of Research on Music Learning* (pp. 3–60). Oxford University Press.

Egger, J. O. (2019). Effects of cooperative learning on preservice elementary teachers' interest in and integration of music into core academic subjects. *International Journal of Music Education*, *37*(4), 608–621.

Elkoshi, R. (2015). Children's invented notations and verbal responses to a piano work by Claude Debussy. *Music Education Research*, *17*(2), 179–200.

Elliott, D. J. (1995). *Music matters: A new philosophy of music education*. Oxford University Press.

Elliott, D. J. (2005). Musical Understanding, Musical Works, and Emotional Expression: Implications for education. *Educational Philosophy and Theory*, *37*(1), 93–103.

Ethical Guidelines for Educational Research, fourth edition. (2019). Ethical Guidelines for Educational Research, Fourth Edition (2018). https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018

Fallin, J. R. (1995). Children's Literature as a Springboard for Music: Music teachers may be overlooking a stimulating resource. Jana R. Fallin looks at the possibilities of bringing children's literature into the music classroom. *Music Educators Journal*, *81*(5), 24–27.

Fantilli, R. D., & McDougall, D. E. (2009). A study of novice teachers: Challenges and supports in the first years. *Teaching and Teacher Education*, *25*(6), 814–825.

Fautley, M. (2018). Why Music Educators Really Understand Skills. *British Journal of Music Education*, *35*(1), 1–4.

Fawcett, M. (2012). *Music matters in early years' settings*. 1–5.

Feng, D. (2006). China's Recent Curriculum Reform: Progress and Problems. *Planning and Changing*, *37*(1–2), 131–144.

Feng, S., Suri, R., & Bell, M. (2014). Does Classical Music Relieve Math Anxiety? Role of Tempo on Price Computation Avoidance: MATH ANXIETY AND MUSIC TEMPO. *Psychology & Marketing*, *31*(7), 489–499.

Finney, J. (2000). Curriculum Stagnation: The case of singing in the English National Curriculum. *Music Education Research*, *2*(2), 203–211.

Finney, J. (2013). Music Teachers as Researchers. In F. Laurence, S. Brindley, & J. Finney, *MasterClass in Music Education: Transforming Teaching and Learning*. Bloomsbury Publishing.

Fischetti, J., & Lynch, D. (2018). Rethinking the Frameworks that Guide Teacher Education. *Peabody Journal of Education*, *93*(3), 265–266.

Flowers, P. J. (1990). Listening: The Key to Describing Music. *Music Educators Journal*, *77*(4), 21–23.

Flowers, P. J. (2002). What Was That?—Talking About What We Hear in Music. *Update: Applications of Research in Music Education*, *21*(2), 42–51.

Fortuna, S., & Nijs, L. (2020). Children's verbal explanations of their visual representation of the music. *International Journal of Music Education*, *38*(4), 563–581.

Fortuna, S., & Nijs, L. (2022). The influence of discrete versus continuous movements on children's musical sense-making. *British Journal of Music Education*, *39*(2), 183–202.

Fredriksen, B., Onsrud, S. V., Rinholm, H., & Lewis, J. (2023). Who takes part in participation? Challenges to empowering student voice in music teacher education. *Music Education Research*, 1–16.

Freer, P. K., & Bennett, D. (2012). Developing musical and educational identities in university music students. *Music Education Research*, *14*(3), 265–284.

Fu, M. (2019). *FuLei Tan YinYue [Fulei's opinion on music]*. Hunan: Hunan Literature and Art Publishing House.

Gao, S., & Wang, J. (2014). Teaching transformation under centralized curriculum and teacher learning community: Two Chinese chemistry teachers' experiences in developing inquiry-based instruction. *Teaching and Teacher Education*, *44*, 1–11.

García, J. A., & Dogani, K. (2011). *Music in schools across Europe: Analysis, interpretation and guidelines for music education in the framework of the European Union.* (pp. 95–122).

Gardner, H. (1997). Multiple Intelligences as a Partner in School Improvement. *Educational Leadership*, *55*(1), 20–21.

Garvis, S., Barton, G., & Hartwig, K. (2017). *Music Education in Schools – what is taught? A comparison of curriculum in Sweden and Australia*. *51*(2), 11.

Georgii-Hemming, E., & Westvall, M. (2010). Teaching music in our time: Student music teachers' reflections on music education, teacher education and becoming a teacher. *Music Education Research*, *12*(4), 353–367.

Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence vs forcing*. Sociology Press.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine de Gruyter.

Gong, L. (2018). Exploration of the Non-normal Students' Attitude to Taking Part in the Teacher Qualification Examination in China. *Theory and Practice in Language Studies*, *8*(6), 613.

Goodwin, A. L., Smith, L., Souto-Manning, M., Cheruvu, R., Tan, M. Y., Reed, R., & Taveras, L. (2014). What Should Teacher Educators Know and Be Able to Do? Perspectives From Practicing Teacher Educators. *Journal of Teacher Education*, *65*(4), 284–302.

Green, L. (2005). The Music Curriculum as Lived Experience: Children's "Natural" Music-Learning Processes. *Music Educators Journal*, *91*(4), 27–32.

Green, L. (2008). *Music, informal learning and the school: A new classroom pedagogy*. Ashgate. http://www.NCL.eblib.com/EBLWeb/patron?target=patron&extendedid=P_446440_0&

Grimsby, R. (2022). "A meeting of equals": Music educators and special education paraprofessionals in a community of practice. *Research Studies in Music Education*, 1–15.

Groulx, T. J. (2016). Perceptions of Course Value and Issues of Specialization in Undergraduate Music Teacher Education Curricula. *Journal of Music Teacher Education*, *25*(2), 13–24.

Guan, Q., & Meng, W. (2007). China's New National Curriculum Reform: Innovation, challenges and strategies. *Frontiers of Education in China*, *2*(4), 579–604.

Gubbins, E. (2021). Music across the waves: An international comparative examination of the Irish generalist and the American specialist models of music education from the teacher's perspective. *British Journal of Music Education*, *38*(1), 74–91.

Guderian, L. V. (2012). Music Improvisation and Composition in the General Music Curriculum. *General Music Today*, *25*(3), 6–14.

Guerriero, S. (2014). *Teachers' Pedagogical Knowledge and the Teaching Profession*. 7.

Guo, H., Yuan, W., Fung, C. V., Chen, F., & Li, Y. (2021). The relationship between extracurricular music activity participation and music and Chinese language academic achievements of primary school students in China. *Psychology of Music*, 1–14.

Guo, W. (2018). *The Practice and Research of Orff's Music Teaching Method in Contemporary Chinese Music Teaching*. *237*, 434–442.

Hallam, S. (2010a). 21st century conceptions of musical ability. *Psychology of Music*, *38*(3),

Hallam, S. (2010b). The power of music: Its impact on the intellectual, social and personal development of children and young people. *International Journal of Music Education*, 21.

Hallam, S. (2013). What predicts level of expertise attained, quality of performance, and future musical aspirations in young instrumental players? *Psychology of Music*, *41*(3), 267–291.

Hallam, S. (2015). Musicality. In G. E. McPherson (Ed.), *The Child as Musician: A handbook of musical development* (pp. 67–80). Oxford University Press.

Hallam, S., & Papageorgi, I. (2016). Conceptions of musical understanding. *Research Studies in Music Education*, *38*(2), 133–154.

Hallam, S., & Prince, V. (2003). Conceptions of Musical Ability. *Research Studies in Music Education*, *20*(1), 2–22.

Hamilton, T. J., Doai, J., Milne, A., Saisanas, V., Calilhanna, A., Hilton, C., Goldwater, M., & Cohn, R. (2018). Teaching Mathematics with Music: A Pilot Study. *2018 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE)*, 927–931.

Han, R., & Leung, B. W. (2017). A survey on Weifang teachers' attitudes toward teaching Chinese folk music. *International Journal of Music Education*, *35*(2), 202–215.

Han, X. (2012). Big moves to improve the quality of teacher education in China. *On the Horizon*, *20*(4), 324–335.

Han, Y.-J. (2016). Expanding Music Listening Experience Through Drawing. *General Music Today*, *29*(3), 12–18.

Hanson, J. (2022). Examining student depictions of actual and ideal learning experiences in elementary general music. *Research Studies in Music Education*, 1–19.

Hardcastle, E., Pitts, S., & Aróstegui, J. L. (2017). A cross-cultural comparison of music education experiences and ambitions in two Spanish and English primary schools. *International Journal of Music Education*, *35*(3), 381–390.

Hargreaves, D. J., Hargreaves, J. J., & North, A. C. (2011). Imagination and creativity in music listening. In *Musical Imaginations: Multidisciplinary perspectives on creativity, performance and perception* (pp. 156–172).

Harry, A. G., & Salvador, K. (2021). Fostering Critical Reflection and Productive Dialogue in Music Teacher Education. *Journal of Music Teacher Education*, *31*(1), 9–22.

Hasnain, S., & Halder, S. (2023). Exploring the impediments for successful implementation of the task-based language teaching approach: A review of studies on teachers' perceptions. *The Language Learning Journal*, *51*(2), 208–222.

He, S., & Qi, C. (2022). The perceived impact of PBL program learning on shifting prospective teachers' beliefs: A case study in China. *Eurasia Journal of Mathematics, Science and Technology Education*, *18*(12), em2195.

Hennessy, S. (2000). Overcoming the red-feeling: The development of confidence to teach music in primary school amongst student teachers. *British Journal of Music Education*, *17*(2), 183–196.

Ho, W.-C. (2012). Music education in Shanghai from 1895 to 1945: The cultural politics of singing. *Music Education Research*, *14*(2), 187–207.

Ho, W.-C. (2018). The Confucian Value of Harmony in Music Education in Relation to Songs. In *Culture, Music Education, and the Chinese Dream in Mainland China* (Vol. 7). Springer Singapore.

Ho, W.-C., & Law, W.-W. (2012). The Cultural Politics of Introducing Popular Music into China's Music Education. *Popular Music and Society*, *35*(3), 399–425.

Holden, H., & Button, S. (2006). The teaching of music in the primary school by the non-music specialist. *British Journal of Music Education*, *23*(1), 23–38.

Holton, J. A. (2007). The Coding Process and Its Challenges. In A. Bryant & K. Charmaz, *The SAGE Handbook of Grounded Theory* (pp. 265–289). SAGE Publications Ltd.

Hongying, S. (2007). Literature Review of Teacher Job Satisfaction. *Chinese Education & Society*, *40*(5), 11–16.

Howe, E. (2022). Music unites us: A teacher educator and teacher candidate comparative ethnographic narrative inquiry into the benefits of music education. *Journal of Education for Teaching*, *48*(1), 115–128.

Howells, K. (2018). *The future of education and skills: Education 2030: the future we want* (pp. 2–21) [Working paper]. OECD. http://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf

Huang, H., & Thibodeaux, T. (2017). What We Learned About Music In China. *The American Music Teacher*, *66*(6), 14–19.

Huang, J., & Xu, S. (2015). A Narrative Inquiry into Chinese Teacher Induction in West China through Cross-Cultural Teacher Development. *Frontiers of Education in China*, *10*(3), 470–492.

Huang, L., Doorman, M., & van Joolingen, W. (2021). Inquiry-Based Learning Practices in Lower-Secondary Mathematics Education Reported by Students from China and the Netherlands. *International Journal of Science and Mathematics Education*, *19*(7), 1505–1521.

Jaffurs, S. (2004). Developing musicality Formal and Informal Practices. *Action, Criticism, and Theory for Music Education*, *3*(3), 1–17.

Jellison, J. A. (2004). *It's About Time*. *52*, 191–205.

Jiaxing Xie & Bo Wah Leung. (2011). Students' motivation to study music: The mainland China context. *Research Studies in Music Education*, *33*(1), 59–72.

Jin, Y., & Li, L. (2011). A Postmodern Perspective on Current Curriculum Reform in China. *Chinese Education & Society*, *44*(4), 25–43.

Johansen, G. (2007). Educational quality in music teacher education: Components of a foundation for research. *Music Education Research*, *9*(3), 435–448.

Johnny, S. (2021). *The coding manual for qualitative researchers* (Fourth edition..). SAGE.

Johnson, D. (2013). Creating Meaningful Music Listening Experiences with Active Music Making. *Musicworks*, *18*, 49–56.

Johnson, D. C. (2011). The Effect of Critical Thinking Instruction on Verbal Descriptions of Music. *Journal of Research in Music Education*, *59*(3), 257–272.

Johnson, D. C., Marie Stanley, A., Ellie Falter, H., Greene, J. L. R., Moore, H. L., Paparone, S. A., Smith, J. C., & Snell II, A. H. (2019). Reflections on music teacher professional development: Teacher-generated policies and practices. *Arts Education Policy Review*, *120*(4), 208–220.

Joiner, S., & Edwards, J. (2008). *Novice Teachers: Where Are They Going and Why Don't They Stay? 1*(1), 36–43.

Jones, B. D., & Parkes, K. A. (2010). The Motivation of Undergraduate Music Students: The Impact of Identification and Talent Beliefs on Choosing a Career in Music Education. *Journal of Music Teacher Education*, *19*(2), 41–56.

Jones, P. M. (2009). Hard and Soft Policies in Music Education: Building the Capacity of Teachers to Understand, Study, and Influence Them. *Arts Education Policy Review*, *110*(4), 27–32.

Kamath, A., & White, P. J. (2023). *Tensions in teaching senior biology using inquiry based learning*. *69*(1), 29–40.

Kanca, I. N., Ginaya, G., & Sri Astuti, N. N. (2021). Collaborative network learning (CNL) on students' online learning. *International Journal of Linguistics, Literature and Culture*, *7*(5), 362–370.

KaoShi JieShao. (2020). Instruction for the Examnation. http://ntce.neea.edu.cn/html1/folder/1507/1181-1.htm

Keane, E. (2015). Considering the practical implementation of constructivist grounded theory in a study of widening participation in Irish higher education. *International Journal of Social Research Methodology*, *18*(4), 415–431.

Keiler, L. S., Diotti, R., Hudon, K., & Ransom, J. C. (2020). The role of feedback in teacher mentoring: How coaches, peers, and students affect teacher change. *Mentoring & Tutoring: Partnership in Learning*, *28*(2), 126–155.

Kellett, M. (2000). Raising musical esteem in the primary classroom: An exploratory study of young children's listening skills. *British Journal of Music Education*, *17*(2), 157–181.

Kemmis, S., Heikkinen, H. L. T., Fransson, G., Aspfors, J., & Edwards-Groves, C. (2014). Mentoring of new teachers as a contested practice: Supervision, support and collaborative self-development. *Teaching and Teacher Education*, *43*, 154–164.

Kenny, A. (2017). Beginning a journey with music education: Voices from pre-service primary teachers. *Music Education Research*, *19*(2), 111–122.

Kenny, A., Finneran, M., & Mitchell, E. (2015). Becoming an educator in and through the arts: Forming and informing emerging teachers' professional identity. *Teaching and Teacher Education*, *49*, 159–167.

Kenny, A., & Morrissey, D. (2021). Negotiating teacher-artist identities: "Disturbance" through partnership. *Arts Education Policy Review*, *122*(2), 93–100.

Kereluik, K., Mishra, P., Fahnoe, C., & Terry, L. (2013). What Knowledge Is of Most Worth: Teacher Knowledge for 21 st Century Learning. *Journal of Digital Learning in Teacher Education*, *29*(4), 127–140.

Kertz-Welzel, A. (2008). Mendelssohn's Last Wish or Case Studies about Aesthetics in Music Education. *Philosophy of Music Education Review*, *16*(2), 193–207.

Khalass, N., Zarnomitrou, G., Haque, K. I., Salmi, S., Maulini, S., Linkermann, T., Salamon, N. Z., Timothy Balint, J., & Bidarra, R. (2019). Musicality: A Game to Improve Musical Perception. In M. Gentile, M. Allegra, & H. Söbke (Eds.), *Games and Learning Alliance* (Vol. 11385, pp. 39–48). Springer International Publishing.

Kim, J.-E. (2022). A case study: 30 elementary music education majors' perceptions of preparedness, interest, and comfort teaching choir before and after taking a choral methods course. *International Journal of Music Education*, *40*(3), 460–470.

Kirkpatrick, R., & Zang, Y. (2011). The Negative Influences of Exam-Oriented Education on Chinese High School Students: Backwash from Classroom to Child. *Language Testing in Asia*, *1*(3), 36.

Kivunja, C. (2014). Do You Want Your Students to Be Job-Ready with 21st Century Skills? Change Pedagogies: A Pedagogical Paradigm Shift from Vygotskyian Social

Constructivism to Critical Thinking, Problem Solving and Siemens' Digital Connectivism. *International Journal of Higher Education*, *3*(3), 81–91.

Klein, P. D. (1997). Multiplying the Problems of Intelligence by Eight: A Critique of Gardner's Theory. *Canadian Journal of Education / Revue Canadienne de l'éducation*, *22*(4), 377–394.

Kokkidou, M. (2013). Critical Thinking and School Music Education: Literature Review, Research Findings, and Perspectives. *Journal for Learning through the Arts: A Research Journal on Arts Integration in Schools and Communities*, *9*(1).

Kolb, S. (2012). Grounded theory and the constant comparative method: Valid research strategies for educators. *Journal of Emerging Trends in Educational Research and Policy Studies*, *3*, 83–86.

Korthagen, F. A. J. (2004). In search of the essence of a good teacher: Towards a more holistic approach in teacher education. *Teaching and Teacher Education*, *20*(1), 77–97.

Korthagen, F. A. J. (2010). How teacher education can make a difference. *Journal of Education for Teaching*, *36*(4), 407–423.

Kos, R. P. (2018). Becoming music teachers: Preservice music teachers' early beliefs about music teaching and learning. *Music Education Research*, *20*(5), 560–572.

Kuebel, C. (2019). Health and Wellness for In-Service and Future Music Teachers: Developing a Self-Care Plan. *Music Educators Journal*, *105*(4), 52–58.

Kyaw, K. K., Khin, H., & Sett, C. C. (2021). *AN ANALYTICAL STUDY ON PEDAGOGICAL KNOWLEDGE AND PRACTICES OF TEACHER EDUCATORS IN EDUCATION COLLEGES*. *XIX*(9A), 57–70.

Lai, M. (2010). Teacher development under curriculum reform: A case study of a secondary school in mainland China. *International Review of Education*, *56*(5), 613–631.

Lai, Y.-C. (2015). *Practitioners' strategies for enhancing early childhood music education in Taiwan*. 284.

Lamont, A., Daubney, A., & Spruce, G. (2012). Singing in primary schools: Case studies of good practice in whole class vocal tuition. *British Journal of Music Education*, *29*(2), 251–268.

Laprise, R. (2018). What's the Problem? Exploring the Potential of Problem-Based Learning in an Ensemble Setting. *Music Educators Journal*, *104*(4), 48–53.

Lawson, F. R. S. (2020). Hidden musicality in Chinese Xiangsheng: A response to the call for interdisciplinary research in studying speech and song. *Humanities and Social Sciences Communications*, *7*(1), 1–9.

Lee, D. H. L. (2023). Identity grafting: Pedagogical identities underpinning teaching practices across five Chinese cities. *Professional Development in Education*, 1–22.

Lee, J. C.-K., Huang, Y. X.-H., Law, E. H.-F., & Wang, M.-H. (2013). Professional identities and emotions of teachers in the context of curriculum reform: A Chinese perspective. *Asia-Pacific Journal of Teacher Education*, *41*(3), 271–287.

Legette, R. M. (2013). Perceptions of Early-career School Music Teachers Regarding Their Preservice Preparation. *Update: Applications of Research in Music Education*, *32*(1), 12–17.

Lempert, L. B. (2007). Asking Questions of the Data: Memo Writing in the Grounded Theory Tradition. In A. Bryant & K. Charmaz, *The SAGE Handbook of Grounded Theory* (pp. 245–264). SAGE Publications Ltd.

Leung, B. W., & Xie, J. (2011). Students' motivation to study music: The mainland China context. *Research Studies in Music Education*, *33*(1), 59–72.

Levitin, D. J. (2012). What Does It Mean to Be Musical? *Neuron*, *73*(4), 633–637.

Lewis, M., Weight, E., & Hendricks, K. (2022). Teaching methods that foster self-efficacy belief: Perceptions of collegiate musicians from the United States. *Psychology of Music*, *50*(3), 878–894.

Li, J., Shi, Z., & Xue, E. (2020). The problems, needs and strategies of rural teacher development at deep poverty areas in China: Rural schooling stakeholder perspectives. *International Journal of Educational Research*, *99*, 101496.

Li, Q., & Ni, Y.-J. (2012). Debates on the Basic Education Curriculum Reform and Teachers' Challenges in China: The Case of Mathematics. *Chinese Education & Society*, *45*(4), 9–21.

Li, Y. (2023). Interactive methods for improving musical literacy among students with preschool education Majors at Teacher Training Universities: The effectiveness of the Kodály method. *Education and Information Technologies*, *28*, 12807–12821.

Liang, S. (2011). Open Class–an Important Component of Teachers' in-Service Training in China. *Education*, *1*(1), 1–5.

Lin, J., & Zhang, Y. (2006). Educational Expansion and Shortages in Secondary Schools in China: The bottle neck syndrome. *Journal of Contemporary China*, *15*(47), 255–274.

Lipman, M. (2003). *Thinking in education* (2nd ed..). Cambridge University Press.

Liu, C., Bano, M., Zowghi, D., & Kearney, M. (2021). Analysing user reviews of inquiry-based learning apps in science education. *Computers & Education*, *164*, 104119.

Liu M., & An G. (2017). Six Arts as Ancient Curriculum of China. *Science Innovation*, *5*(6), 398–402.

Liu, S., & Onwuegbuzie, A. J. (2014). Teachers' motivation for entering the teaching profession and their job satisfaction: A cross-cultural comparison of China and other countries. *Learning Environments Research*, *17*(1), 75–94.

Liyanage, I., & Walker, T. (2023). English teachers' identity-agency and curriculum reform policies in the People's Republic of China (PRC). *Educational Research for Policy and Practice*, *22*, 427–441

Long, S. D. (2015). *The Arts In and Out of School: Educational Policy, Provision and Practice in Ireland Today*. *8*(2), 267–286.

Loughran, J. (2014). Professionally Developing as a Teacher Educator. *Journal of Teacher Education*, *65*(4), 271–283.

Lu, C., & So, W. W. M. (2023). Translanguaging in scientific practices: A study of high school teachers in English Medium Instruction inquiry-based science classrooms. *International Journal of Science Education*, *45*(10), 850–871.

Lunenberg, M., Korthagen, F., & Swennen, A. (2007). The teacher educator as a role model. *Teaching and Teacher Education*, *23*(5), 586–601.

Ma, Y., Wang, T., Wang, J., Chen, A. L. R., & Yan, X. (2021). A comparative study on scientific inquiry activities of Chinese science textbooks in high schools. *Research in Science Education*, *51*(S1), 407–427.

Ma, Y., Yin, H., Tang, L., & Liu, L. (2009). Teacher receptivity to system-wide curriculum reform in the initiation stage: A Chinese perspective. *Asia Pacific Education Review*, *10*(3), 423–432.

MacGlone, U., Wilson, G., & MacDonald, R. (2022). "I don't know how musically creative they should be at that age": A qualitative study of parents' and teachers' beliefs about young children's creative and musical capacities. *Psychology of Music*, *50*(5), 1586–1600.

Mäkinen, M., Eronen, L., & Juvonen, A. (2020). *Does curriculum change have impact in students? A comparative research of teacher students' willingness to teach music. 10*, 21–58.

Mansfield, C., Beltman, S., & Price, A. (2014). 'I'm coming back again!' The resilience process of early career teachers. *Teachers and Teaching*, *20*(5), 547–567.

Manuell, P., & Graham, W. (2017). *Grounded Theory: An Action Research Perspective with Models to Help Early Career Researchers*. *8*(1), 74–90.

Marcus, G. F. (2012). Musicality: Instinct or Acquired Skill? *Topics in Cognitive Science*, *4*(4), 498–512.

Marsh, K. (2012). Commentary: Music Learning and Teaching During Childhood: Ages 5–12. In G. E. McPherson & G. F. Welch (Eds.), *The Oxford Handbook of Music Education, Volume 1* (pp. 317–321). Oxford University Press.

Marshall, J. C., Smart, J. B., & Alston, D. M. (2017). Inquiry-Based Instruction: A Possible Solution to Improving Student Learning of Both Science Concepts and Scientific Practices. *International Journal of Science and Mathematics Education*, *15*(5), 777–796.

Martin, F. (2008). Knowledge Bases for Effective Teaching: Beginning Teachers' Development As Teachers of Primary Geography. *International Research in Geographical and Environmental Education*, *17*(1), 13–39.

Mateos-Moreno, D. (2022). Why (not) be a music teacher? Exploring pre-service music teachers' sources of concern regarding their future profession. *International Journal of Music Education*, *40*(4), 489–501.

McArthur, J. R. (2002). The Why, What, and How of Teaching Children Social Skills. *The Social Studies*, *93*(4), 183–185.

McCambridge, J., Witton, J., & Elbourne, D. R. (2014). Systematic review of the Hawthorne effect: New concepts are needed to study research participation effects. *Journal of Clinical Epidemiology*, *67*(3), 267–277.

McCann, T. M., & Johannessen, L. R. (2004). Why Do New Teachers Cry? *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *77*(4), 138–145.

McCarthy, M., & Goble, J. S. (2002). Music Education Philosophy: Changing Times. *Music Educators Journal*, *89*(1), 19–26.

Meng, H., & Goopy, J. (2023). Early-career music teachers' perspectives of their initial teacher education program in China. *Research Studies in Music Education*, 1–17.

Merryfield, M. M. (2015). Why aren't teachers being prepared to teach for diversity, equity, and global interconnectedness? A study of lived experiences in the making of multicultural and global educators. *Teaching and Teacher Education*, *16*(4), 429–443.

Miendlarzewska, E. A., & Trost, W. J. (2014). How musical training affects cognitive development: Rhythm, reward and other modulating variables. *Frontiers in Neuroscience*, *7*, 1–18.

Mills, J. (2007). *Conceptions, functions and actions: Teaching music musically*. 8.

Mills, J., Bonner, A., & Francis, K. (2006). Adopting a constructivist approach to grounded theory: Implications for research design. *International Journal of Nursing Practice*, *12*(1), 8–13.

Ministry of Education. (2022). *YiWu JiaoYu KeCheng FangAn (2022 version.)*. http://www.moe.gov.cn/srcsite/A26/s8001/202204/t20220420_619921.html

Ministry of Education,People's Republic of China. (2011). *Yiwu jiaoyu yinyue kecheng biaozhun (2011 Nian ban)[Music Curriculum Standards of full-time compulaory scholing(2011 dition)]*. Beijing,China:Beijing Normal University Press.

Moore, G. (2014). Mind the gap: Privileging epistemic access to knowledge in the transition from Leaving Certificate music to higher education. *Irish Educational Studies*, *33*(3), 249–268.

Moore, G. (2019). Musical futures in Ireland: Findings from a pilot study in primary and secondary schools. *Music Education Research*, *21*(3), 243–256.

Morse, J. M. (2007). Sampling in Grounded Theory. In A. Bryant & K. Charmaz, *The SAGE Handbook of Grounded Theory* (pp. 229–244). SAGE Publications Ltd.

Murphy, R. (2017). Enhancing Creativity through Listening. In *Teaching Music Creatively* (2nd ed.). Routledge.

Music in schools: Student progress. (2012). https://www.gov.uk/government/publications/music-in-schools

Nes, F. van, Abma, T., Jonsson, H., & Deeg, D. (2010). Language differences in qualitative research: Is meaning lost in translation? *European Journal of Ageing*, *7*(4), 313–316.

Ni, Y., Li, Q., Li, X., & Zhang, Z.-H. (2011). Influence of curriculum reform: An analysis of student mathematics achievement in Mainland China. *International Journal of Educational Research*, *50*(2), 100–116.

North, A. C., Sheridan, L. P., & Areni, C. S. (2016). Music Congruity Effects on Product Memory, Perception, and Choice. *Journal of Retailing*, *92*(1), 83–95.

North America International School, Shanghai, China, & Mamedov, N. (2022). Student-Led Music Curriculum: Achieving Self-Regulated Learning through Project-Based and Inquiry-Based Pedagogies. *International Journal of Learning and Teaching*, *8*(2), 99–107.

Nuangchalerm, P. (2014). Inquiry-based Learning in China: Lesson learned for School Science Practices. *Asian Social Science*, *10*(13), 64–71.

O'Connor, J. (2019). Document analysis. In *Practical Research Methods in Education* (pp. 67–75). Routledge.

O'flynn, J. (2005). Re-appraising ideas of musicality in intercultural contexts of music education. *International Journal of Music Education*, *23*(3), 191–203.

O'Flynn, J., Moore, G., Burgess, F., & Moore, J. (2022). Comparative music education in partnership: Examining policy and provision of music in initial teacher education in Ireland and Northern Ireland. *Music Education Research*, *24*(3), 364–376.

Ong, E. T., Luo, X., Yuan, J., & Yingprayoon, J. (2020). The Effectiveness of a Professional Development Program on the Use of STEM-Based 5E Inquiry Learning Model for Science Teachers in China. *Science Education International*, *31*(2), 179–184.

Onsrud, S. V., Fredriksen, B., Rinholm, H., & Lindgren, M. (2022). The multiplicity of preservice music teachers' positioning in a participatory action research project. *Research Studies in Music Education*, *45*(2), 329–343.

Outline of Basic Education Curriculum Reform (Trial). (2001). http://www.moe.gov.cn/srcsite/A26/jcj_kcjcgh/200106/t20010608_167343.html

Özbey, S., & KöyceğiZ, M. (2020). A Study on the Effect of the Social Skill Education on the Academic Self Respect and Problem Solving Skills of the Pre-School Children. *International E-Journal of Educational Studies*, *4*(8), 176–189.

Paine, L. W., & Fang, Y. (2006). Reform as hybrid model of teaching and teacher development in China. *International Journal of Educational Research*, *45*(4–5), 279–289.

Pajares, M. F. (1992). Teachers' Beliefs and Educational Research: Cleaning up a Messy Construct. *Review of Educational Research*, *62*(3), 307–332.

Pang, Y. (2019). Social Justice and School Music Education in China. *BU Journal of Graduate Studies in Education*, *11*(2), 41–46.

Patton, K., & Parker, M. (2017). Teacher education communities of practice: More than a culture of collaboration. *Teaching and Teacher Education*, *67*, 351–360.

Pauleen, D., & Yoong, P. (2015). Studying Human-Centered IT Innovation Using a Grounded Action Learning Approach. *The Qualitative Report*, *9*(1), 137–160.

Pellegrino, K. (2019). *Music Teacher Identity Development* (pp. 268–293).

Pellegrino, K., Kastner, J. D., Reese, J., & Russell, H. A. (2018). Examining the long-term impact of participating in a professional development community of music teacher educators in the USA: An anchor through turbulent transitions. *International Journal of Music Education*, *36*(2), 145–159.

Pflederer, M. (1963). The Nature of Musicality. *Music Educators Journal*, *49*(6), 49–52.

Pham Thi Hong, T. (2011). Issues to consider when implementing student-centred learning practices at Asian higher education institutions. *Journal of Higher Education Policy and Management*, *33*(5), 519–528.

Philosophy for Children China. (2020). *P4C China*. http://www.p4c.org.cn/en/Resources.aspx

Pillay, N. (2014a). A survey of school timetabling research. *Annals of Operations Research*, *218*(1), 261–293.

Pillay, N. (2014b). *An Overview of School Timetabling Research*. 321–335.

Pilten, P., Mentiş Taş, A., & Divrik, R. (2021). Effect of Inquiry-Based Learning Method Supported by Metacognitive Strategies on Fourth-Grade Students Problem-Solving and Problem-Posing Skills: A Mixed Methods Research. *Lnternational Electronic Journal of Elementary Education*, *13*(2), 287–308.

Policy at the Intersection of Curriculum and Music Teacher Agency, P. (2022). Musical backgrounds and musical identity development in pre-service music education and primary education students: A narrative study. *Music Education Research*, *24*(1), 111–123.

Powell, S. R. (2019). Field Experience. In C. M. Conway, K. Pellegrino, A. M. Stanley, & C. West (Eds.), *The Oxford Handbook of Preservice Music Teacher Education in the United States* (pp. 482–508). Oxford University Press.

Powell, S. R., & Parker, E. C. (2017). Preservice Music Teachers' Descriptions of Successful and Unsuccessful Teachers. *Journal of Music Teacher Education*, *26*(3), 27–37.

Priede, C., Jokinen, A., Ruuskanen, E., & Farrall, S. (2014). Which probes are most useful when undertaking cognitive interviews? *International Journal of Social Research Methodology*, *17*(5), 559–568.

Qin, F., Hu, H., Loyalka, P., Dill, S.-E., & Rozelle, S. (2022). Stuck in the middle school rut: Can anything improve academic achievement in rural Chinese middle schools? *Journal of Development Effectiveness*, *14*(4), 306–339.

Reimer, B. (1989a). Music Education as Aesthetic Education: Toward the Future. *Music Educators Journal*, *75*(7), 26–32.

Reimer, B. (1989b). Music Education in China: An Overview and Some Issues. *The Journal of Aesthetic Education*, *23*(1), 65–83.

Ribaeus, K., & Löfdahl Hultman, A. (2022). Teacher educators' perspectives on shaping a preschool teacher education while dealing with internal and external demands. *Journal of Praxis in Higher Education*, *4*(1), 79–99.

Riley, P. E. (2013). Curriculum Reform in Rural China: An Exploratory Case Study. *Research and Issues in Music Education*, *11*(1).

Robert, C. (2021). Inference and interpretation in research. In C. Robert, H. Larry V, A. Laura Day, & W. Michael (Eds.), *Research methods & methodologies in education* (Third edition..). SAGE.

Roholt, T. C. (2010). 'Musical' Musical Nuance. *The Journal of Aesthetics and Art Criticism*, *68*(1), 1–10.

Rosa-Napal, F. C., Muñoz-Carril, P.-C., González-Sanmamed, M., & Romero Tabeayo, I. (2021). Musical expression in the training of future primary education teachers in Galicia. *International Journal of Music Education*, *39*(1), 50–65.

Rotherham, A. J., & Willingham, D. T. (2010). '21st-Century' Skills: Not New, but a Worthy Challenge. *American Educator*, *34*(1), 17–20.

Rowe, E. E., & Skourdoumbis, A. (2019). Calling for 'urgent national action to improve the quality of initial teacher education': The reification of evidence and accountability in reform agendas. *Journal of Education Policy*, *34*(1), 44–60.

Rozsahegyi, T. (2019). Observations. In *Practical Research Methods in Education*. Routledge.

Russell-Bowie, D. (2009). What me? Teach music to my primary class? Challenges to teaching music in primary schools in five countries. *Music Education Research*, *11*(1), 23–36.

Ryan, J., Kang, C., Mitchell, I., & Erickson, G. (2009). China's basic education reform: An account of an international collaborative research and development project. *Asia Pacific Journal of Education*, *29*(4), 427–441.

Sang, G., Liang, J.-C., Chai, C. S., Dong, Y., & Tsai, C.-C. (2018). Teachers' actual and preferred perceptions of twenty-first century learning competencies: A Chinese perspective. *Asia Pacific Education Review*, *19*(3), 307–317.

Sargent, T., & Hannum, E. (2005). Keeping Teachers Happy: Job Satisfaction among Primary School Teachers in Rural Northwest China. *Comparative Education Review*, *49*(2), 173–204.

Sbaraini, A., Carter, S. M., Evans, R., & Blinkhorn, A. (2011). How to do a grounded theory study: A worked example of a study of dental practices. *BMC Medical Research Methodology*, *11*(1), 128–128.

Schellenberg, E. G. (2005). *Music and Cognitive Abilities*. *14*(6), 4.

Schellenberg, E. G., & Moreno, S. (2010). Music lessons, pitch processing, and g. *Psychology of Music*, *38*(2), 209–221.

Schweisfurth, M. (2011). Learner-centred education in developing country contexts: From solution to problem? *International Journal of Educational Development*, *31*(5), 425–432.

Scott, S. (2011). Contemplating a Constructivist Stance for Active Learning within Music Education. *Arts Education Policy Review*, *112*(4), 191–198.

Scott, S. J. (2008). Exploring an Inquiry-Based Stance for Planning and Instruction in General Music Education. *General Music Today*, *21*(3), 13–17.

Seale, J. (2009). Doing student voice work in higher education: An exploration of the value of participatory methods. *British Educational Research Journal*, *36*(6), 995–1015.

Şensoy, A., & Güneş, M. H. (2023). *Guided Inquiry-Based Learning Practices*. *12*(3), 471–487.

Sepp, A., Kangas, J., Hietanen, L., & Ruismäki, H. (2023). Sources influencing primary school student teachers' self-efficacy beliefs in their music studies. *Music Education Research*, *25*(1), 36–48.

Sepp, A., Ruokonen, I., & Ruismäki, H. (2015). Musical practices and methods in music lessons: A comparative study of Estonian and Finnish general music education. *Music Education Research*, *17*(3), 340–358.

Shim, S. H. (2008). A philosophical investigation of the role of teachers: A synthesis of Plato, Confucius, Buber, and Freire. *Teaching and Teacher Education*, *24*(3), 515–535.

Shin, J. (2019). Becoming a music teacher: Korean music student teachers' perceptions of their student teaching experience. *Music Education Research*, *21*(5), 549–559.

Shively, J. (2015). Constructivism in Music Education. *Arts Education Policy Review*, *116*(3), 128–136. https://doi.org/10.1080/10632913.2015.1011815

Shroat-Lewis, R. A., & Hage, M. (2021). Engaging Students at All Academic Levels in an Inquiry-Based Paleoecologic Learning Activity—Even When You Don't Have the Rocks. *RESEARCH AND TEACHING*, 78–87.

Shuler, S. C. (2011). Music Education for Life: The Three Artistic Processes—Paths to Lifelong 21st-Century Skills through Music. *Music Educators Journal*, *97*(4), 9–13.

Silverman, D. J. E., Marissa. (2019). Change in Music Teacher Education A Philosophical View. In C. M. Conway, K. Pellegrino, A. M. Stanley, & C. West (Eds.), *The Oxford Handbook of Preservice Music Teacher Education in the United States* (1st ed.). Oxford University Press.

Sims, W. L. (1986). The Effect of High Versus Low Teacher Affect and Passive Versus Active Student Activity During Music Listening on Preschool Children's Attention, Piece Preference, Time Spent Listening, and Piece Recognition. *Journal of Research in Music Education*, *34*(3), 173–191.

Sims, W. L. (2005). *Effects of Free versus Directed Listening on Duration of Individual Music Listening by Prekindergarten Children*. 78–86.

Sims, W. L., & Nolker, D. B. (2002). Individual Differences in Music Listening Responses of Kindergarten Children. *Journal of Research in Music Education*, *50*(4), 292–300.

Siw Graabræk Nielsen & Inger-Anne Westby. (2012). The professional development of music teachers. Understanding the Music Teacher as a Professional and as a Competency Nomad. In *Educating music teachers in the new millennium: Multiculturalism, professionalism and music teacher education in the contemporary society: A report from a research and development project* (pp. 141–154).

Sláviková, Z., & Králová, E. (2019). Musiceducation in The Context of New Challenges for Philosophy of Education. *Review of Artistic Education*, *17*(1), 8–21.

Smialek, T., & Boburka, R. R. (2006). *The Effect of Cooperative Listening Exercises on the Critical Listening Skills of College Music-Appreciation Students*. 57–72.

Spires, H. A., Medlock Paul, C., Himes, M., & Yuan, C. (2018). Cross-Cultural Collaborative Inquiry: A Collective Case Study with Students from China and the US. *International Journal of Educational Research*, *91*, 28–40.

Spruce, G., Marie Stanley, A., & Li, M. (2021). Music teacher professional agency as challenge to music education policy. *Arts Education Policy Review*, *122*(1), 65–74.

Stallions, M., Murrill, L., & Earp, L. (2012). Don't Quit Now!: Crisis, Reflection, Growth, and Renewal for Early Career Teachers. *Kappa Delta Pi Record*, *48*(3), 123–128.

Stavrou, N. E., & O'Connell, L. (2022). Music teachers at the crossroads: Navigating the curriculum as plan and lived. *Music Education Research*, *24*(2), 166–179.

Sun, Y., Yan, Z., & Wu, B. (2022). How differently designed guidance influences simulation-based inquiry learning in science education: A systematic review. *Journal of Computer Assisted Learning*, *38*(4), 960–976.

Sun, Z., & Leung, B. W. (2014). A survey of rural primary school music education in Northeastern China. *International Journal of Music Education*, *32*(4), 437–461.

Suomi, H., Hietanen, L., & Ruismäki, H. (2022). Student teachers' views of their own musical skills to teach the National Core Curriculum in Finland. *Music Education Research*, *24*(3), 327–339.

Svalina, V., & Sukop, I. (2021). Listening to music as a teaching area in Croatian primary schools: The teacher's perspective. *Music Education Research*, *23*(3), 321–334.

Swaminathan, S., & Schellenberg, E. G. (2016). Music Training. In T. Strobach & J. Karbach (Eds.), *Cognitive Training* (pp. 137–144). Springer International Publishing.

Swanwick, K. (1988). *Music, mind, and education*. Routledge.

Swanwick, K. (1994). *Musical knowledge: Intuition, analysis, and music education*. Routledge.

Swanwick, K. (1996). *A basis for music education*. Routledge.

Swanwick, K. (2011a). Principles of music education. In *Teaching Music Musically (Classic Edition)*. Routledge.

Swanwick, K. (2011b). The why and how of musical assessment. In *Teaching Music Musically (Classic Edition)*. Routledge.

Swanwick, K. (2012). Understanding Music as the Philosophical Focus of Music Education. In W. Bowman & A. L. Frega (Eds.), *The Oxford Handbook of Philosophy in Music Education* (p. 0). Oxford University Press.

Tan, C. (2017). Constructivism and pedagogical reform in China: Issues and challenges. *Globalisation, Societies and Education*, *15*(2), 238–247.

Tang, Y. (2020). It's not only Work and Pay: The Moderation Role of Teachers' Professional Identity on their Job Satisfaction in Rural China. *Applied Research in Quality of Life*, *15*(4), 971–990.

Teig, N., Scherer, R., & Nilsen, T. (2019). I Know I Can, but Do I Have the Time? The Role of Teachers' Self-Efficacy and Perceived Time Constraints in Implementing Cognitive-Activation Strategies in Science. *Frontiers in Psychology*, *10*, 1–17.

Thompson, L. K. (2007). *Considering Beliefs in Learning to Teach Music*.

Tian, J., Ren, C., & Lei, Y. (2022). Undergraduate Research and Inquiry-Based Learning in Geographical Information Science: A Case Study from China. *Scholarship and Practice of Undergraduate Research*, *5*(4), 16–23.

Todd, J. R., & Mishra, J. (2013). Making Listening Instruction Meaningful: A Literature Review. *Update: Applications of Research in Music Education*, *31*(2), 4–10.

Toropova, A. V., Gadzhieva, Z. S., & Malukhova, F. V. (2016). Musicality: A Phenomenon of Nature, Culture, and Identity. *MATHEMATICS EDUCATION*, 1373–1382.

Trehub, S. E., Becker, J., & Morley, I. (2015). Cross-cultural perspectives on music and musicality. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *370*(1664), 1–9.

Turner-Bisset, R. (1999). The Knowledge Bases of the Expert Teacher. *British Educational Research Journal*, *25*(1), 39–55.

Ulker, V., & Ali, H. (2023). Inquiry-Based Learning Implementation: Students' Perception and Preference. *International Journal of Social Sciences & Educational Studies*, *10*.

Váradi, J. (2022). A Review of the Literature on the Relationship of Music Education to the Development of Socio-Emotional Learning. *SAGE Open*, *12*(1), 1–11.

Vidulin, S., Žauhar, V., & Plavšić, M. (2022). Experiences during listening to music in school. *Music Education Research*, *24*(4), 512–529.

Vitale, J. L. (2011). *Music Makes You Smarter: A New Paradigm for Music Education? Perceptions and Perspectives from Four Groups of Elementary Education Stakeholders*. *34*(3), 317–334.

Walker-Gleaves, C. (2023). *EDU3006: Responding to SEN* [Seminar Presentation].

Wallerstedt, C. (2013). 'Here comes the sausage': An empirical study of children's verbal communication during a collaborative music-making activity. *Music Education Research*, *15*(4), 421–434.

Wang, D. (2011). The dilemma of time: Student-centered teaching in the rural classroom in China. *Teaching and Teacher Education*, *27*(1), 157–164.

Wang, J., & Li, Y. (2009). Research on the teaching quality of compulsory education in China's West rural schools. *Frontiers of Education in China*, *4*(1), 66–93.

Wang, Q., & Luo, J. (2021). Chinese folk music and its effect on human mathematical thinking skills. *Interdisciplinary Science Reviews*, 1–10.

Wang, X., & Guo, L. (2021). How to Promote University Students to Innovative Use Renewable Energy? An Inquiry-Based Learning Course Model. *Sustainability*, *13*(3), 1–19.

Wang, Y., Lavonen, J., & Tirri, K. (2018). Aims for Learning 21st Century Competencies in National Primary Science Curricula in China and Finland. *EURASIA Journal of Mathematics, Science and Technology Education*, *14*(6), 2081–2095.

Wang, Y., Wang, A., & Wu, B. (Eds.). (2012). *Interpretation of compulsory education music curriculum standards [YIWU JIAOYU YINYUE KECHENG BIAOZHUN 2011NIANBAN JIEDU]* (1st ed.). BeiJing Normal Univeristy Publishing Group.

Wayne, B. (2002). Educating Musically. *The New Handbook of Research on Music Teaching and Learning: A Project of the Music Educators National Conference*, 63–84.

Webster, P. R. (1990). Creativity as Creative Thinking. *Music Educators Journal*, *76*(9), 22–28.

Webster, P. R. (2002). *Creative Thinking in Music: Advancing a Model*. 18.

Webster, P. R. (2003). Conference Keynotes: Asking music students to reflect on their creative work: encouraging the revision process. *Music Education Research*, *5*(3), 243–249.

Webster, P. R. (2011). Construction of Music Learning. In R. Colwell & P. R. Webster (Eds.), *MENC Handbook of Research on Music Learning* (pp. 35–83). Oxford University Press.

Webster, P. R. (2016). Creative Thinking in Music, Twenty-Five Years On. *Music Educators Journal*, *102*(3), 26–32.

Webster, R. (2015). The classroom experiences of pupils with special educational needs in mainstream primary schools-1976 to 2012. What do data from systematic observation studies reveal about pupils' educational experiences over time? *British Educational Research Journal*, *41*(6), 992–1009.

Welch, G., & Henley, J. (2014). Addressing the challenges of teaching music by generalist primary school teachers. *Revista Da Associação Brasileira de Educação Musical*, *22*, 12–38.

Wiggins, J. (1999). Teacher Control and Creativity: Carefully designed compositional experiences can foster students' creative processes and augment teachers' assessment efforts. *Music Educators Journal*, *85*(5), 30–44.

Wills, R. (2011). The magic of music: A study into the promotion of children's well-being through singing. *International Journal of Children's Spirituality*, *16*(1), 37–46.

Winwood, J. (2019). Using interviews. In *Practical Research Methods in Education*. Routledge.

Wong, J., Bautista, A., Ho, Y. L., & Kong, S. H. (2023). Preschool teachers' music-specific professional development preferences: Does teaching experience matter? *Research Studies in Music Education*, 1–18.

Woody, R. H. (2004). Reality-Based Music Listening in the Classroom: Considering Students' Natural Responses to Music. *General Music Today*, *17*(2), 32–39.

Woody, R. H., & Burns, K. J. (2001). Predicting Music Appreciation with Past Emotional Responses to Music. *Journal of Research in Music Education*, *49*(1), 57–70.

Wrahatnolo, T. & Munoto. (2018). 21st centuries skill implication on educational system. *IOP Conference Series: Materials Science and Engineering*, *296*, 1–7.

Wright, E., & Lee, M. (2014). Developing skills for youth in the 21st century: The role of elite International Baccalaureate Diploma Programme schools in China. *International Review of Education*, *60*(2), 199–216.

Wu, J. (2019). *Systematic Discussion and Rational Thinking of Vocal Music Education under the Current Social Background of China*. *322*, 4.

Wu, J., Guo, R., Wang, Z., & Zeng, R. (2021). Integrating spherical video-based virtual reality into elementary school students' scientific inquiry instruction: Effects on their problem-solving performance. *Interactive Learning Environments*, *29*(3), 496–509.

Xiaowei, Y. (2012). Changes in Practice and Reconstruction of Theory: A Retrospective of Thirty Years of Reform and Research in Primary and Middle School Teaching in Mainland China. *Chinese Education & Society*, *45*(1), 51–58.

Xu, B., & Ma, D. (2007). WoGuo GaoDeng YinYue JiaoYu JiaoXue GaiGe De FanSi Yu ZhanWang[The general situation and expectation of the development of Chinese normal college's music education]. *People's Music*, *3*, 79–80.

Xu, Y. (2009). School-based teacher development through a school-university collaborative project: A case study of a recent initiative in China. *Journal of Curriculum Studies*, *41*(1), 49–66.

Xu, Z., Dai, H., Li, H., Liang, H., Lv, Z., & Yan, D. (Eds.). (2016). *Yinyue （Music） (Grade 1, 1st term)* (second edition). Jiangsu Shaonianertong Publisher.

Yan, C. (2015). 'We can't change much unless the exams change': Teachers' dilemmas in the curriculum reform in China. *Improving Schools*.

Yang, W., Liu, C., & Liu, E. (2019). Content analysis of inquiry-based tasks in high school biology textbooks in Mainland China. *International Journal of Science Education*, *41*(6), 827–845.

Yang, W., & Liu, E. (2016). Development and validation of an instrument for evaluating inquiry-based tasks in science textbooks. *International Journal of Science Education*, *38*(18), 2688–2711.

Yang, Y. (2022). Assessing alignment between curriculum standards and teachers' instructional practices in China's school music education. *Research Studies in Music Education*, 1–21.

Yang, Y., & Welch, G. (2022). A systematic literature review of Chinese music education studies during 2007 to 2019. *International Journal of Music Education*, 1–24.

Yang, Y., Yin, A., & Guan, T. (2021). Mapping music education research in Mainland China (2007–2019): A metadata-based literature analysis. *International Journal of Music Education*, *39*(2), 234–246.

Yiran, F. (2021). *The Role of the Chinese Piano School in the Formation of the Chinese Piano Art*. *5*(54), 44–55.

You, Y. (2019). The seeming 'round trip' of learner-centred education: A 'best practice' derived from China's New Curriculum Reform? *Comparative Education*, *55*(1), 97–115.

Yu, Z., & Leung, B.-W. (2019). Music teachers and their implementation of the new Music Curriculum Standards in China. *International Journal of Music Education*, *37*(2), 178–197.

Zabanal, J. R. A. (2022). Research-to-Resource: Applying a Self-Care Framework to Music Education. *Update: Applications of Research in Music Education*, *40*(3), 5–10.

Zandén, O., & Ferm Thorgersen, C. (2015). Teaching for learning or teaching for documentation? Music teachers' perspectives on a Swedish curriculum reform. *British Journal of Music Education*, *32*(1), 37–50.

Zhang, C. (2011). *Daxue yinyue tongshike zai renwen jingshen suzao zhong de sange lizudian [Thinking, feeling and indulging: Three footholds of college music general course in the shaping of humanistic spirit]*. *10*, 91–94.

Zhang, C. (2017). Daxue yinyue tongshike de Shijian lujing tanxi [The practical path of college music general course teaching]. *People's Music*, *12*, 54–57.

Zhang, D., Akhter, S., Kumar, T., & Nguyen, N. T. (2022). Lack of Emotional Experience, Resistance to Innovation, and Dissatisfied Musicians Influence on Music Unattractive Education. *Frontiers in Psychology*, *13*, 922400.

Zhang, L.-X., & Leung, B.-W. (2023). Context matters: Adaptation of student-centred education in China school music classrooms. *Music Education Research*, 1–17.

Zhang, L.-X., Leung, B.-W., & Yang, Y. (2023). From theory to practice: Student-centered pedagogical implementation in primary music demonstration lessons in Guangdong, China. *International Journal of Music Education*, *41*(2), 271–287.

Zhong, Q. (2006). Curriculum reform in China: Challenges and reflections. *Frontiers of Education in China*, *1*(3), 370–382.

Zhou, G., & Zhou, X. (2019). *Education Policy and Reform in China*. Springer Singapore.

Zhou, H. (2012). Promoting Compulsory Education in Rural China: What Are the NPOs Doing? *Frontiers of Education in China*, *7*(4), 576–607.

Zhou, J. (2014). Teacher education changes in China: 1974-2014. *Journal of Education for Teaching*, *40*(5), 507–523.

Zhou, K. (2012). ZhongGuo BenTu YueJiao ZheXue Yu MinJian YueJiao ChuanCheng [Local Chinese music education philosophy and folk music education heritage: On the contemporary connection of ancient diversification educational thinking. *Musicology in China*, *3*, 107–115.

Appendix A: Participant Information Sheet

You are invited to take part in a research study entitled 'An exploration of the P4C pedagogical strategies of Chinese primary teachers teaching the primary music curriculum'. Please read this document carefully and ask any questions you may have before agreeing to take part in the study.

- The study is conducted by Rufei Ji of School Education, Communication & Language Sciences at Newcastle University. This research project is supervised by Professor Caroline Walker-Gleaves from the School of Education, Communication & Language Sciences at Newcastle University.
- The purpose of this study is to research how could IBL applied in Chinese music classes at primary school stage improving the music learning and enhancing it so that the children are more engaged and develop better musicality and musical autonomy.
- You children have been invited to take part in this study because he/she is the student who is offered music lessons weekly by the Nanjing YiXingHuaYuan Primary school. If you agree to take part in this study, you will be asked to sign in the consent form and return that form to the class-teacher.
- Your participation in this study will take approximately 15 weeks with a 60-minutes session per week. Once research has been completed, I will debrief you on the main findings of the research via email or another meeting if you wish. You will also be given a full copy of the research paper that I aim to produce.
- You are free to decide whether or not to participate. If you decide to participate, you are free to withdraw at any time without any negative consequences for you. You may decline to answer any questions or withdraw from the study without penalty of any kind. All non-identifying information you provide, will be kept in a password-protected electronic database, tagged with an anonymous ID number. Identifying information, e.g. your name, contact details and date of birth will be kept on paper in a locked filing cabinet in my office. This office is kept locked when not in use. This means that any anyone with access to the electronic information will not be able to identify you as an individual. The only way to identify you as an individual is to access both the electronic records, and the paper records stored in the locked filing cabinet. It is very unlikely that anyone outside of the research team will be able to do this.
- We would like to upload your non-identifying information to a repository (the Open Science Framework) to be shared with other researchers. It is impossible for anyone to identify you as an individual from this information alone. Your rights to access, change or move your information are limited, as Newcastle University needs to manage your information in specific ways in order for the research to be reliable and accurate under UK General Data Protection Regulations. If you withdraw from the study, Newcastle University will keep the information about you that has already been obtained. To safeguard your rights, the minimum personally-identifiable information will be used. You can find out more about how Newcastle University uses your information at http://www.ncl.ac.uk/data.protection/PrivacyNotice and/or by contacting Newcastle University's Data Protection Officer (Maureen Wilkinson, rec-man@ncl.ac.uk).
- If you have any questions, requests, or concerns regarding this research, please contact me via email at r.ji2@newcastle.ac.uk or by telephone at 07394431243.

This study has been reviewed and approved by the School of Education, Communication &

Language Sciences Ethics Committee at Newcastle University (date of approval:…….)

Appendix B: Declaration of Informed Consent

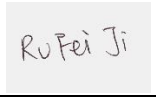
- I agree to participate in this study, the purpose of which is to research how could P4C applied in Chinese music classes at primary school stage improving the music learning and enhancing it so that the children are more engaged and develop better musicality and musical autonomy.
- I declare that I have understood the nature and purpose of the research
- I have read the participant information sheet and understand the information provided.
- I have been informed that I may decline to answer any questions or withdraw from the study without penalty of any kind.
- I have been informed that all of my responses will be kept confidential and secure, and that I will not be identified in any report or other publication resulting from this research.
- I have been informed that the researchers may wish to share non-identifying information, e.g. my responses to questions, in a public repository. I understand that it will not be possible to identify me as an individual from this information alone.
- I have been informed that the investigator will answer any questions regarding the study and its procedures. The investigator's email is r.ji2@newcastle.ac.uk and they can be contacted via email or by telephone on 07394431243
- I will be provided with a copy of this form for my records.

Any concerns about this study should be addressed to the School of Education, Communication & Language Sciences Ethics Committee, Newcastle University via email to ecls.researchteam@newcastle.ac.uk

_____

Date Participant Name (please print) Participant Signature

I certify that I have presented the above information to the participant and secured his or her consent.



27.05.2020 _____

Date Signature of Investigator

Appendix C: Details in the Segment Objectives

Teaching Content \ Year Groups		Phase I	Phase II
Feelings and Appreciation	Elements of Expression	1 Listen and imitate sounds - Through Your Own Voice or Percussion Instruments 2 Recognise the Tone of Various Human Voices 3 Recognise the Tones of Common Percussion Instruments 4 Use Percussion Instruments to Play Sounds of Different Intensity and Length 5 Feel and Describe the Changes in Intensity and Tempo 6 Make Corresponding Physical Responses to Two- and Three-Beat Music	7 Listen and imitate sounds - Through Your Own Voice or **Other Instruments** 8 Recognise and **Classicise the Different Types** of Female and Male Voices 9 Recognise **Common Chinese and Western Musical Instruments** and their Tones. 10 **Able to Hum** a Familiar Song or Music 11 **Recognise the Difference in beats** and Experience the Rhythm 12 **Perceive Musical Themes and Distinguish Basic Musical Phrases** 13 Responds Appropriately with **Body Posture or Lines and Colours**
	Emotions And Feelings	1 Experience and Express the Similarities and Differences of Musical Emotions	1 Experience and Briefly **Describe the Change of Musical Expressions**

Year Groups / Teaching Content		Phase I	Phase II
Feelings and Appreciation	Subject and Form	1. Appreciate Children's Songs, Short Marches, Dance Songs and Other Genre Music Paragraphs 2. Responding to the Music Through Singing and Performing with Percussion Instruments or Movements or Dance	1. Appreciate Children's Songs and **Carols, Lyrical Songs, Narrative Songs, Art Songs, and Other Various Genres** 2. **Appreciate Small Instrumental Pieces of Different Genres** 3. Responding to the Music Through Humming, Performing with Percussion Instruments or Movements **4. Appreciate Musical Themes and Recognise the Name of the Songs**
	Style and Genre	1. Try to Appreciate Various Genres of Music from Different Countries, Regions and Nationalities and Experience the Different Styles	1. Appreciate **Chinese Folk Music and Chinese Opera and Operatic Music with Beijing Opera as the Representative**, and Experience its Different Styles 2. Appreciate Various Genres of Music from Different Countries, Regions and Nationalities and Experience the Different Styles

Year Groups / Teaching Content		Phase I	Phase II
Performing	Singing	1. Be able to Sing 4 to 6 Songs Each Academic Year (including 1 to 2 Chinese Folk Songs) 2. Respond to Command Movements 3. Ability to Express the Mood of the Song	1. Singing with **Correct Singing Posture and Breathing Method** 2. Singing with **a Natural Voice, Accurate Rhythm and Pitch** **3. Learn about the Voice Change Period and How to Protect it.** **4. Be able to Comment Briefly on Their Own and Others' Singing** 5. Be able to Sing 4 to 6 Songs Each Academic Year (including 1 to 2 Chinese Folk Songs) **6. Learn to Sing Beijing Opera or Local Opera Singing Fragments**
	Instruments Playing	1. Be able to Improvise or Accompany Songs with Percussion Instruments or Other Sound Materials	**1. Learn Flute** **2. Be able to Comment Briefly on Their Own and Others' Performance** 3. **Be able to Perform 1 to 2 songs of music Per Academic Year**

Year Groups / Teaching Content		Phase I	Phase II
Performing	Comprehensive Performing	1. Be able to Participate in Relevant Performance Activities 2. Be able to Collaborate with Others in such Activities	1. **Actively** Participate in Relevant Performance Activities **2. Take on a Character in a Musical Performance Activity (e.g., Children's Cabaret)** **3. Be able to Comment on Their Own and Others' Performance**
	Score Reading	1. Recognise Basic Rhythm Symbols and Express with Sounds, Language and Body Movement 2. Be able to Sing the Score by Solfege	**1. Recognise Note Names, Notes, Rests and Some Common Musical Notations** 2. Be able to Briefly Sight-read
Creation	Sound Exploration	1. Imitate Sounds Using Human and Instruments 2. Be able to Explore Different Expressions of Sound with Percussion Instruments or Other Vocal Materials	1. **Express** Sounds Using Human, Instruments or Other Vocal Materials 2. Be able to **Make Their Own Simple Musical Instruments Under the Guidance of Teachers**

Year Groups / Teaching Content		Phase I	Phase II
Music and Related	Music and Social Life	1. Listen to Music through Radio, Film, Internet, Tapes, CDs, and Other Media 2. Participating in Community or Village Music Events	1. **Enjoy** Listening to Music through Radio, Film, Internet, Tapes, CDs, and Other Media 2. **Active** Participation in Community or Village Music Activities and Communicate with Others about Music
	Music and Related Arts	Be able to use: 1. Simple Movements to Match the Rhythm 2. Simple Performance to Express the Mood 3. Colour or Line to Show Emotions	**1. Appreciate the Role of Music in Drama and Dance** 2. **Be able to Combine the Familiar Film and Television and Experience the Role of Music in it**

Appendix D: An Example of a Lesson Plan (Chinese version)

《海滨音诗》（第五单元）

教学目标

1. 能通过作品的对比，分辨管弦乐合奏和小提琴独奏的演奏形式，听辨小提琴音色。

2. 能够辨别作品的音乐主题变化，以及表达出的情感。

预设教学过程

- 复习导入

1. ‘还记得我们上节课欣赏的作品《蓝色多瑙河》，它是一部管弦乐作品，由许多乐器共同演奏完成，让我们再听一听引子部分，回顾一下都有那些乐器。’

2. 问题 2：你刚刚听到的小提琴的声音是什么样的呢?

【该问题为了引出下面新曲欣赏小提琴独奏中小提琴的不同作用，在新曲欣赏中要突出体会小提琴的丰富表现力。】

- 歌曲欣赏

1. 欣赏海滨音诗：设想一下（画一画），你刚刚听到的这个作品会是由一个怎么样的小提琴演奏出来的?【可以再接下来的视听中不断完善他们的想法】

2. 结合谱例，再次听一听乐曲。说一说主旋律一共出现了几次，都出现在哪里?

3. 完整欣赏歌曲，说一说歌曲大致可以分为几个部分?

‘说一说哪一个部分是你们觉得情感变化最丰富的？‘

4. 仔细听一听 B 段，感受音乐是如何情感过渡的。

【在此部分，体现出小提琴的丰富表现力。】

- 问题讨论

‘对比小提琴独奏与管弦乐合奏，你更喜欢小提琴在哪种演奏方式里的表现？为什么?’【结合学生刚刚设计的小提琴的样式】’

【重点是放在理解乐器的声音特点上】【总共 10 分钟-小组讨论大约 6-7 分钟，班级交流时间 3-4 分钟】

【可以是小提琴独奏-因为很突出它本身的音色/丰富的表现力-那么学生觉得小提琴不同于其他乐器的音色特点是什么？】

【可以是管弦乐合奏-因为各种乐器与小提琴的配合会使音乐本身更丰富。-也可以反驳这样的话小提琴本身的声音就会被掩盖掉一部分。】

- 总结

‘今天通过欣赏小提琴独奏《海滨音诗》……

Appendix E: An Example of a Lesson Plan (English version)

Seaside Sound Poetry (Hai Bin Yin Shi) (Unit 5)

Teaching objectives

1. to be able to distinguish between the orchestral ensemble and the solo violin by comparing the works and listening to the violin tone

2. to be able to identify the variations in the musical themes of the work and the emotions expressed.

Pre-determined teaching process

- Introduction

1. 'Remember the piece we enjoyed in the last lesson, The Blue Danube, which is an orchestral work for many instruments. Let's listen to the introduction again and review the present instruments.

2. Question 2: What did the violin sound like that you just heard?

[This question is intended to introduce the different roles of the violin in the following new piece appreciation of the solo violin and to highlight the rich, expressive power of the violin in the new piece appreciation].

- Song Appreciation

1. Appreciate the song: Imagine (draw a picture) how this piece you have just heard would be played by a violin? [You can refine their ideas in the next audiovisuals].

2. Listen to the piece again with the score examples. How often does the main theme appear, and where does it appear?

3. Enjoy the entire song and say how many parts the song can be roughly divided into?

'Tell me which part you find the most emotionally varied? '

4. Listen carefully to the B section and feel how the music transitions emotionally.

[In this part, the rich, expressive power of the violin is reflected.].

- Question discussion

'Comparing the solo violin and the orchestral ensemble, in which way do you prefer the violin to play? Why?' [Incorporate the style of the violin that students have just designed]'

[The focus is on understanding the sound characteristics of the instrument] [10 minutes total - about 6-7 minutes for group discussion and 3-4 minutes for class sharing]

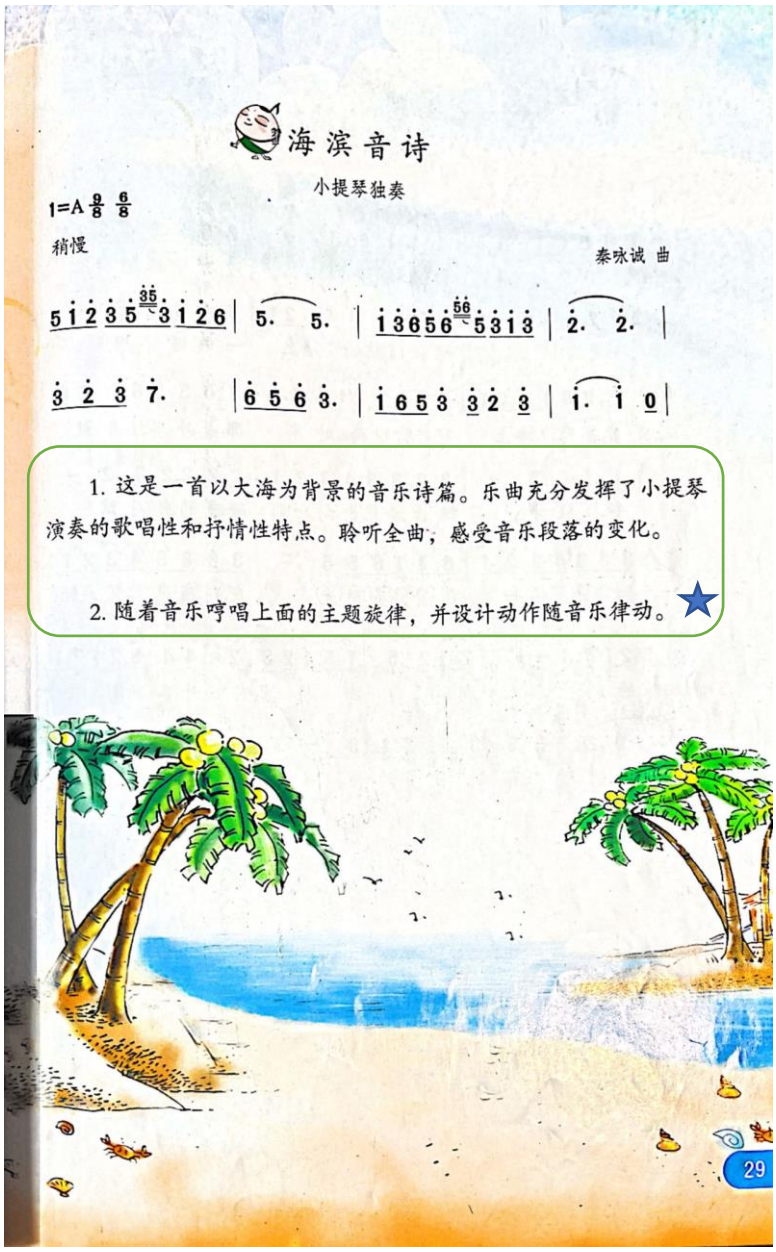
[Can be a solo violin - because it highlights its own timbre/rich expressiveness - so what do students think are the timbral characteristics that make the violin different from other instruments?

[It could be an orchestral ensemble - because the various instruments that work with the violin make the music itself richer. -Can also argue that this would obscure some of the violin's sound.

- Conclusion

'Today by enjoying the solo

Appendix F: Content in the Textbook for the Example



海滨音诗

小提琴独奏

1=A $\frac{9}{8}$ $\frac{6}{8}$

稍慢

秦咏诚 曲

1. 这是一首以大海为背景的音乐诗篇。乐曲充分发挥了小提琴演奏的歌唱性和抒情性特点。聆听全曲，感受音乐段落的变化。

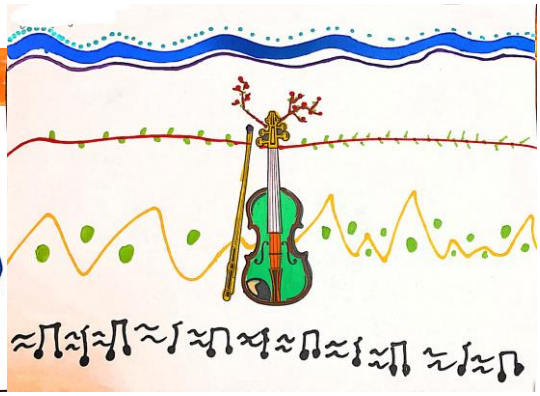
2. 随着音乐哼唱上面的主题旋律，并设计动作随音乐律动。

29

* This is a musical poem with the sea as a background. The piece fully uses the violin's singing and lyrical character. Listen to the whole piece and feel the changes in the musical passages.

*Hum the main theme above with the music and create movements to accompany the music.

Appendix G: Some Examples of Student's Work in the Lessons



Appendix H: List of the Initial Coding in Learning Objective (Track Version.)

~~1. 6/8 beat and its pattern~~

~~2.~~1. Actively collaborate with peers 35

~~3. Add backing vocals~~

~~4. Appreciate the piano solo~~

~~5. Be inspired to sing~~

~~6. Changes in intensity (2)~~

~~7. Changes in melody~~

~~8. Chinese oboe~~

~~9. Chinese pentatonic scales~~

~~10. Chinese school song~~(2)

~~11.~~2. Compare and contrast

~~12.~~3. Connect music to nature

~~13.~~4. Connect~~ion between~~ music ~~and~~ to characters 42/69

~~14. Creation: practical music activities~~

~~15. Deepen impressions~~

~~16.~~5. Develop a love of life and nature

~~17.~~6. Develop an interest in the folk songs

~~18.~~7. Develop their creativity and practical skills

~~19. Distinguish between the orchestra ensemble and the solo violin~~

~~20.~~8. Distinguish it from a wide range of genres/forms of music 10/19/33/45/53/67/75

~~21. Distinguish musical phrases~~

~~22. Distinguish section and compare and contrast~~

~~23. Dot rhythm~~

~~24. Emotions expressed~~

~~25. Enrich and express feelings~~

~~26.~~9. Enrich the emotional experience (2) 25/27

~~27. Experience and feel~~

~~28. Explore the characteristics of Western string instruments~~

~~29. Express the deep feelings~~

~~30.~~10. Express understanding and feelings in various ways 15/24/29/73

~~31.~~11. ~~Feel the connection between mood and tempo~~Connect music to mood 32

~~32. Feel the mood~~

~~33. Folk music (2)~~

~~34.~~12. Gain pleasure

~~35. Group work~~

~~36. Hum the main melody~~

~~37.~~13. Identify the rhythmic characteristics~~ typical rhythmic patterns of Waltz~~ 1

~~38.~~14. Identify the timbre of ~~their~~ instruments 4/8/28/71

~~39. Identify the variations in musical themes~~

~~40. Melodic Progression (2)~~

~~41. Movements and 'ups and downs' beats~~

~~42. Musical instruments and characters~~

~~43.~~15. Musical notation (2) 23/51

~~44.~~16. Musical Structure 9/40/40/72

~~45. Opera music elements~~

~~46. Participant in appreciation activities~~

~~47.~~17. Participant in musical activities 14/46/48

~~48. Participate in practical music activities~~

~~49.~~18. Practice choral skills 3/59/60

~~50. Recognise the 'Weak rise'~~

~~51. Recognise the crescendo and decrescendo notation~~

~~52.~~19. Recognise the difference phrases (Terms and Signs) 21/22/39

~~53. Recognise the solo and repertoire~~

~~54.~~20. ~~Relate melody to colour~~Connect music to colour

~~55.~~21. Respond to variation and repetitions of musical themes through language or movement 41

~~56.~~22. Rhythm, beat, timbre and melody 6/7/74

~~57. Sing in a natural, relaxed voice~~

~~58. Sing with emotion~~

~~59. Singing a two-part choral piece~~

~~60. Singing a two-part harmony in a small, fixed phrases~~

~~61. Singing in a natural and soft voice~~

~~62. Singing in a natural, soft and harmonious voice~~

~~63. Singing in a soft and beautiful voice~~

~~64. Singing in different voice with different sections~~

~~65.~~23. Singing parts of the melody along with the music 36

~~66.~~24. Singing with feeling and proficiency 5/57/58/61/62/63/64/68

~~67. Symphonic Fairy Tales~~

~~68. The pitch of F and #F~~

~~69. The relation between musical instruments and the images portrayed~~

~~70.~~25. The role of notation in the music

~~71. Traditional Chinese instruments~~

~~72. Trilogy structure~~

~~73. Understand the creator's intentions~~

~~74. Up-beat~~

~~75.~~26. ~~World folk music~~

Appendix I: Comparison between Initial Coding in the Learning Objectives and Details of segment objective in the National Curriculum

Year 4	Initial Coding in the Teaching Objectives	Corresponding Teaching Content
Lesson 1	◆ Changes in intensity ◆ Sing with emotion. ◆ Develop a love of life and nature. ◆ Group work ◆ Be inspired to sing. ◆ Develop their creativity and practical skills Musical Notation ◆ Musical Structure ◆ Melodic Progression	➢ **Feelings and Appreciation** - Elements of Expression ➢ **Performing –** Singing ➢ **Music and Related** - Music and Social Life ➢ **Creation** - Creative Practice
Lesson 2	◆ Sing in a natural, relaxed voice. ◆ Changes in intensity ◆ Recognise the crescendo and decrescendo notation. ◆ The role of notation in the music ◆ Recognise the difference phrases (Terms and Signs)	➢ **Performing –** Singing ➢ **Feelings and Appreciation** - Elements of Expression ➢ **Performing –** Score Reading
Lesson 3	◆ Distinguish musical phrases. ◆ Folk music ◆ Feel the mood. ◆ Participant in musical activities ◆ Traditional Chinese instruments	➢ **Feelings and Appreciation** - Style and Genre ➢ **Feelings and Appreciation** - Elements of Expression ➢ **Feelings and Appreciation** - Emotions and Feelings
Lesson 4	◆ Explore the characteristics of Western string instruments. ◆ The relation between musical instruments and the images portrayed. ◆ Enrich the emotional experience. ◆ Symphonic Fairy Tales ◆ Musical instruments and characters	➢ **Feelings and Appreciation** - Elements of Expression

Year 4	Initial Coding in the Teaching Objectives	Corresponding Teaching Content
Lesson 5	◆ Singing in a natural and soft voice ◆ 6/8 beat and its pattern. ◆ Recognise the solo and repertoire. ◆ Add backing vocals. ◆ Chinese school songs	➢ **Performing –** Singing ➢ **Feelings and Appreciation -** Elements of Expression ➢ **Feelings and Appreciation -** Subject and Form ➢ **Creation -** Sound Exploration
Lesson 6	◆ Movements and 'ups and downs' beats ◆ Changes in melody ◆ Experience and feel	➢ **Feelings and Appreciation -** Style and Genre ➢ **Feelings and Appreciation -** Elements of Expression
Lesson 7	◆ Recognise the 'Weak rise' ◆ Singing a two-part choral piece ◆ Singing in a natural, soft, and harmonious voice ◆ World folk music ◆ Up-beat ◆ Musical notation- Triadic harmony	➢ **Performing –** Comprehensive Performing ➢ **Performing –** Singing ➢ **Feelings and Appreciation -** Elements of Expression
Lesson 8	◆ Enrich the emotional experience. ◆ The pitch of F and #F ◆ Chinese school song	➢ **Performing –** Singing ➢ **Performing –** Instruments Playing ➢ **Feelings and Appreciation -** Emotions and Feelings

Year 5	Initial Coding in the Teaching Objectives	Corresponding Teaching Content
Lesson 1	◆ Singing in different voice with different sections ◆ Opera music elements ◆ Participant in appreciation activities	➢ **Performing –** Singing ➢ **Feelings and Appreciation** - Emotions and Feelings ➢ **Feelings and Appreciation** - Style and Genre
Lesson 2	◆ Identify the timbre of their instruments. ◆ Feel the connection between mood and tempo. ◆ Hum the main melody. ◆ Deepen impressions. ◆ Distinguish section and compare and contrast. ◆ Relate melody to colour. ◆ Trilogy structure	➢ **Feelings and Appreciation** - Emotions and Feelings ➢ **Feelings and Appreciation** - Subject and Form
Lesson 3	◆ Respond to variation and repetitions of musical themes through language or movement. ◆ Identify the rhythmic characteristics- typical rhythmic patterns of Waltz. ◆ Distinguish it from a wide range of genres of music	➢ **Feelings and Appreciation** - Emotions and Feelings ➢ **Feelings and Appreciation** - Style and Genre ➢ **Feelings and Appreciation** - Subject and Form
Lesson 4	◆ Distinguish between the orchestra ensemble and the solo violin. ◆ Compare and contrast. ◆ Identify the variations in musical themes. ◆ Emotions expressed	➢ **Feelings and Appreciation** - Subject and Form ➢ **Feelings and Appreciation** - Emotions and Feelings

Year 5	Initial Coding in the Teaching Objectives	Corresponding Teaching Content
Lesson 5	◆ Appreciate the piano solo. ◆ Singing parts of the melody along with the music ◆ Folk music ◆ Actively collaborate with peers ◆ Creation: practical music activities	➢ **Feelings and Appreciation** - Elements of Expression ➢ **Feelings and Appreciation** - Style and Genre ➢ **Creation –** Improvisation ➢ **Performing –** Comprehensive Performing
Lesson 6	◆ Singing with feeling and proficiency ◆ Develop an interest in the folk songs. ◆ Understand the creator's intentions. ◆ Chinese pentatonic scales ◆ Melodic progression	➢ **Performing –** Singing ➢ **Feelings and Appreciation** - Style and Genre ➢ **Music and Related** - Music and Related Arts
Lesson 7	◆ Singing in a soft and beautiful voice ◆ Express the deep feelings. ◆ Singing a two-part harmony in a small, fixed phrases ◆ Practice choral skills ◆ Dot rhythm	➢ **Performing –**Singing ➢ **Creation –** Creative Practice
Lesson 8	◆ Rhythm, beat, timbre and melody. ◆ Express understanding and feelings in various ways ◆ Connect music to nature. ◆ Enrich and express feelings. ◆ Gain pleasure ◆ Participate in practical music activities. ◆ Chinese oboe ◆ Connection between music and characters	➢ **Feelings and Appreciation** - Elements of Expression ➢ **Creation –**Improvisation ➢ **Performing –** Comprehensive Performing

Appendix J: List of Initial Coding in the Observation (Track Version.)

1. ‘2 natural stops’ in discussion
2. ‘A bored sign’ to similar musical activities
3. ~~‘Be the right one’~~
4. ~~‘Main Body’ Review (2)~~
5. ~~3.~~ ‘Re-Name’ it by personal emotions (3)
6. ~~4.~~ A never responded student
7. ~~Add movements~~
8. ~~Add musical notation by Emotions~~
9. ~~Ask questions-Connect music with imagination~~
10. ~~5.~~ Background introduction (9)
11. ~~6.~~ ~~Choir- composition and~~ collaborative task 74
12. ~~7.~~ Compositional approach
13. ~~Connect emotional expression to musical elements~~
14. ~~Connect emotions and feelings with musical changes- rhythm, notations~~
15. ~~8.~~ Connect music to words/storylines 22
16. ~~9.~~ Connect music to imaginations (7) 9
17. ~~10.~~ Connect music to colour (2)
18. ~~11.~~ Connect Music ~~with~~ to Shapes and Melodic Line (2)
19. ~~12.~~ Connect musical elements to emotional expression 13/14/23/33(2)/49
20. ~~13.~~ Connect the tone of instruments to emotional expression
21. ~~Could not singing accurate without teacher’s leading~~
22. ~~Describe it by words, colours or imagines~~
23. ~~Different moods and musical elements in composition~~
24. ~~14.~~ Difficulty in back to the whole class group
25. ~~15.~~ Direct Leading (14)
26. ~~16.~~ Discuss feelings after listening
27. ~~Distinguish the difference between 3/4 and 4/4~~
28. ~~17.~~ Distinguish the different emotions
29. ~~Distinguishing between singing forms~~
30. ~~18.~~ Eager to ~~participant/~~show

~~31.~~19. Eager to play with drum- interested in additional stuff

~~32. Easily distracted~~

~~33. Emotional expression (2)~~

~~34.~~20. Empathising with the music

~~35. Explain the key points~~

~~36.~~21. Express ideas supported with 'how, what and why'

~~37. Identify musical phrases, changes in melody~~

~~38. Identify the melody in the piece- sight reading by teacher~~

~~39. Identify the musical instruments~~

~~40.~~22. Identify the musical phrases (4) 27/38/42

~~41.~~23. Identify the rhythm and its strength and weakness pattern 27

~~42. identify the similarities in melody~~

~~43.~~24. Less patience in the overlong piece (5)

~~44. Limited by the example~~

~~45.~~25. Listening as a mechanical action

~~46.~~26. Listening as an appreciation

~~47.~~27. Logic in presenting ideas

~~48. Meaningless shouting for their answer~~

~~49. Melody, beat, rhythm, imagine~~

~~50. Musical notation~~

~~51. No confidence in singing choir~~

~~52. Pitch corrects: F&#F~~

~~53. Practice the interval: C-E~~

~~54.~~28. Ask Question

~~55.~~29. Proper singing posture

~~56.~~30. Quickly engaged

~~57.~~31. Raise interest because of the uniqueness

~~58. Recognise the difference between F and #F~~

~~59.~~32. Recognise the form of the song

~~60. Recognise the musical instruments~~

~~61.~~33. Recognise the timbre of the instruments 39/60/62

~~62. Recognise the tone of violine~~

~~63.~~34. Reminder: 'Be quiet' (9)

~~64.~~35. Reminder: 'No right answer' 3/48

~~65.~~36. Reminder: 'Please sit straight.'

~~66.~~37. Reminder: 'Please do not be limited by teacher's example' 44

~~67.~~38. Repeat answer to ensure everyone heard (2)

~~68.~~39. Respect for each other (3)

~~69. Review the form of singing~~

~~70.~~40. Explain and Review the key points (4) 4(2)/35/69

~~71. Score-Reading~~

~~72.~~41. Sense of identity 89

~~73.~~42. Set an emotional scene (3)

~~74. Share with peers (2)~~

~~75. Sight reading- hum the score~~

~~76.~~43. sight-reading 71/74

~~77.~~44. Simple answer/responses

~~78.~~45. Singing in different groups: Combination between the teacher, students and flute.

~~79.~~46. Singing in the correct pitch but wrong name

~~80. Singing parts of the song~~

~~81.~~47. Singing practices: focus on difficult phrases 52/53/58/80

~~82.~~48. Strategy for engagement: hand out additional materials as a prize for concentration

~~83.~~49. Strategy for pitch correction- Convert vague concepts into direct adjectives or equivalent language

~~84.~~50. Strategy for pitch correction: Find the pitch on the flute

~~85.~~51. Strategy to draw attention: use drum instead of words

~~86.~~52. Strategy used in practice beat: Hands clapping or adding body movements 7

~~87.~~53. Strategy used in practice score-reading: find the similarities and differences

~~88.~~54. Student as the marker

~~89. Teachers' compliments~~

~~90.~~55. Tempo practice

~~91.~~56. The ability to identify the pitch after practising

~~92.~~57. The difficulty of the philosophical question

~~93.~~58. The impact of being observed

~~94.~~59. The impact of difficulty of 'concertation'- not singing in a beautiful voice

~~95.~~60. The impact of external factors- classroom layout

~~96.~~61. The issue of teaching coverage

~~97.~~62. Time limitation in presenting (10)

~~98. unable to hum when giving example~~

~~99. Understand the overall mood~~

~~100.~~63. Understand the role of musical notation in emotional expression 50

~~101.~~64. Understand the song through melodic variation

~~102.~~65. Understand the song through overall mood 99

~~103.~~66. Understand the song through the lyrics (4)

~~104.~~67. Understand the song through musical phrases

~~105.~~68. Understand the song through the topic

~~106.~~69. Unstable pitch- get better with teacher's leading 21/51/98

~~107.~~70. Unstable pitch- particular in backing vocals

~~108.~~71. Unstable pitch-easily distracted by others 32

~~109.~~72. Various Singing Forms in Practice 29

~~110.~~73. Warm-up game about musical notations 8

~~111.~~74. Warm-up game: Singing in different tempos and recognise the differences

Appendix K: An Example of the Observation Sheet

Time	Activities	Comments
Start	Review the previous lesson	◆ Only listened to the introductory part ◆ The teacher hand out the material for today's lessons (She does not give that to everyone, but only gives for someone to perform good- listen carefully and well behaved – she said that is a strategy)
00:02:36	Leading to today's lesson	◆ Which instrument did you notice? -Violin, cello, oboe, clarinet etc. ◆ What do you know about the violin? A bright sound; and elegant. (Keep handing out that paper – Students seem very motivated to answer questions today)
00:04:30	Introducing the song for today	◆ Play part of the music score ◆ The teacher sings this part -creating the mood
00:06:11	Appreciation	◆ Can you identify how many times this section appears in this piece? Notice: until now, not everyone got that paper. So, students are still waiting for that piece of paper.
00:11:34	Answer Check	3 vs 4 vs 5: most students agreed 5 times. ◆ What other instruments do you hear besides the violin? – Piano ◆ Background Knowledge of the instruments
00:13:12	Second Appreciation	◆ How many parts can this piece be divided into? ◆ Which part do you think changes most strongly? ◆ How do these changes contribute to the emotional expression of the music? (The teacher is still handing out that paper and asking students to bring their colour pens to their desk – remind them to be quiet as well)
00:15:25		All students got that piece of paper. Then some of them seem to be the focus of that paper. – they started painting.
00:19:03	Answer Check	◆ parts vs 4 parts ◆ Kindly ask students to stop painting because they do not know what to paint. – Not simply colouring
00:22:44	Activity for today	◆ Observe what the violin is made up of.

		◆ Painting that violin and its background. You could also add the player. – according to the music
00:24:24	Activity Start	
00:31:33	Back to the whole class group	• Share their paintings and thoughts.
	Student 1: 3 parts. I had the first and the third part similar. They are also very soft. The middle section is very high tone. - it has a strong emotion. Student 2: I also think there are 3 parts. I used lines to present the emotions. Lines in the first and the third part are thin, while in the 2nd part, lines go very strong. Student3: I agreed with them. I only draw the second section because it has the greatest emotional changes. So, I draw a very bright sun behind the violence. (Then, the teacher asked if there was anyone disagreed with those 3 students.) Student 4: I think there are four parts because there is a transition section between parts 2 and 3. This transition section shows the sound of low tide waves lapping against the rocks.	
00:37:40	Summary of this activity	◆ Confirm the number of parts and analyse with the music. - Give a model answer to show the meaning of music
00:39:37	End of the class	