U.PORTO
FACULDADE DE BELAS ARTES
UNIVERSIDADE DO PORTO

João António Ferreira Cavadas da Costa

THE PROCESS OF SENSE MAKING IN MUSIC TEACHING AND LEARNING

The reconfiguration of the roles of the music teacher and the implication for his personal, professional and artistic identity

PhD IN ARTISTIC EDUCATION 2021

Advisor: **Andrea Creech (PhD)**
Schulich School of Music
McGill University
Canada

Co-Advisor: **Catarina Martins (PhD)**
Faculdade de Belas Artes
Universidade do Porto
Portugal

U.PORTO
FACULDADE DE BELAS ARTES
UNIVERSIDADE DO PORTO

João António Ferreira Cavadas da Costa

THE PROCESS OF SENSE MAKING IN MUSIC TEACHING AND LEARNING

The reconfiguration of the roles of the music teacher and the implication for his personal, professional and artistic identity

Tese Aprovada pelo Júri no dia 31 de Outubro de 2022

Presidente:

Doutora Maria Graciela Cabral Machado
Professora Associada, Faculdade de Belas Artes da Universidade do Porto

Vogais:

Doutora Andrea Creech
Professor, McGill University, Canadá

Doutora Guro Gravem Johansen
Associate Professor, Norwegian Academy of Music

Doutora Ana Luísa Paz
Professora Auxiliar, Universidade de Lisboa

Doutor Mário Joaquim Silva Azevedo
Professor Adjunto, Instituto Politécnico do Porto

Doutor Tiago Barbedo Assis
Professor Auxiliar, Faculdade de Belas Artes da Universidade do Porto

PhD IN ARTISTIC EDUCATION 2021

Advisor: **Andrea Creech (PhD)**
Schulich School of Music
McGill University
Canada

Co-Advisor: **Catarina Martins (PhD)**
Faculdade de Belas Artes
Universidade do Porto
(Porto's University Faculty of Fine Arts)
Portugal

U.PORTO
FACULDADE DE BELAS ARTES
UNIVERSIDADE DO PORTO

João António Ferreira Cavadas da Costa

THE PROCESS OF SENSE MAKING IN MUSIC TEACHING AND LEARNING

The reconfiguration of the roles of the music teacher and the implication for his personal, professional and artistic identity

PhD IN ARTISTIC EDUCATION 2021

Advisor: **Andrea Creech (PhD)**
Schulich School of Music
McGill University
Canada

Co-Advisor: **Catarina Martins (PhD)**
Faculdade de Belas Artes
Universidade do Porto
(Porto's University Faculty of Fine Arts)
Portugal

Contents

Abstract
Resumo
Acknowledgments
List of Figures

0. PRELUDE **15**
0.1. Introduction **15**
0.1.1. Background of the research 16
0.1.2. Research in music education 18
0.1.3. Researcher positionality 19
0.1.4. Final remarks 21
0.2. Ignition and motivation **22**
0.2.1. The first moment of ignition 22
0.2.2. The second moment of ignition 23
0.2.3. Engaging in research 24
0.3. Overview of the thesis **24**
0.3.1. PART I - Research Background and Literature Review 25
0.3.2. PART II – Methodology 26
0.3.3. PART III – Outcomes of and findings from experiencing a *praxial* music making context 27
0.3.4. PART IV – Discussion and Possibilities for the future of music education 27
0.3.5. PART V – Coda 28

1. PART I
Research Background and Literature Review **29**
1.1. Context of the Research **30**
1.1.1. Portuguese music-teaching system 30
1.1.2. *Classical conservatoire culture* 32
Introduction and overview 32
Problematizing the values and practices of a tradition 35
Schooling in music education and the relevance of broader discourses about schooling 36
The concept of musical knowledge 39
Curriculum in the CCC 41
Teaching in the classical conservatoire culture 47
1.1.3. Starting point for research 52
1.2. *Critical Approaches to Education and Music Education* **52**
1.2.1. Philosophy, Critical Pedagogy and Constructivism in Music Education 53
Critical Pedagogy 55
Constructivism and the concept of knowledge 62
1.2.2. Meaning and Sense Making 65

Meaning making 65
Musical Knowledge, Musical Experience and Embodiment 66
Sense making 67
Musical understanding and musical sense-making 68
Fluency 69
Flow / optimal experience 70
1.2.3. *Praxial* Approach to Music Making 70
A praxial approach to instrumental music education and its relationship to principles of critical pedagogy 71
Praxial VS *Aesthetic* 72
Praxial philosophy holistic principles 74
Music as a social activity 75
Praxial Activities 76
Theory and practice in the *praxial* approach 78
1.2.4. Resistance to change and the process of change 79
Resistance to change in students-centred educational settings 79
Responding to resistance: Scaffolding and disciplined improvisation in teaching 80
Resistance to change in educational settings 81
Resistance as a possibility 82
Facilitating the process of change – institutional and individual transformation 83
1.2.5. The Roles of the Teacher in a critical and praxial approach to music teaching 84
To become a music teacher 86
The music teacher in a *praxial* context 89

2. PART II
Methodology 93
2.1. Introduction 93
2.2. Methodological stance 95
2.2.1. Qualitative research paradigm 96
2.2.2. Participatory action research 96
2.2.3. Ethical issues 98
2.2.4. Reflection on the evolution of the project and overview of the chapter 100
2.3. Research Methodology 101
2.3.1. Goals of the research 101
2.3.2. Research design(s) 102
2.3.3. Data collection 104
Reflexive Journal (RJ) 105
Video recordings (V) 105
Session reports (SR) 106
Post-session analysis (SA) 107
Focus group interviews (FG) 107
2.3.4. Approaches to Data Analysis 108

2.4. Intervention Methodology **111**
2.4.1. Goals of the Intervention 111
2.4.2. Context of the research 113
The school 113
Research Participants 115
The sessions and other activities 117
Field project report 119
2.5. Writing Methodology **120**
2.5.1. Polyphonic approach 121
2.5.2. Reflexive approach to writing 123
2.6. Summary of the methodology **124**

3. PART III
Outcomes and findings experiencing a praxial music making context **127**
3.1. Basis for the field project with students **127**
3.1.1. Starting point 128
3.1.2. The possible path to meaningfulness and musical sense-making 137
3.1.3. How to start? 128
Replication of non-formal characteristics in a formal and traditional educational setting 129
Alternative possibilities for the music-making settings 130
3.1.4. My view as a participating teacher 132
3.2. The field project – approaches to description and analysis **132**
3.2.1. Phase 1 134
Intended goals for Phase 1 134
Phase 1 overview 135
Data analysis 138
a) Students' resistance and insecurity to relinquish their passive approach to learning in the classroom 138
b) Challenges in transitioning to a praxial approach involving principles of critical pedagogy 139
c) The transition required scaffolding and a disciplined improvisation pedagogical approach 141
d) Collaborative and cooperative work between students and teacher and the emergence of different roles 142
e) Sense making and meaningful musical experiences 143
3.2.2. Phase 2 144
Intended goals for Phase 2 144
Phase 2 overview 146
Data analysis 147
a) students 147
b) teacher 150
c) activities 150
Main Outcomes and Milestones 151
3.2.3. Phase 3 152
Intended goals for Phase 3 152

Phase 3 overview 153
Data analysis 154
a) students 154
b) teacher 157
c) activities 159
d) Musical products 161
Main Outcomes and Milestones 161
3.2.4. Phase 4 163
Intended goals for Phase 4 163
Phase 4 overview 165
Data analysis 167
a) students 167
b) teacher 176
c) activities and group dynamics 180
d) musical products 184
e) Musical sense-making 186
Main Outcomes and Milestones 186
3.3. The end of the field project 188

4. PART IV
Discussion and Possibilities 191
4.1. Discussion of the outcomes addressing the questions raised at the beginning of the research 191
4.1.1. The process of sense making in music teaching and learning 191
Musical sense-making and musical understanding 191
Use or not use notated music? 192
Theory and technical development versus expression 193
Collaborative learning in the context of musical sense-making 193
4.1.2. The reconfiguration of the roles of the music teacher and the implications for his personal, professional and artistic identity 195
Democratic settings 195
Personalised approach 196
Teacher's roles 197
4.2. Discussion of themes that emerged during the fieldwork with students 198
4.2.1. Students' resistance 198
4.2.2. Musical product 199
4.3. Implications of the key findings for pedagogical practice, theory and educational policy 200
4.4. Possibilities for the future of music education 200
4.4.1. Level A 203
4.4.2. Level B 203
Students 203
Music teachers 203
Pedagogical setting 205
4.4.3. Level C 207
Music school 207
Community 209
4.4.4. Level D 209

4.5. Final comment on this section **213**

5. CODA **215**
5.1. Limitations **215**
5.2. Future Research **215**
5.3. Synopsis and overview **216**
5.3.1. Results of the research 217
5.3.2. Personal experience in the project 219
5.3.3. Final notes – Where am I at this moment? 221

References **225**
End Notes **239**

Abstract

The research presented here was motivated by my observation that the principles and practices of the *classical conservatoire culture* (CCC) are not in line with the current needs and interests of the majority of music students in the Portuguese music teaching system. Undertaking a multiplicity of roles as teacher/researcher, and engaged in a *participatory action research* guided by the principles of *critical pedagogy*, the first goal of my research was to explore music students' *musical sense making*. A second goal was to explore the roles of the teacher when engaged collaboratively with students in a transformative process that aims to lead the students to more meaningful and fluent use of the musical language.

The core of this research was a longitudinal two-year field project where, within the context of weekly ensemble classes, teacher (myself) and students (18 instrumental students aged from 12 to 15) explored relational models and musical activities based in creative practices. In contrast with the *master-apprentice* music ensemble pedagogy and activities characteristic of the western classical teaching tradition, the relational setting transitioned to a student-led *praxial* approach, characterised by collaborative and creative musical activities including *sound exploration*, *improvisation*, *composition, arrangements,* and *conducting*. These activities were initially unfamiliar to myself (the teacher) and students. A transformation in the relational setting allowed for less directive and linear movement teaching that valued democratic and horizontal collaboration and promoted active learning, critical thinking and musical problem-solving skills, thus empowering students to claim ownership of their own learning. As teacher, I had also to emancipate myself in order to, as suggested by Rancière, teach students what I did not know.

The research became a transformative journey shared by teacher and students, where tensions and milestones during the process were documented. The key findings argue in favour of instrumental ensemble education within collaborative relational settings that prioritize creative musical activities. This was found to be the path for *musical sense making* and *musical understanding* founded upon rewarding and meaningful musical experiences and the development of non-musical and musical and skills. The research also highlights the need for a clarification of the values, principles and goals of the Portuguese music teaching system and the emancipation of music teachers to undertake critical action regarding their own teaching contexts, embracing their roles as principal change agents.

Keywords: ***music teaching; musical sense-making; musical understanding; critical pedagogy; praxial approach; participatory action-research; disciplined improvisation.***

Resumo

A investigação aqui apresentada foi motivada pela minha constatação de que os princípios e práticas da *cultura clássica do conservatório* (CCC) não se coadunam com as necessidades e interesses atuais da maioria dos estudantes de música no sistema de ensino de música Português. Assumindo uma multiplicidade de papéis como professor/investigador, e implicado numa investigação-ação participativa guiada pelos princípios da *pedagogia crítica*, o primeiro objetivo da minha investigação foi o de explorar a *criação de sentido musical* pelos alunos de música. Um segundo objetivo pretendeu explorar os papéis do professor quando envolvido de forma colaborativa com os alunos num processo transformador que visava levar os alunos a um uso mais significativo e fluente da linguagem musical.

O elemento central desta investigação foi um projeto de dois anos no contexto de aulas de conjunto com regularidade semanal, onde eu, como professor, e alunos (18 alunos de instrumento com idades compreendidas entre 12 a 15 anos) exploraram modelos relacionais e atividades musicais baseadas em práticas criativas. Em contraste com a pedagogia de grupo baseada na relação *mestre-aprendiz* em atividades características da tradição clássica, o cenário relacional fez a transição para uma abordagem *praxial* onde a centralidade passou para os alunos, caracterizada por atividades musicais colaborativas e criativas, incluindo *exploração de som*, *improvisação*, *composição*, *arranjos* e *direção*. As atividades a desenvolver neste contexto eram uma novidade para mim (como professor) e para os alunos. Uma transformação no contexto relacional permitiu um ensino menos diretivo e linear que valorizou a colaboração democrática e horizontal, e promoveu a aprendizagem ativa, o pensamento crítico e as competências de resolução de problemas musicais, capacitando os alunos a reivindicar uma autoria e participação na sua própria aprendizagem. Como professor, tive também que me emancipar para, como sugere Rancière, ensinar aos alunos o que eu não sabia.

Esta investigação tornou-se uma jornada transformadora partilhada por professor e alunos, onde tensões e eventos marcantes durante o processo foram documentados. As principais conclusões argumentam a favor da existência de conjuntos instrumentais em configurações relacionais colaborativas que priorizam atividades musicais baseadas em processos criativos. Este foi o caminho para a construção de sentido musical e compreensão musical, baseada em experiências musicais gratificantes e significativas e no desenvolvimento de competências não musicais e musicais. É ainda destacada a necessidade de clarificação dos valores, princípios e objetivos do sistema de ensino da música Português e da emancipação dos professores de música para uma ação crítica face aos seus próprios contextos de ensino, assumindo o seu papel de principais agentes de mudança

Palavras-chave: ***ensino de música; criação de sentido musical; compreensão musical; pedagogia crítica; abordagem praxial; investigação-ação participativa; improvisação disciplinada.***

Acknowledgments

This research advocates in favour of a *constructivist* approach to learning, but with the same being assumed for teaching, believing that teaching is not a solo performance, as it is always a 'construct' in the presence of 'the other'.

Given the amount of people involved, to different degrees, in this project, it is impossible to name them all. It would be unfair, however, not to acknowledge some specific groups or people.

The first word goes to *Escola de Música de Perosinho*, a project I helped to create and develop and the highest professional achievement in my career. My thanks go to the school's management bodies and also the colleagues from the pedagogical direction with whom I shared, for several years, the building of this project. I also thank my brother, Rui Costa (designer), and Briony Andrews (text review), for helping me to communicate my discourse in this thesis.

An important milestone in my professional life was the decision to opt for research in *Artistic Education* at the *University of Porto's Faculty of Fine Arts*, a field and place where I found my 'tribe' regarding the positioning of research. The freedom given to students in a real and profound questioning setting was the 'fuel' for maintaining, for several years, the necessary energy and motivation to engage in research. The positive and challenging experience within this tribe can be represented by my collaboration with Paiva, Catarina (also my co-adviser) and Mário. Also extremely important was the support given by my advisor, Andrea Creech, one of the most relevant authors of this century in the field of music education. Andrea made it possible for me to connect to the world of research in this field and gave me the honour of associating my name with hers, not only in this thesis but also in a previous shared research document.

A word of thanks should also be addressed to the students, 'my fellow travellers' in this research, and also to their parents. Being a project without predefined clear goals and outcomes, to have the 'complicity' of these students for a period of almost two years was proof of great generosity, without which it would be impossible to develop such an ambitious research work. To them I am immensely and eternally grateful.

Although this research project could be seen as an example of a collective undertaking, the writing of the thesis was an extremely solitary process. During its almost five years, the writing process was stopped or intermittent due to personal and professional limitations and, in this period, a lot of moments of frustration occurred, leading to extremely difficult personal and familial moments. That is why my last acknowledgments go to my family, who also endured these difficult moments. For this... and for a lot of unnamed things, I dedicate this thesis to them.

List of Figures

Fig.1	The Music Lesson: Wladimir Hernsingern and Brigitte by Sempé	49
Fig. 2	Edgar Dale's Cone of Experience in Teaching	75
Fig. 3	Research Design 1	102
Fig. 4	Research Design 2	103
Fig. 5	Session Report Model	106
Fig. 6	Calendar and Attendance Log	118
Fig. 7	Research Design 3	120
Fig. 8	Phase 1 Overview	135
Fig. 9	Phase 2 Overview	146
Fig. 10	Phase 3 Overview	153
Fig. 11	Phase 4 Overview	165
Fig. 12	Key Findings	190

0. PRELUDE

0.1 Introduction

This thesis reports a *participatory action research* project implemented in the context of a music school. The project used critical pedagogical action, with the overarching aim of transforming facets of the educational context and student experiences that were perceived by myself - the teacher/researcher - as problematic in some respects. In so doing, critical questions were raised in relation to the traditional roles attributed to music teachers.

Notwithstanding some very positive aspects of traditional Western classical instrumental music teaching systems that benefit a small percentage of students (Finney 1999, 237; Sloboda 2005, 371), some evidence in my school context pointed to a gradual reduction in the level of relevance of formal instrumental music education for many students. This phenomenon has also been reported in other contexts. For example, Campbell (2007, 234) referred to students 'desperately seeking relevance' in music programs that 'may not yet be fully in touch with the needs of a considerable population of young people in secondary schools', while Cavicchi (2009) addressed the issue of the 'irrelevance of music education' in comparison with non-formal music-making settings. According to some authors cited in this thesis, without a clear shift in its rationale, in the near future music education will be at risk of sliding 'into impotency and irrelevancy' (Tregear, et al. 2016, 287). In this vein, Hallam and Creech (2010, 340), referring to classical instrumental training, affirmed that there is 'a danger that some musical traditions will die out altogether and it may be that efforts will need to be made to ensure that these are sustained in the long term'. According to research in the field (Abrahams 2005, 2006; Martignetti, et al. 2013; Schmidt 2005), critical pedagogical action can be an opportunity for many 'traditional' instrumental teachers to make their teaching more relevant and meaningful to students. In addition, instruments associated with pop and rock music culture and new alternative technologies are becoming increasingly favoured and, in some cases, can replace traditional instruments that require long hours and years of study (Hallam and Creech 2010; Schiavio and van der Schyff 2018; Westerlund 2006).

This introductory section has three main intentions: 1) to describe the **background of the research**, referring to 2) the events that provoked the **ignition** and the **motivations** to engage in research about my own teaching context, and 3) to present an **overview of the thesis**, including a clear image of the full research project.

0.1.1 Background of the research

[1]This research is embedded in a personal and professional positioning that evolved continuously during my 25 years of experience as a musician, music teacher and school manager, among other roles that included project management and artistic direction. Transversal to all of these is also **the role of a permanent learner being empowered by an increasing awareness of a capacity to speak out** (Rancière 1987). In parallel with all the personal and professional experiences, a few years after initial training as a musician (performance degree as a cellist), I also pursued additional academic training in the field of educational sciences, always engaging in research about my professional context. If on the one hand, those experiences answered some of my questions, on the other hand they created a need to address emergent themes.

Given this background, it is clear that the questions that underpin this research did not emerge from a 'vacuum space', but from real experience working with students, teachers and other stakeholders in music learning and music-making contexts, while also engaging in continuous dialectic questioning about wider issues related to the instrumental music teaching system as a whole.

In the first years of my professional career, as both a teacher and school manager in primary and secondary levels of education, I was convinced of the positive pedagogical strategies and practices that were being followed by myself and by most of my colleagues. Nevertheless, after a few years, I reached the conclusion that the system was designed for so-called 'talented' students, leaving behind most of those who were not included in that category. However, **even in the case of those students designated as talented and 'successful', some signs of inadequacy of the teaching system were revealed**. In my professional context, this was evidenced by demotivation and dropout or, in the case of students who completed their formal training in the school, a lack of continued involvement with music making after graduation. Despite these problematic issues, most of the students seemed engaged in the school's educational project[2] although, as it was later revealed, not for musical reasons.

Despite the lack of statistical information regarding the number of students engaging in formal music education in Portugal[3], as a pedagogical director of a music school I reached the conclusion that after the implementation of the *Reform of the Specialised Artistic Teaching System*[4] in Portugal, after 2009, the percentage of students that were not 'aligned' with the goals and

1 In the writing of the thesis I tried to make a separation of voices according to the methodological tools I have used. That is why a graphic distinction is made to highlight a permanent dialogical tension between the perspective of a more distanced researcher and that of a more implicated teacher.

2 'Educational Project' is a document that, among other aspects, states the values and mission of the school and presents the pedagogical and artistic guidelines.

3 In order to obtain information about the statistical data of students attending formal music education I contacted the office responsible for these studies (***Direção de Serviços de Estatísticas da Educação*** [Education Statistics Services Directorate]). According to this organisation, 'the number of students attending artistic education in ***articulated*** and ***supplementary*** regimes is not ascertained', providing information regarding only the ***integrated*** regime, which represents a very small percentage of the system.

4 Legislation: Portaria n.º 691/2009 de 25 de Junho in https://dre.pt/application/conteudo/491967

> teaching practices of the system[5] increased significantly to represent the large majority of students in the school where the field project was implemented[6]. With increasing awareness of this situation, I concluded that a personal, but also systemic, transformation was essential. Therefore, in parallel with my deep reflections on what should be the values and goals of music education, **the departure point for this research was a critical analysis and reflection concerning the 'new' rationale for a transformative and inclusive instrumental music education, with corresponding new roles assigned to the music teachers.**

Many potential complementary and wider benefits of engagement with music and music education have been highlighted. Music educators and researchers refer to aspects such as enhanced verbal and visual memory, spatial reasoning, self-regulation (Hallam 2015, 103), emotional benefits, character-building and life skills, social benefits (Campbell, Connell and Beegle 2007, 1), linguistic skills (Gordon 2011, 1), general attainment, creativity, and social and personal development (Hallam and Creech 2010) or the enhancement of the profile of a school or organisation (Swanwick 1999, 2). Notwithstanding these arguments in favour of music education, the research reported in this thesis was underpinned by the assertion that, by themselves, wider benefits are 'not enough to justify music in an education system [nor] do they provide a rationale for teachers or other musicians who know that what they do is significant' (Swanwick 1999, 2). The position defended in this thesis is that music learning, in its wider sense, should be valued by its impact 'in cultural reproduction and social affirmation but also [with] potential for individual development, for cultural renewal, for social evolution [and] for change' (Swanwick 1999, 22).

Some Western music education systems are perceived, by several authors, as being anachronistic in relation to the interests, needs and learning characteristics of the school populations they serve (Hargreaves, Marshall and North 2003, 156; Jorgensen 2001, 347; Mantie 2015, 178). In particular, this happens from the age of adolescence when, in a process of self-knowledge and autonomy development, students may not be prepared to assume the level of commitment required by their instrumental teachers and, after years of parenting influence, start to gain a greater control over their choices (Campbell, Connell and Beegle 2007, 226; Galvão 2006, 170; Sloboda 2005, 311). Some music teachers are often still convinced of the exclusive merits of the Western classical teaching tradition and the superiority of classical music in relation to any other musical language (Sloboda 2005, 271; Wright 2018, 18), even when musical genres and contexts associated with what Westerlund calls 'the popular music culture' (2006, 123) are chosen by students to engage with music outside of school contexts (Campbell, Connell and Beegle 2007, 2; Jones 2008, 5), these being more in line with their listening interests[7]. Reacting against (and not really reflecting upon) some resistance from students to engage in formal music education, some schools

5 The conclusions of a study conducted in three Portuguese music schools (Sousa 2003), previous to the implementation of the ***Reform of the Specialised Artistic Teaching System***, point to a gap between what music schools offer - curricula, study plans and programmes whose aim is to train future professional musicians – and the interests of the majority of the students that do not want to pursue a professional career as a musician. The author reports that the students were not willing to invest the amount of time required by the music teaching system, this being the cause of lack of motivation and anxiety (Sousa 2004, 29). According to the results of this study, that was focused on the factors of formal music education dropout, only 10.6% of the students reached the secondary level of education in music (Sousa 2004, 27).

6 Despite the lack of known research evidence, it is a personal belief that the same happens in most of the Portuguese music schools and conservatoires.

7 Although this research has not addressed the musical interests of the participants in the field project, empirically I argue that these are not very different to what several western authors designate by 'popular music' (Hallam and Creech 2010, 330; Westerlund 2006, 123).

try to implement processes of change in an arguably superficial manner, for example by adding 'other' musical genres to the curriculum – *modified* multicultural curriculum (Elliott and Silverman 2015, 449) – without really transforming the values, principles and practices that underpin and frame the teaching and learning process, focusing solely on the piece of music instead of its specific 'ways of learning' (Westerlund 2006, 120). A consequence of such initiatives is 'frequently [giving] the appearance of change without really changing' (Ramberg 2014, 361).

In summary, the key issues raised in this introduction intend to present a perspective of the context where the research was undertaken, reporting a general adherence of instrumental teaching to the values and goals of the Western classical tradition. It is argued that, despite being socially accepted by policy makers and community, formal music education has a limited impact among some students engaging in instrumental learning, and it is advanced as a possibility that replicated practices and musical languages do not take into consideration the students' interests. Not wanting to obscure or minimise the achievements demonstrated via student recitals or orchestral and choral programmes of excellence, the main concern of this research is with creating the conditions for meaningful music-making for those students who have been disenfranchised within traditional formal approaches to instrumental music education, bearing the mark of poor and/or irrelevant musical experiences that they will carry throughout their lives, and that will have implications for their musical identity and for their continued engagement in making music (Salvador 2015, 222; Sloboda 2005, 186). **One of the goals of this research is to problematize and make visible aspects that are, often, blurred or overshadowed by the success cases of the system**.

0.1.2 Research in music education

Although research in music education has been influenced by fields such as philosophy (Bowman 1998; Elliott and Silverman 2015; Reimer 1995), psychology (Gardner 1983; Hallam 2015) and neurophysiology (Reybrouck, Eerola and Podlipniak 2018; Schiavio, Menin and Matyja 2014), the Portuguese music teaching system (the context for this research), namely in basic and secondary education in music schools and conservatoires, has arguably remained almost unaffected by progressive movements in education. There seems to exist a permanent tension between those 'who see themselves as responsible for upholding revered standards of the past' and others who intend to promote effective changes (Kratus 2015, 345). Empirical evidence in music education in Portugal (in particular in the context of instrumental music education) suggests that, as said by Gert Biesta (2009, 37), some stakeholders, the ones 'who benefit from the status quo to keep things as they are and not open up a discussion about what education might be', refuse a critical position regarding music education. Perhaps conditioned by 'strong artistic personalities' (Gaunt 2007, 224), some music teachers assume that 'anyone can teach' (Elliott and Silverman 2015, 111), adopting 'a transmission model of teaching and [being] limited to the propagation of a culture of conformity and the passive absorption of knowledge' (Giroux 2011, 5). The academy 'has remained isolated, resistant to change, and too frequently regressive rather than progressive in its approach to undergraduate education' (Sarath, Campbell and Myers 2014, 2), favouring instead the perpetuation of values and practices associated with the Western classical conservatoire culture[8]. Instead

8 The values, goals and practices associated to this traditional model are described in detail in the section *classical conservatoire culture*.

of intervening according to the increasingly heterogeneous individual and contextual characteristics of the pedagogical settings and assuming that 'teaching occurs not in isolation but in relation to students' (Elliott 1995, 251), instrumental music teachers tend to replicate 'past practices, including traditional notions of music teacher identity' (Woodford 2002, 676).

This permanence of most Western instrumental music education systems within the Western classical conservatoire tradition made them largely disconnected to some educational movements in the 20th century, characterised by progressive educators such as John Dewey, Célestin Freinet, Maria Montessori and Paulo Freire, among others. Although the number of music educators aligned with critical pedagogy principles increased towards the end of the 20th century, questioning some of the traditional values and practices of music education, there still remain contexts where the focus of research and teacher training programmes is largely to better that which had already been done, 'perfecting the explanations' (Bingham, Biesta and Rancière 2010, 3).

Although increasingly influenced by cognitive sciences, much research in music education is still based on musical analysis, historical research or performance studies (Reybrouck 2012) or, to obtain a teaching degree, didactic skills, often referring to methods like *Orff*, *Kodály* or *Suzuki* that were created for specific individual and social contexts. Criticising what he calls 'traditional research in music', Reybrouck (2005) highlights the narrowness of the subject matter, focusing on the Western canon of music, and the fact of dealing mostly with second order stimuli. In the same line of thought, Colwell (2005, 10), referring to Apple (1996), criticises the lack of critical questioning by music educators about schooling and society, spending their time 'fiddling at the edges or with issues of limited importance'.

Pedagogical action based on methods and 'prescriptions' to be followed by teachers favours the perpetuation of a status quo that has been perceived as potentially dangerous to the future of music education (Myers 2008; Tregear, et al. 2016). Framed by a teacher's positionality that favours the adoption of critical reflection and action, the line of inquiry of this research assumes that, **before engaging in the discussion of methods or contents, it is important to boost the critical thinking skills of music teachers, preparing us to discuss the values and goals of music education that include, but are not limited to, musical and technical skills.** Arguably, this wide approach to the role of the teacher, approximated to what Elliott calls 'educatorship' (1995, 252), will prepare music teachers to respond in-context to the challenges of our professions and to deal with 'banking' approaches to teaching or, as stated by Michel Foucalt, engaging in 'the art of not being governed' (1978).

0.1.3 Researcher positionality

My starting point for this research was a humanistic and democratic view of education, as defended by authors like Freire (1983), Elliott (1995) and Allsup (2003), whereby, through a process of 'self-understanding through other-understanding' (Elliott 1995, 293), students are thought to benefit from a central role in learning and teaching activities, and where their active participation in learning is highly valued. Arguing against a *neoliberal* view of education, these issues are linked to *constructivist* and *critical pedagogy* principles (Bingham, Biesta and Rancière 2010, 21; Elliott and Silverman 2015, 299; Giroux 2011, 7). Regarding instrumental music teaching practices, as Elliott

> (1995, 235) I question the myth of 'music-as-talent' ingrained in the Western *classical conservatoire culture*, believing and defending the idea that all people can benefit from learning to play an instrument, and have the right to engage in relevant and meaningful musical experiences. From this perspective, **music education should not be seen as a way to identify, select and nurture the best students who, in the future, will pursue professional careers as performers.** In this respect, Robinson (2011) criticises the incoherence of a rationale in education where general investment is made in subjects such as maths, languages and sciences for all, even if students will not pursue professional careers in those fields, but, by contrast, investment in the arts is considered justified only for students identified as being talented.

With regard to music teaching and learning practices, this thesis is underpinned by what David Elliott (1995) calls a *praxial* approach, valuing the students' active and autonomous participation and musical creation in different activities instead of focusing solely on the performance of Western music repertoire pieces from the 18th and 19th centuries. This perspective argues against some practices characteristic of the *master-apprentice*[9] (or *apprenticeship)* approach to the pedagogical relationship (Burwell 2012; Cope 2002, 94; Schiavio and Cummins 2015), where the teacher controls the process by stating the goals and 'how they should be attained' (Westerlund 2006, 120) and the students assume a passive role (Wright 2018, 18), sometimes having to 'customise their learning to the teacher' (Carey and Grant 2015, 9). According to research about this teaching relationship, the focus is on doing, rather than knowing (Burwell 2012, 278), usually through the repetition of motor gestures to achieve technical mastery (Cope 2002, 94), working against the students' independence, autonomy and ownership of their learning (Bowman 2009, 151; Gaunt 2007, 125; Swanwick 1999, 93).

> Another important facet of researcher positionality is concerned with music learning in music schools and conservatoires, acknowledging a gap between 'institutionalized musicality' and 'everyday musicality' (Cavicchi 2009, 99–100). Being convinced of the merits of non-formal (Bois-Reymond 2003) or even informal education (Green 2008), my perspective is underpinned by the pragmatic belief, also defended by Swanwick (1999, 32), that formal instruction systems based in music schools and conservatoires are the main points of access for learning music in Western countries, and that is necessary to address dialogically the tensions between formal school-based pedagogies and non-formal instrumental learning.
>
> The final important point of positionality is regarding my role and outlook as a researcher. In most research projects in which I have been involved, I always felt the need to be completely immersed in order to understand the whole process, to learn and be transformed by it. In this research, although a literature review could be considered enough to provoke the beginning of a personal transformation, I felt the need to 'get my hands dirty' and to put myself at risk in an unfamiliar position as a teacher. This is in line with what is defended by Freire (1996, 77), assuming that we, as educators, 'cannot be in the world with gloves in [our] hands', being necessary an approach that 'implies decision, choice, intervention in reality.'

9 Although this discussion regarding the apprenticeship model is, most of the time, associated with one-to-one instrumental teaching, the same questions and discussions can be transferred to music making in groups.

'Ninguém pode estar no mundo, com o mundo e com os outros de forma neutra. Não posso estar no mundo de luvas nas mãos constatando apenas. A acomodação em mim é apenas caminho para a inserção, que implica decisão, escolha, intervenção na realidade.' (2008, 77)

To conclude, and in line with the researcher positionality and perspectives outlined above, I am aware that the considerations and perceived outcomes of this thesis have been constructed and must be understood within a specific context and through a personal lens framed by my previous experiences and beliefs. For those reasons, any kind of direct transposition to other pedagogical or relational contexts without a previous critical approach could be considered insufficient. **The main facet of this research that can be seen as transferable to other pedagogical settings is the undertaking of a project with students without assuming hierarchical control, responding and reflecting *in-action* and *on-action* to the students' behaviour and requests, 'practising' what Sawyer (2004) calls 'improvisational performance'**. The challenge was even higher when the proposed goal was to engage in fields and creative activities that, as a teacher, but also as a musician, I have never experienced, exposing myself as I have never done in other contexts where I teach what I know. This approach was inspired by what Rancière's Jacotot found out in his teaching experience: that the method followed should be the 'student's method' and that it is possible to teach what we do not know as long we emancipate ourselves by believing in the capacity of the students, creating the conditions within which they may learn intelligently and autonomously and, by doing that, also emancipating them (Rancière 1991).

0.1.4 Final remarks

Summarising this introduction, this investigation is framed by: 1) **the belief that a music teaching system should give all children the possibility to develop their musical abilities and interests**; 2) the empirical and evidence-based literature suggesting that **the current music teaching systems are not having good results for the majority of students involved in formal education;** and 3), in response to 2), **the desire to transform teacher practices**. I am not devaluing the immense relevance that the traditional Western classical instrumental music education system has had and continues to have for many people. However, recognising that the majority of students in Portuguese music schools 'are not prepared to make the level of commitment required for a professional music career' (Sloboda 2005, 311), if we intend to evolve into a system that increases the relevance for all its users, we must acknowledge a problem in our practices that is threatening the existing teaching system. According to Kratus (2015, 345), 'the perceived responsibility to the past has restrained efforts to change music education' and, for that reason, we need to question the nature of the 'conservative institutions, defenders of proud and rich traditions' (Tregear, et al. 2016, 277) that have resisted any attempt to change and transform them into institutions that can be more adequate to the students' needs and interests. This way, we can use this perceived problem as an opportunity, by thinking critically about everything that involves music teaching and the learning process (Tregear, et al. 2016, 277). It is important to question **what kind of training (or should we ask: what kind of education?) we want music schools and conservatoires to provide, how to increase the relevance and authenticity of the students' music making** and, in parallel, **how to train future professional musicians and music teachers for the new challenges they will be required to address in their professional lives**.

0.2 Ignition and motivation

My decision to engage in research was not driven by academic motivations or professional requirements, but by a personal need to engage in a profound questioning of my own teaching practice. As a school manager, it also implied questioning the widespread practices of the whole Portuguese music teaching system.

0.2.1 The first moment of ignition

The first moment of ignition, and my initiation into structured questioning and research, occurred after 15 years of teaching and coincided with the discussion and implementation in Portugal of a *National Reform of the Artistic Education Teaching System*[10]. Despite some positive aspects of that Reform, mainly its role in prompting widespread discussion concerned with artistic education in Portugal, I was in complete disagreement with the principles, the methodology and the main conclusions of the study (Fernandes, Ó and Ferreira 2007) that gave ground to the implementation of the Reform. In my professional view, the data and the fundamentals for the study were politically driven, with a biased validation of the results used by the Government to justify a top-down political intervention in artistic education, the main impact being felt on the administrative, curricular and financial aspects. Despite some good intentions regarding widening the reach of the system, increasing the number of children accessing artistic education, one of the main political goals was to raise standards and qualification levels. In my professional capacity, I observed that this goal to raise standards was achieved artificially, for example by changing the conditions required to advance grades or the conclusion of basic and secondary courses or by creating an accountability system that conditioned schools to raise qualification levels, that had a direct impact on the level of Government funding for the following years[11]. This may be interpreted as an example of the phenomenon described by Robinson, whereby 'political initiatives to raise standards in education are making matters worse' (2011, 15).

Although engaged in the questioning of the whole system, my initial research interests were a direct consequence of the observation of my own teaching environment, recognising positive outcomes in the crossing between formal and non-formal musical learning environments, addressing possibilities of implementing this blended learning in formal music teaching. The first decision I had to take was regarding where I should seek additional training that could help me engage in a self-reflective process. Having as initial training a performance degree as a cellist, the logical option was to look for training in the music department of a university. However, I realised that, given the characteristics of the Western *classical conservatoire culture* and its dominance in the type of research undertaken in these universities, it would be difficult to engage in relevant discussions because, in those institutions, I would be in the 'eye of the storm'. Consciously or not, in these institutions the status quo was maintained

10 Legislation: Portaria n.º 691/2009 de 25 de Junho in https://dre.pt/application/conteudo/491967

11 I do not disagree with some guidelines determined by the Reform. What I question is the success of its implementation propagated by policy makers and some music educators, by focusing solely on the 'tip of the iceberg', validated by some statistics.

when, instead of questioning the problems of the system, traditional pedagogies and curricula acted as the 'old master' (or 'la Vieille') referred to by Rancière (2002), neutralising the capability of the students (future music teachers) to learn and reinforcing the 'banking model' of education criticised by Paulo Freire (1970). For these reasons, I took the decision to move away from higher music education to seek a wider and more holistic view of the educational system and perspectives that were not so conditioned by the normalised and crystallised beliefs and practices of the classical music tradition. This led me to seek training in the field of educational sciences, undertaking post graduate studies, engaging in discussions about general education philosophies and policies, but always addressing the concrete reality of my professional context, making me confront a wide range of problems and contradictions in the music teaching system. This experience opened my mind to the need to make a critical approach to my teaching and school management practices, developing a research topic that was focused on the importance of the school context, mainly its non-formal aspect, and relational settings as promoters of the students' motivation and active participation (Costa 2010).

0.2.2 The second moment of ignition

The second moment of ignition to continue my investigative path happened following some findings of the previous research. Many of the young instrumental students in 'my school', although apparently extremely motivated, stated that the main reasons to remain in formal contexts of music learning were, among others, the excitement of playing in public, being part of a music group, to be applauded in concerts and to be with friends in environments that promote relaxation and conviviality. **According to the students, learning music was not what really motivated them.** The most striking moment was when one of the students who had been in the school for more than 10 years stated that only after that period, music started to make sense for him: '...throughout all these years ... the music begins to make sense in my life ...' (Costa 2010, 33 – Annex D). Based on the students' testimonies, I concluded that:

...it is possible that these students enjoy being in the music school only because they have discovered in this environment a context conducive to social relations (their "tribe") and experiences from which they have been building meanings. The musical sense, that is, the moment when the object of study by itself begins to make sense [...] only happens after about eight to ten years of learning and [after being] subjected to an intense level of preparation followed by an artistic experience (solo recital) that is emotionally remarkable and that is the completion of an important cycle. From this experience, according to some testimonies, 'the music begins to make sense'. Until this moment, the main reasons that lead students to enjoy being in the music school are not directly related to the subject of study (Costa 2010, 86)

This awareness, that is not exclusive to the Portuguese reality (Swanwick 1999, 91), had a huge impact on me, not only as a teacher but also as a school manager. Contrary to the argument proposed by Sloboda (2005, 185) that 'the positive experience has to come from the music itself', music was not the main reason to continue investing in music learning and some students

even affirmed that they did not really like music classes. As important as this awareness was, the fact remained that most students who 'endured' this situation of not being motivated by the music itself some years later achieved a high level of musical proficiency and some of them became long-term music practitioners or even professional musicians. **Was the solution to compel students to remain in the system for enough time to 'make sense' of music? And how long is 'enough time'? More than one decade? Is this really acceptable in today's society?**

Although some may accept this process of delaying musical rewards, I decided that I should not be complacent with this view of education with its focus on future reward, whereby hard work on the part of students leads to good grades, good grades lead to good course results, a good job and a high salary in the future. From this view, students spend a large part of their lives in environments where the rewards and meaning associated with learning are constantly deferred. Such delayed gratification seems to be related to what Rubem Alves calls 'the progressive installation of torture processes that children and adolescents have to undergo, taking all the joy from the experience of learning' (Alves 2005, 78).

'Observo a progressiva instalação dos processos de tortura a que crianças e adolescentes têm de se submeter, tirando toda a alegria da experiência de aprender'

0.2.3 Engaging in research

The awareness that students do not see musical meaning in their experiences framed my current 'problem': **should we, as music teachers, be comfortable with a practice that, although very relevant to a small group of students, is not reaching or is not relevant to the majority of the students involved in formal music education?** This overarching question led me to research the possibility of accessing more rapidly the *musical sense-making*, perceived as a way leadoff leading to more meaningful musical experiences in earlier stages of music learning. As in the first structured research, I felt the need to displace myself from the 'comfortable spaces', including higher education in music and educational sciences. The search for a different perspective more in line with the artistic medium and its specific discussions and concepts led me to the field of Artistic Education where, although almost diametrically opposed to what were my previous training experiences, I engaged with completely different questions and from alternative perspectives. The most relevant forays into the field of artistic education included critical social theory, politics, philosophy and aesthetics, helping me to make connections to issues that, although distant from my initial training, were intrinsically connected to my research interests. Therefore, although it seemed clear to me what my research interests were, I recognise that the initial intentions were also re-framed by the immersion in new discussions, by reading new authors and by connecting with new people.

0.3 Overview of the thesis

This research argues against an uncritical adoption of a national curriculum where teachers are merely technicians and/or 'script-followers', that compel them to teach exactly the

same content and in the same way independently of the real teaching context. Empirical knowledge supports my belief that Portuguese instrumental music teachers defend and apply willingly this model, subscribing to the static 'work concept' of musical knowledge and the idea that, if the strategies are applied to all students in the same way, and if those students practise enough, the results will be the same for all independent of their contextual background.

Assuming the limitations of a research project developed in a very specific context with a small number of students, the main goal is to describe a process of transformation of practices, including the pedagogical relation, musical languages and musical activities, to try to understand how students can attain musical sense-making or higher levels of music understanding. The second goal is to 'map' the path of a teacher that relinquishes well-rehearsed pedagogical approaches aligned with the more traditional settings, transitioning to a more horizontal relational approach where the students and teacher are required to adopt new roles. In both cases, and framed by critical and constructivist principles, there is no method or strict plan to follow, the process being exploratory and experimental. These intentions can be translated by the following research questions: - **What is the student and teacher experience of encountering musical sense-making?** and - **What are the implications in that process of the pedagogical relationship, musical activities and musical language?**

Besides this introductory section (*prelude*), this thesis is divided into five parts that represent: 1) the *research background* and *literature review*; 2) the *methodology(ies);* 3) the description of the *implementation of the field project* and *data analysis;* 4) the *discussion* of the main themes and *possibilities for the future of music education* and 5) the *Coda*, including the limitations and implications of the research.

0.3.1 PART I - Research Background and Literature Review

In this first part of the thesis, the goal is to address the themes and questions that form the basis of, and clarify the *positionality* and *system of values* of the teacher-musician-researcher, regarding education in general and music education in particular. Adhering to the principles of *social constructivism* (Dewey 1916; Freire 1970; Giroux 2011; Lampert 1997; Sawyer 2004), different concepts of *schooling*, both in general and in music education, are addressed. A critical approach to the *classical conservatoire culture* is also undertaken, whereby it is argued that this approach may not have positive results for the majority of students engaging in music learning in formal contexts. I highlight the necessity of contextualising the system, addressing its main characteristics and the aspects that are perceived as incompatible with the current students' characteristics and interests.

In part one I also present some themes that were relevant in developing and structuring the field project implemented with students, including ***meaning making*** and ***musical experience***, but also, regarding musical skills and knowledge, the intimate concepts of ***musical sense-making, musical understanding*** and ***musical fluency***, among others. These last concepts are central to this discussion, and are, perhaps, the most difficult ones to address and access in the students' work, as they are deemed, sometimes, to be in an 'in-between' state.

I also introduce other themes that emerged during the implementation of the exploratory field project, namely associated with ***resistance to change***, the ***process of change*** and also ***the role required of the teacher*** in order to deal with the difficulties arising from this resistance.

Despite being guided by what seemed to be a clear philosophical and methodological stance relevant to an exploratory approach, the field work needed a basis from where to start. Being myself, as a teacher and musician, 'ignorant' about many of the activities and strategies proposed by the *praxial* approach that was adopted to engage students with music making, I implemented concrete activities to derail the students' preconceived ideas about music making in groups. Arguably, some proposals (activities, relational settings, musical goals) could contribute to a positive transformation of the music teaching system, namely by focusing primarily on authentic music making - 'teaching music musically' (Swanwick 1999) – and asking the students to adopt a more active role in their own learning (Prince 2004). Some concrete activities included improvisation, sound exploration, creative and more structured composition, arrangements, performance and conducting, as suggested by Elliott (1995). This *praxial* philosophical approach also includes other relevant links with the social and musical world outside the music school and other elements that can contribute to *meaning* and *sense making*.

0.3.2 PART II – Methodology

In this part, the goal is to focus on the 'how', starting by making clear the methodology (or methodologies) followed in the research. The methodology section will be divided into three different dimensions: 1) ***research methodology***, 2) ***intervention methodology*** and 3) ***writing methodology***. I felt the need to make this separation due to the different roles I assumed in this research: teacher, researcher and artist, to which I can also include, among others, the roles of artistic and pedagogical director of a music school. Although this can configure an incursion into an *A/R/Tographic practice-based research* paradigm, given the fact that the artistic dimension, although existent, is not widely developed in this research, this methodological concept will not be developed in the thesis. It was clear, from the outset of the project, that questioning needed to be addressed by consideration of different points of view, creating internal discussions between the different voices, and articulating contradictory feelings and perspectives through a *dialogical process* that, as Biesta (2013) puts it, understands education 'as a process in which people learn together through interaction and dialogue' (6), as opposed to a *monological approach*, characteristic of a banking model where the learning is reproductive and the 'truth is learned from the teacher'. (72)

In summary, the ***Research Methodology*** frames my work as a researcher from a more 'distanced' view of the researched objects (myself included), the ***Intervention Methodology*** describes the way I planned, as a teacher, the work with students and also my roles during the sessions and, to articulate all the different voices, the ***Writing Methodology***, using a *polyphonic writing* approach where 'ideas and images *emerge* rather than a space where facts are merely collected, reiterated and arranged' (O'Donnell 2015).

0.3.3 PART III – Outcomes of and findings from experiencing a *praxial* music making context

In this part the goal is to report the field project with students, initially by stating its main goals and intervention methodology whilst also highlighting all the doubts and changes in the implementation that resulted from it being an exploratory and experimental project. Given those characteristics, and that it was a longitudinal project carried out over an extended period of time, it was divided into several phases that were being decided concurrently the implementation, in a clear *cyclical and iterative process*, characteristic of a critical and transformative positionality. The important goal of understanding both the processes of the students' *musical sense-making* and, in parallel, the multidimensional changes in the teacher, central to the implementation of the project was, besides empowering all the participants to be actively engaged in a transformative process, the need to guarantee that at all times all the voices were heard and registered for future analysis, whilst also having a relevant and immediate impact on the implementation of the project.

It was clear from the outset of the research that the results of the field project would be difficult to assess and evaluate. Having this premise in mind, with the triangulation of the varied set of data sources my goal was: 1) to evaluate what kind of changes the teacher had to undertake to match the challenges created by the research, 2) to know if the students, after engaging in *praxial* music making experiences, became more conscious about the different dimensions included in musical knowledge and if they were better prepared to use the musical language in an autonomous and meaningful way, and 3) to know what kind of didactical and musical initiatives could help to increase students' awareness of the creative process in music making and promote significant and meaningful musical experiences. However, as it will be seen, other themes emerged during the implementation of the project, that had a direct impact on the data analysis and that, in some cases, raised other discussions to be addressed in future research.

0.3.4 PART IV – Discussion and Possibilities for the future of music education

The final part of this thesis is where all the voices, perspectives, experiences, contexts and approaches are synthesised. Due to the intended democratic, collaborative and participatory nature of the research and the following of a cyclical model, with the intention of developing all the participants' critical skills, the data analysis referred to in Part III already incorporates discussions that emerged and evolved during the project's implementation. As the project unfolded, these emergent discussions informed the (semi-) structuring of its subsequent steps. In this part of the thesis, the goal is to focus on the most relevant overarching outcomes, engage in deeper levels of discussion around the implications of the main themes, and also discuss possibilities for the future of music education.

Always assuming *schooling* to be the 'best available' model with which to engage in music learning, **a parallel goal proposed for this research was to ascertain in what way the outcomes could contribute to changing the existent music education paradigm in Portugal**. Although not intending to make a list of recommendations to be applied without self-reflecting in different contexts, in the final part of this chapter some possibilities that may be relevant within formal music education settings will be addressed.

0.3.5 PART V – Coda

This section will include some comments regarding the main outcomes of the research, addressing them from the perspective given by the extensive time period separating the field project from the writing of the thesis. Furthermore, it will present an evaluation of the perceived transformation resulting from participation in this research experience, addressing personal and professional dimensions, and also potential future impact, namely by acknowledging a personal positionality in relation to the Portuguese music education system and also advancing with possibilities for future research.

1. PART I
Research Background and Literature Review

The themes chosen for background literature did not emerge, as said before, from a 'vacuum space', but from a real experience of more than 25 years of working with students. My responsibilities as a teacher and school manager led me to undertake a critical stance regarding my context that, since the beginning of my path as a music student, and even compared with my initial experience as a teacher, underwent a significant transformation. This critical perspective framed my views regarding music education and other aspects related to society and art, and conditioned the choice of themes for the background literature. Engaging in a self-reflexive process, I confronted dissonances and contradictions between the discourses and practice in the field, exploring them through a polyphonic writing approach throughout the thesis.

The central themes of this research are related to *Education* and *Music Education,* yet several other fields are intimately connected, namely *Philosophy* (of *Education*, *Music Education* and *Art*), *Sociology*, *Pedagogy*, *Medicine* (especially the latest studies on *cognitive science*) and *Psychology*. Not being possible to address all these themes in depth, in this part of the thesis I will focus on the aspects that, on the one hand, 'ignited' the research and, on the other hand, are directly associated to all the stages of the field project (planning, implementation and evaluation).

Having as a goal the promotion and achievement of transformation on several levels, most of what will be highlighted in this part will focus on perceived negative aspects of the Portuguese music-teaching system, including the curricular guidelines, values, goals and teaching practices. However, it is important to stress that the Portuguese music-teaching system is seen as extremely positive and relevant by some students engaging with music in formal music education institutions. Anecdotally, many music teachers and school managers perceive the system as mostly positive but, I argue, that evaluation is framed by values and goals for music education that will be contested throughout this thesis, being also questioned by researchers, at least since the second half of the 20th century.

I was not able to find in research what I could consider to be critical perspectives on Portuguese music schools and conservatoires, mainly referring to the role of the teacher in basic and secondary levels of education, which led to the option of resorting almost exclusively to non-Portuguese authors. Although acknowledging that those authors refer to social and organisational contexts that have significative differences in comparison with the Portuguese music-teaching system, I argue that some parallels between different systems can still be made, the most important being the lack of engagement of many music teachers in a critical confrontation with the, for some, unquestionable merits of the Western *classical conservatoire culture*.

The literature review presented in this chapter is dedicated to the themes that make explicit the research background as perceived by me, as researcher and teacher, also focusing on the critical approaches to education in general and music education in particular. Some characteristics of the Portuguese educational system (highly aligned with neoliberal teaching practices) will be addressed, with an incisive focus on a music teaching system that I perceive to be in compliance with the *classical conservatoire culture* and resistant to

a process of transformation made from within. Focusing on critical approaches to music education, the authors and concepts presented here represent 1) the positionality and the clarification of my personal system of values regarding education that framed this research and 2) the planning of the field project with students, projecting and accompanying its implementation in all stages.

> At several points personal inputs will be inserted during this chapter. This is justified by the fact that the themes approached here were the basis, or as a result, of the field project with students and, for that reason, a personal voice will contribute to a better articulation between themes.

1.1 *Context of the Research*

> *There is little evidence to show that school music provides meaning for the majority of pupils*
> (Finney 1999, 237)

In the last four decades, there has been a gradual movement in order to 'merge' music education with general education. For that reason, in order to clearly map the context where the research was undertaken, I will address aspects related to the *classical conservatoire culture* as presented by Sloboda and other authors that, arguably, shares many features with the Portuguese music-teaching system. This introduction brings forward some of the most relevant dimensions of a 'cultural lag' (Kao 2007) between the music teaching practices of the *classical conservatoire culture* (Sloboda 2005) and the constant societal changes. The last large study that focused on the Portuguese artistic teaching system was carried out in 2007, but the main focus of the study were the public conservatoires that represented a small part of the system (6 public schools among 98 private schools) (Fernandes, Ó and Ferreira 2007, 142). Owing to the implementation of the reform that followed that study, the music teaching system changed considerably and, for that reason, a characterisation of the system in the present is a pressing need.

1.1.1 Portuguese music-teaching system

In Portugal, formal music education can be provided from preschool to the secondary level in three main systems: general education, professional (vocational) education and specialised education. In general education, from preschool to the 2nd cycle of basic education (11/12 years old) music is a part of the curriculum (in some cases it may be extended to the 3rd cycle – 14/15 years old). In preschool, music education is highly valued and often assumes a central part in daily activities. However, when the students enter basic education, where teachers either do not feel competent to engage in musical activities or are pressed to reallocate the time for artistic expression to more 'essential' fields like maths and the Portuguese language (Alves and Martins 2015, 119) or, as Robinson (2011, 23) ironically states, 'the useful band' of the curriculum, music education is practically absent. Still in general education, government educational policies created 'curriculum enrichment

activities' in the 1st cycle of basic education to keep students in the school after the end of the curricular activities. In most cases, music is one of the subjects included in these activities[12].

The Portuguese music-teaching system allows students to enter professional education[13] from the age of 12 years (3rd cycle of basic education). In this case, although the curriculum contains general subjects, the students' training is mainly focused on artistic subjects and, in the case of music education, overvaluing individual technical training and orchestral work[14].

Children and youngsters (from 6 to 18 years of age) who want to learn music also have the possibility of entering the specialised music education system, that includes music schools and conservatoires. The lack of a public offer of specialised music education in most regions led to the creation of agreements between the Portuguese government and more than a hundred private music schools and conservatoires all over the country, financing students' formal music education partially or in full, depending of the attendance regime. In this system, students can opt for one of *integrated*, *articulated*, *supplementary* or *free*[15]attendance. The difference between the *integrated* and the *articulated regimes* is that, in the former, all curricular subjects are taken in the same school or conservatoire, whereas in the latter the music subjects are taken in the music school and the general subjects in general school. For both integrated and articulated regimes, in basic education the general curriculum is slightly reduced, while in secondary education the focus is on music education and the students only maintain the common core of general subjects. In these regimes, the musical part of the curriculum is totally financed by the government and students need to maintain their musical and general education in parallel.

In the *supplementary regime* there is no link between the students' general and artistic education. Although the musical curriculum is almost similar to the integrated and articulated regimes, in this case the students' general curriculum is not reduced and they can have more flexibility regarding their academic evolution. In this regime, some students are financed partially by the government.

The last possibility is the *free regime*, more similar to non-formal educational settings and without fixed curricula. In this regime students are not financed by the government, do not have any kind of formal certification and, contrary to what happens with the other three regimes, that can be only attained in schools recognised by the Portuguese Ministry of Education, many non-official schools and other institutions of the community provide this kind of teaching.

The main aspects transversal to these music teaching regimes are the valuing of the classical culture practices, including the focus on technical skills and the reproduction of

12 In this thesis I will not address the 'curriculum enrichment activities' that, despite some positive experiences, I see as a problematic programme regarding its fundamentals, teaching settings and practices, and outcomes. Despite being 'promoted' as a political measure that intends to guarantee equal opportunities, this is one of the clearer examples of the institutionalisation of children, as criticised by Illich.

13 In this work I also do not intend to make a deep evaluation of music education in the Professional (vocational) Education System. However, I believe that, despite very relevant outcomes regarding the level of Portuguese musicians, the values at the base of this type of teaching are almost opposite to the values of a holistic and humanistic education defended in this thesis.

14 This is a personal opinion that, most certainly, will be violently argued against by many of whom defend this kind of teaching.

15 As a clear denomination shared by the different countries about these types of attendance does not exist, I decided to make a literal translation of the terms used in Portuguese.

European works from the 18th and 19th centuries, and the *master-apprentice* pedagogical setting. Another important aspect, framed by the concept of 'talent', is that, according to the law, except *free regime*, students need to audition to enter. They have to undertake 'aptitude tests' to assess their musical and motor skills, being placed in a serial list that selects the 'best ones' to enter.

1.1.2 *Classical conservatoire culture*

> *Tradition is not the worship of ashes, but the preservation of fire.*
>
> Gustav Mahler

Introduction and overview

Classical conservatoire culture (CCC) was the term used by Sloboda (2005, 369-371) to frame a set of practices that reproduce, without significant changes, the early times of the *Conservatoire de Paris*, being still prevalent in most curricula of present-day music schools. Arguably, many characteristics of the CCC are not adequate to the needs and interests of current students and are not training future musicians for the challenges they will be required to undertake as professionals. Regarding a permanence in tradition, Kratus (2015, 343-344) affirms that there are no significant differences between the courses of study in 19th and 21st century conservatoires: 'extensive private instruction focusing on a single instrument or voice in the classic tradition, extensive conductor-led large ensemble or opera experience with 19th century repertoire, some piano study, multiple years of theory emphasizing written notation and solfege, and the historical study of European music literature'. According to Sloboda (2005, 278), some of the most relevant teaching characteristics in the CCC include: '(a) a concern with accurate and faithful reproduction of a printed score, rather than improvisation or composition; (b) the existence of a central repertoire of extreme technical difficulty; (c) definitions of mastery in terms of ability to perform items from a rather small common core set of compositions within a culture; and (d) explicit or implicit competitive events in which performers are compared with one another by expert judges on their ability to perform identical or closely similar pieces, such judgments forming an important element in decisions about progression and reward within the culture'.

In more depth, some aspects that are ingrained in this traditional approach include: a focus on **individual behaviour achievements** (Allsup 2003; 2016; Dent and Goldberg 1999; Tregear, et al. 2016) where learning follows a **linear evolution**, from simple to more complex exercises or pieces of music (Allsup 2003; Elliott and Silverman 2015), valuing **a work-concept of knowledge** that neglects to acknowledge situation-specific contexts, especially the characteristics and needs of the learners (Allsup 2003; Hargreaves, Marshall and North 2003; Nichols 2011). Aiming to prepare (the best) students for engagement in professional orchestras or opera companies (Kratus 2015, 344), the most visible aspect in the CCC is an investment in **individual instrumental tuition** and in **large ensembles** (Kratus 2007; Nichols 2011; Randles 2015), focusing in parallel on the development of **reading and writing music notation skills** (Allsup 2003; Benedict 2012; Cope 2002; Creech, Papageorgi, et al. 2008; Kratus 2007), **specialised performance** (Dembo and Seli

2004; Elliott 1995; Webster 1989) and **music theory or musical formal knowledge** (Allsup 2003; Elliott 1995; Qi and Veblen 2016). The context is characterised by **hierarchical settings**, where the teacher, whose **self-identity was constructed as a musician** (Ballantyne, Kerchner and Aróstegui 2012; Dent and Goldberg 1999; Nichols 2011), **exerts total control** in a **master-apprentice relationship** (Gorzelsky 2009; Schiavio and Cummins 2015; Tregear, et al. 2016; Westerlund 2006).

The recognition of a 'gap' between the practices of education systems and the 'real world' habits, needs and interests of children and young people is a position shared by a wide number of authors in the field of music education (Campbell, Connell and Beegle 2007, 7; Jones 2008, 5; Nichols 2011, 4, 23; Sloboda 2005, 342, 369; Silverman 2015, 254; Swanwick 1999, 32, 89). There is a permanent tension between these authors and stakeholders and policy makers that defend that 'music is inaccessible, unachievable, and, therefore, an inappropriate or unnecessary subject for the majority of school children' (Elliott 1995, 235). Criticism is not exclusively directed to policy makers but also for music teachers and others who have responsibilities in the implementation of the system, leading Elliott to affirm, quoting Charles Fowler, that 'our profession has not made an effective case for music education' and questioning if, regarding some dimensions, 'Might we be the cause of some of our own problems? Could we be our own worst enemy?' (Elliott 1995, 300). This possibility is reinforced by Colwell (2005, 3) who refers to 'a lack of professional scepticism [and] little "critical" reflection on methods, materials, scholarship, research, or service' in the field of music education.

Traditional music education prioritises the development of technical skills (Boyce-Tillman 2013, 30; Custodero 2007, 78; Johansen 2020, 256; Sloboda 2005, 9) as a path to achieve a greater level of musical proficiency, musical understanding and relevant experiences. In this respect, Brøske and Lysne (2020, 232) state that the 'skills paradox urges for a constant discussion on how personal motivation and love of music interacts with technical skills, instrument-specific knowledge, and traditional craftsmanship'. According to McPherson (2005, 7), to reach the mastery level as musicians, experts undertook 'vast amounts of practice over a period of more than 10 years' and, in the same line of thought, Daniel Coyle (2009) stated that mastery in a given field (sports and arts, for example) requires about 10,000 hours of practice in a ten-year period. However, later, the same author criticised those who applied this rule just thinking about quantity of time, proposing as alternative to the '10,000-Hour Rule' the '**10-Minute Rule**'. According to the author, this new rule has three main elements: '1) Focus: pick out a target skill — a single chunk you want to work on; 2) Super-high intensity; 3) Rest: only do it when you're fresh. If you're exhausted, quit.' (Coyle 2013).

Sloboda (2005, 371) states that the Western *classical conservatoire culture* can be 'vibrant and valuable [but] just won't do for the majority of our children'. However, after many years of investment, sometimes motivated by extra-musical rewards, children can start to see meaning in their musical learning, finding the 'spark' that motivates them to invest time in the development of technical skills needed to participate in activities that depend on high technical achievement (Costa 2010). One of my main concerns as a teacher and as a pedagogical director has been the large increase in the number of students who drop formal music education in the transition between the basic and secondary levels. There are a number of possible reasons for this, starting with a group that Sloboda (2005, 311) calls the 'happy' dropouts, those who leave formal music education because they have other interests and are not willing to invest their time and effort in learning music. Other reasons for abandoning musical training are: 1) a type of teaching that does not motivate

the students who experience 'a difficult transition from the unreflexive and intuitive modes of musical thinking characteristic of children to more analytical and self-critical modes of adult thinking where what once seemed easy […] appears to "fall apart" and become problematic' (Sloboda 2005, 311); 2) a competitive context that is based on the 'talent' concept, conveying the message to a lot of the students that they are not musically gifted or that they do not have the necessary skills to continue learning music; and 3) a reduction in the funds available for those who want to keep investing in music learning but are not intending to purse a professional career[16].

> In Portugal, the system is based on a pyramidal structure[17] that selects students from the moment they try to enter the system (through musical and motor aptitude tests) and, as they evolve in musical training, selects the 'best' students to reach the higher levels and who, ultimately, can become professional musicians. For the large majority of those who decide not to invest in professional careers in music, the system, for different reasons, may not be giving an appropriate answer. Based on empirical knowledge I can affirm that, for the majority of students in the music teaching system, music itself it is not rewarding (Costa 2010), and it does not make sense to them, even after several years of immersion in music learning and music making (is it really music making?).
>
> To call something 'traditional', as in the 'conservatoire tradition', is not necessarily negative. However, I argue that the perpetuation of this 'classical tradition' is problematic if not accompanied by complementary measures to align it with the specific contexts (individual and social) in which music education occurs. Regarding the music teaching system in Portugal, its efficacy or success can be assessed from two very different perspectives. If the 'lens' is more in line with neoliberal principles, Portugal has a very efficient system evidenced by an increase in the number and quality of Portuguese musicians over the last two decades, winning prizes in international competitions and performing as soloists and in orchestras around the world. However, if the focus is on the total number of students who undertook formal music teaching in music schools and conservatoires, the results are disappointing, with anecdotal evidence suggesting that the majority of students have abandoned the system at different stages of their musical development, without experiencing meaningful or relevant musical experiences.

One of the problems identified by several authors is that **many students do not see their learning in formal music education as relevant**. Campbell, Connell, and Beegle (2007, 232) referred to students who 'complained of "boring classes," "boring music" (repertoire) […] and classes whose teachers used skill routines in regimented fashion with little variation from one class to the next', and Swanwick (1999, 89) noted that 'very rarely can students be said to be having a musically authentic experience', leading to a separation between what the music students learn and do in the music school and what they engage with in the 'real world' (Nichols 2011, 4; Swanwick 1999, 33). Swanwick (1999,

16 In Portugal, attending formal music education at the secondary level, even in the cases where students are partially funded by the government, implies tuition fees that many families cannot pay.

17 In the study conducted by Fernandes, Ó and Ferreira (2007, 148), in the school year 2004/2005 the number of students attending the 2nd and 3rd cycles of basic education (5th to 9th grade) in 78 private schools was 6453 (ca.1290 per grade) and the number of students in secondary education (10th to 12th grade) was 1058 in total (ca.352 per grade). Although lacking statistical information regarding the current situation, my informed analysis is that this ratio between the number of students undertaking basic and secondary education has increased considerably.

88) also refers to 'negative attitudes to school music on the part of pupils', with the result that, according to Sloboda (2005, 311), 'many promising adolescents never […] reach the highest levels of musical excellence'. Similarly, Salvador (2015, 230) states that, 'a few' students recall positive musical experiences when they were young children or in the first years of adolescence, but to many students the system conveyed the message that 'they were not musicians, [these students being] the ones who did not get solos, were always in last or second-to-last chair, were told their voices were not "special", were asked to mouth the words, and so on' contributing to the image of school music as 'an exclusive space, in which a student was identified and/or identified herself by a non-quality or a negative: in terms of what she was not'.

Empirical evidence supports the view that even among the students who reach high levels of technical and musical mastery, formal music education is failing in the attempt to promote lifelong engagement with music making (Campbell, Connell and Beegle 2007, 6; Kohn 1992; Mantie 2015, 178; Swanwick 1999, 33-34). For example, Mantie and Tucker (2008, 218) state that the profession's conceptualisation of music teaching in music schools 'militates against lifelong participation and engagement with music', and Swanwick (1999, 34), refers to 'little sign among adult communities of [the] continued engagement' of students that undertook formal instrumental and/or choral school programmes. In the same line of thought, Sloboda (2005, 186) reinforces that traditional teaching systems and practices, that are inhibitors of creative behaviours, mark most of the children as 'unmusical' and that 'negative events almost invariably (85% of cases) had a negative influence on the subsequent involvement of these subjects with music.' Despite this, some students 'are found engaging in highly expressive and creative forms of music behavior outside the formal classroom culture, be it involvement in playground games involving singing, or in the formation of peer-organized groups, using popular forms such as pop, jazz, or folk' (Sloboda 2005, 292).

Problematizing the values and practices of a tradition

A critical approach to teaching and research encourages me to explore, in this research, possible paths that can contribute to the 'activation' of my teaching context. Although seeming somewhat utopian, this is an attempt to go against the perpetuation of a system that does not work for the large majority of students and risks reducing significantly the number of students that will be motivated to engage, in the future, in formal music learning.

In this critical approach to the traditional values and practices in music education, I will address some of the aspects that, arguably, are the main reasons for a static, unreflective and unresponsive teaching system. Among these I include the concept of *schooling*, that is highly conditioned by a neoliberal ideology where education is at the service of market logic, and where *knowledge* is seen as something that can be transferred from teacher to students. This model conveys a concept of infancy, childhood and adolescence that treats students as miniature adults in pursuit of a future reward, this assumption having a relevant impact on the *curriculum* and *teaching practices*.

Schooling in music education and the relevance of broader discourses about schooling

> *Indeed, many aspects of schooling can get in the way of education*
>
> Elliott and Silverman (2015, 453)

Alongside the values and practices of the classical tradition, the Portuguese music education system is also highly conditioned by the requirements and limitations of *schooling*. However, **in this research the goal was not to defend an alternative to the school model, but to explore and to advocate alternatives within the school model to learn music**. While it is difficult to envisage alternatives to schooling in today's model of society, I argue that by transitioning to a more critical and constructivist approach on the part of the teacher, and being permeable to alternative (wider) goals and practices, music making in the school system has the potential to be transformed into more relevant and meaningful musical and non-musical learning experiences. **Addressing alternatives within the school model, my intention is to problematise the relationship between music education and *schooling*, namely by advancing some possibilities to bring to the school features more associated with non-formal and informal settings**.

The roles and functions assigned to the schools in the Western world have increased considerably, transforming education and the school systems into arenas for ideological and political discussions (Bois-Reymond 2003; Giroux 2011). In comparison to previous generations, children, young people and adults attend formal education settings for much longer periods of time[18], this being a visible aspect of a neoliberal view whereby it should be the goal of schools to respond to the constantly renewed requirements of labour markets (Bois-Reymond 2003, 5).

Besides the increase in the number of years in formal education, Portuguese children also spend increased time in organised activities. Some activities and educational roles that were previously assigned to the families or to the local community transitioned to the schools' sphere, transforming the school into a kind of 'benign asylum' (Elliott 1995, 301). In opposition to this model, and claiming that students should engage in educational experiences outside the school, Illich (1972, 9) defends that 'schools are the wrong places for learning a skill [and] even worse places for getting an education', this being more problematic in a society where 'not only education but social reality itself has become schooled.' Similarly, this dependence on the school for child development diminishes the existence of the child outside the school's influence: 'the child [becomes] a schoolchild.' (Dekker, et al. 2012, 6).

The domination made by the neoliberal ideology in Western educational systems in the last three decades of the 20th century (Allsup 2016; Elliott and Silverman 2015; Ramberg 2014; Wright 2018) led schools to value individual achievements and quantitative targets,

18 For example, the percentage of the population resident in Portugal between 30 and 34 years of age with a tertiary education degree rose from 9,8 in 1998 to 36,2 in 2019. (https://www.pordata.pt/Portugal/População+residente++segundo+os+Censos++com+o+ensino+superior+-completo+em+percentagem+da+população+residente+total+e+por+sexo-677)

viewing education mostly as preparation for a professional career, thus putting an emphasis on vocational training. Neoliberal discourses about education highlight collaboration, perspective taking, social justice, and equal opportunities, among other humanistic values (Austin 1990; Bingham, Biesta and Rancière 2010; Kohn 1992), but Elliott (1995, 304) stresses the contradictions between these discourses and real practices, saying that 'while the ideals of education are primarily concerned with the whole child, including matters of self-development, integrity, social competence, cultural awareness, tolerance, and creativity, the functions of schooling are not.' By deferring the preparation of students to participate and assume an active voice to the future, education, politics and society are seen as separate units, placing 'education before and outside of democracy' (Bingham, Biesta and Rancière 2010, 75). In the same vein, Masschelein (2000, 614) reinforces that 'society does not exist only at the end of education', defending that 'education is the space and time that society gives to itself to reflect on itself'.

Despite the generalised attendance by the majority of children in a given society being a relatively recent phenomenon, there is general consensus that 'school' is one of the major human rights[19]. Schools are also seen as a positive development indicator of modern societies[20], being used by political regimes and societies to accomplish an increasing variety of roles. A simplistic dichotomy between the 'good' and the 'bad' impact of school in society can be represented by the extreme visions of Comenius (17th century) and Illich (20th century). Comenius, author of 'Didactica Magna' and one of the proponents of universal education, saw school as the 'salvation' of the human race and believed that school should be capable of teaching everything to everyone (Comenius 2015, 35). From this viewpoint, most families and communities were not seen as being competent to teach their children, giving the 'state' that moral responsibility. By contrast, addressing this 'salvation narrative' regarding schooling, that Catarina Martins also finds in some speeches regarding art education (2013, 74) and Popkewitz and Gustafson (2002, 82) in the specific case of music education, Illich states that *school* has become 'the world religion of a modernized proletariat [that makes] futile promises of salvation to the poor of the technological age' (Illich 1972, 6).

While an in-depth analysis of educational models in different historical periods is beyond the scope of this thesis, a common feature shared by some progressive movements in this field was a critical approach to their own times and places, this being evidence that the goals, values and concepts that give ground to the educational practices are conditioned by the social *zeitgeist*[21]. The main demands made to school models in the last century were related to academic development and vocational training (Elliott and Silverman 2015, 456) but, depending on the epoch, place or personal positioning, these concepts meant different things. For example, according to Giroux (2011, 7-8), liberal and conservative approaches to education prioritised 'training future workers […] to promote economic growth and global competitiveness […] helping students find a good fit within a wider

19 The Article 28 of ***The United Nations Convention on the Rights of the Child*** recognises (1990) 'the right of the child to education'. Although not always explicit, the premise is that this should be achieved through schooling, referring to 'primary and secondary education', the need to 'take measures to encourage regular attendance at schools and the reduction of drop-out rates' and 'to ensure that school discipline is administered in a manner consistent with the child's human dignity'.

20 For example, the ***Organisation for Economic Co-operation and Development*** (OECD) addresses issues like 'the impact of learning across countries; access, participation and progression in education; the financial resources invested in education; and teachers, the learning environment and the organisation of schools', among other dimensions. (in http://www.oecd.org/education/education-at-a-glance)

21 Robinson (2011, 178) defines ***zeitgeist*** as 'the spirit of the times, the ghost in the social system, or what Raymond Williams has called the 'structure of feeling' of a time.'

market-oriented culture of commodification, standardization, and conformity [treating students] as customers and clients rather than a civic resource'. Opposing this educational, philosophical and pedagogical approach, Giroux (2011, 4) presents an educational model with wider goals, enabling 'individuals to wield power, learn how to govern, and nurture a democratic society.'

Besides the two goals of schooling referred to above (academic development and vocational training), the roles, functions, missions and goals attributed to school have been continuously added to. Research in the field refers to aspects like self-development, integrity, social competence, cultural awareness, tolerance, creativity, allocation, custody (Elliott 1995), the reducing of inequalities (Bingham, Biesta and Rancière 2010), socialisation and the transmission of particular norms and values (Biesta 2009), participation and communication (Dewey 1929), social responsibility, political awareness and action (Giroux 2011), the development of logical or deductive reasoning and the transmission of "'bodies of knowledge' (Robinson 2011), with the promotion of democratic values being one of the ultimate goals referred to by all the previous authors.

> Music education in Portugal offers two different models that, depending upon one's perspective, can be considered opposite or complementary regarding their goals, values and practices: 1) holistic education for everyone (general education) and 2) the focus on individual tuition for the 'talented' (classical tradition). It is my belief that the attempt made by the Portuguese music-teaching system in combining the goals envisaged for each one of the models is not achieving the best results. This happens because **both models suffer from a 'cultural lag'** (Kao 2007, 101), being incapable of adapting to the current conditions of society.

Given today's organisation of educational systems, music education is part of a wider concept of education based on a model labelled as *schooling* that exerts an important and increasing influence on today's music education systems (values, goals and practices). Contrary to what happened until a few decades ago in Portugal[22], when the prevalent models of learning music were non-formal or informal (in the family, in the community, between peers or in an isolated *master-apprentice* relationship), currently most children start to learn music in a school context, this often being the only way to have access to formal music-learning experiences.

Research in the field refers to 'various types of disconnection between school, community, and homemade music making around the world' (Silverman 2015, 254) in which musical experiences, as products of a subculture, are not rewarding and authentic, leading many students to look for new ways to engage with music making that do not imply thousands of hours and long years of individual technical training (Swanwick 1999, 31-33). According to Hallam and Creech (2010, 330), to increase the relevance of musical experiences, music in schools must integrate 'music from children's own homes and cultural backgrounds' instead of favouring 'a new amalgamation of cultural practices' conditioned by administrative and control requirements such as 'class timetables, notions of achievement and pedagogical organization, theories of childhood, and standards that weave music performances with notions of redemption and salvation' (Popkewitz and Gustafson 2002, 82). Other critiques on schooling state that students' lives are sacrificed 'to curricular aims that exist abstractly, somewhere "out there" in some far-distant future beyond students'

22 Only after 1983, with the publication of a policy document (Decreto-Lei n.º 310/83 de 1 de Julho in https://dre.pt/pesquisa/-/search/452686/details/maximized?jp=true), private institutions were granted the possibility of accepting music students financed by the government.

current motivations' (Elliott and Silverman 2015, 133), where students experience less of world less, resulting in an educational impoverishment. This narrowing of diversity can lead to hegemonic discourses and uniformity (Biesta 2013, 123), leading Schmidt (2005, 3) to argue in favour of an alternative model for music education that can contribute to the elimination of the 'great schism between [the students'] music and school music'.

Critical approaches to the *classical conservatoire culture* refer to 'single and narrow activities repeated to no real purpose, shallow musical involvement, student failure and alienation during undifferentiated activities, social exclusion by a narrow repertoire, and little or no room for student contributions to the musical transaction' (Swanwick 1999, xi). This leads to the 'problem of school music' where 'music is unsuccessful, unimaginatively taught, and out of touch with pupils' interests' (Hargreaves, Marshall and North 2003, 156-157). One of 'the problems' referred to above is the prevalence of hierarchical and power relations, whereby among the most problematic aspects is the attempt to 'colonise' the students' musical tastes (Heuser 2015), and not taking into account their learning characteristics by controlling all the steps of the learning process (Engeström 1987, xix).

My analysis of the Portuguese music-teaching system leads me to ask: ***is school the best place to learn music?*** Answering this question implies taking a wider view of the contexts where music making is seen as relevant by its practitioners, including garage bands, church music, community choirs, folk groups or others (Elliott and Silverman 2015, 15; Mantie 2015; Salvador 2015, 220; Westerlund 2006). The use of new technological means, allowing people to participate in activities such as covering, arranging or remixing (Tobias 2013, 30) is an example of a rapid transformation with a high impact in music education. These alternatives to the school model seem to resonate to what Weber (2008) called 'the decline of musical apprenticeship as a formal institution'. Despite this, with the argument of it being necessary to maintain the focus on the development of the musicians' technical skills, the apprenticeship model still remains as a main feature of traditional teaching (Burwell 2012, 278), this being related to a certain conception of knowledge and the best way to achieve it.

The concept of musical knowledge

> *'Knowledge' in the verbal sense was seen as the key to the future, and schooling was seen as the means of distributing the key.*
>
> David Elliott (1995, 301)

The concept of knowledge has a wide range of meanings according to different authors and contexts. I highlight the opposition between two of the most important for this research: 1) **a positivistic and cognitivist conception** of what knowledge is, being independent from the context and from the subjects (Schiavio and Cummins 2015, 4; Wright 2018, 18); and 2) **a constructivist conceptualisation** that assumes that knowledge is 'discovered through dialogue and experienced in and with the world' (Schmidt 2005, 3). Ken Robinson (2011, 7) exposes a fundamental misconception of the concept of *knowledge*, affirming that there is a confusion between 'academic ability' and 'intelligence', the practical consequences being a prevalence of 'testing systems, examinations, selection procedures' that convey the message to many students that they are not intelligent or, at least, as intelligent as others. Robinson (2011) defends an alternative conceptualization of knowledge that he relates to ***creative achievement***, refusing the traditional view that makes a separation between theory

and practice and between body and mind (131). Following Dewey's holistic approach to learning and knowledge, Robinson (143) criticises school models by overly emphasising 'deductive reason and propositional knowledge' in school's curricula where there is distinction between the subjects 'that are thought to promote intellectual development, including the sciences, and those to do with emotions, notably the arts'. Robinson associates creative achievement with a multimodal way of thinking that includes 'playing with ideas and trying out possibilities' (133) requiring a 'control of the medium' (131) and involving 'many different mental functions, combinations of skills and personality attributes' (137).

In summary, the neoliberal view of knowledge is politically and economically driven, training students for the labour market, promoting an individualistic rationale that conveys the idea that intellectual ability is a synonym for intelligence 'rather than as aspects of it' (Robinson 2011, 64), leading to the devaluation of other types of intelligence in the school system. As opposed to neoliberal education, critical pedagogy defends that learning is essentially a social, collaborative and dialogical movement with the goal to transform, through humanistic values, all those involved in the pedagogical relationship. Elliott and Silverman (2015, 84) state that 'music is, fundamentally, a socially situated human endeavour […] a social *praxis* [and] a people-centered artistic-social-cultural endeavour'. The authors criticise the contexts in which the concepts of *music* and *pieces of music* or *musical products* are undifferentiated and where the value of those products lies in the combination of their internal elements and is 'sealed in the structured sound properties of "the music itself"' (Elliott and Silverman 2015, 66-67). Similarly, Schiavio and Cummins (2015, 1) criticise a conception of musical knowledge or cognition that is seen as an intellectual ability, that leads to 'disembodied and ungrounded teaching modalities' because it is focused on 'properties and relations independent from the subjects' instead of a cognitive process that is constructed by the learner (2015, 5).

The conception of musical knowledge has implications for the way traditional music education bases its practices, focusing on dimensions like **reading skills**, having access to select repertoire, **technical work**, preparing students to perform the pieces from that repertoire accurately, and **focusing on information** about the works of music and their composers (Elliott and Silverman 2015, 112; Kratus 2015, 343-344; McPherson 2005). Sawyer (2004) argues against the implementation of scripted curricula by script readers (teachers), thus transforming students as knowledge consumers instead of creators, 'practising' a concept where knowledge is static and unchangeable. This is in line with authors that criticise the lack of critical analysis of preconceived notions where knowledge is based 'upon syntactic intricacy and technical excellence alone' (Schmidt 2005, 5), giving students 'a limited view of what music is and how it functions' (Swanwick 1999, 91). Also ingrained in the *classical conservatoire culture* is what Sloboda (2005, 312) calls one of the myths of music education, in which 'musical achievement depends upon the pre-existence of a rare inherited quality "talent"' or, according to a similar view, that 'music making is fundamentally i*naccessible* to most because "musical ability" is something that only a few infants are blessed with and all others are not' (Elliott and Silverman 2015, 454). This 'romantic myth of music-as-talent' (Elliott 1995, 235) leads the school systems to categorise students according to their 'innate' characteristics. By contrast, Gardner (1983) argues that music is a type of *intelligence* that can be nurtured, defining *musical intelligence* as the capacity to solve musical problems in context. So, according to this view, 'every person has the conscious powers necessary to make music and to listen for music competently, if not proficiently' (Elliott 1995, 235), being musical knowledge 'a basic aptitude which is shared by almost all human beings' (Sloboda 2005, 312). Widening the concept of musical

knowledge, a *praxial* approach to music making argues against dualistic separations ingrained in some contexts where, for example, thinking and feeling, knowing and doing, and reflection and practice are seen as separate (Elliott and Silverman 2015, 103-104). This dualistic view also divides mind and body (Nichols 2011; Schiavio and van der Schyff 2018; Walker 2000), separating technical work from musical work, leading to an emphasis on skill-drilling over 'expressive, educative, and creative music making' (Elliott and Silverman 2015, 53).

Curriculum in the CCC

Curriculum is one of the main instruments of the school model, its main ancient characteristics being the separation of knowledge content into different disciplines and a *Tylerian* behavioural and objectives-based approach[23]. Considering that traditional *curricula* are instruments of control of the education systems envisaging conformation in different dimensions, their formulation allows the assessment of what is at the base of educational policies (Biesta 2013, 121; Elliott 1995, 245; Nyberg 2015, 6). Control is exerted over teachers and students by the adoption of 'teacher-proof curricula', a set of laws prescribed by national policies (Swanwick 1999, 89), ensuring that all teachers teach and all students learn the same subjects in the same way (Giroux 2011, 10; Sawyer 2004, 12).

Some criticisms made of 'conventional curricula' apply also to music education, namely the *Tylerian* behavioural curriculum approach, the separation between disciplines, and also a mechanistic view of the teacher's role (Colwell 2005, 11; Elliott and Silverman 2015, 395-397). These issues are linked to a conception of curriculum that is closely related to content, understood by many instrumental teachers to be a list of repertoire pieces (Kratus 2015, 344), being conditioned by an 'instrumental ethos of the school' concerned with focusing on the musical product (Small 1977, 216). This approach reduces the time which students spend engaging in active music making by shifting 'from active participation in creative *musicing* to the passive consumption of preformed objects' (Elliott and Silverman 2015, 398-399).

Despite the prevalence of traditional approaches, in recent decades some alternatives to curriculum making have been explored. Elliott and Silverman (2015, 447-449), although refusing this as a rigid categorisation, suggest a distinction between: *assimilationist music curriculum* ('characterized by an exclusive concern with the central practices of the western European "classical" tradition'); *amalgamationist curriculum* (incorporation of practices of a limited range of microcultures into the classical tradition); *insular multiculturalism* ('curricula that select musical praxes exclusively on the basis of students' cultural affiliations'); *modified multicultural curriculum* ('musical praxes are selected for study on the basis of local or regional boundaries of culture, ethnicity, religion, function, or race'); *dynamic multicultural (intercultural) curriculum* ('music curriculum as a reflective practicum'). These curricula ask different approaches from the teachers, ranging from a total denial of the students' cultural identity to a constructivist approach.

Elliott and Silverman (2015) argue in favour of a *dynamic multicultural (intercultural) curriculum*, it being closest to the *praxial* principles by valuing the real context where

23 Elliott and Silverman (2015, 395) describe the Tylerian model of curriculum as following a linear process in four steps: '(1) state the objectives (or ends) of learning in specific terms, (2) select learning activities (or means) in relation to one's objectives, (3) organize learning activities in relation to objectives, and (4) develop means of evaluation in relation to ones objectives', focusing on the transformation of the students' patterns of behaviour in order to achieve the stated goals.

teaching and learning occurs, but also promoting the engagement with 'unfamiliar music cultures' (449) and by placing 'the teacher-as-reflective practitioner at the center of curriculum development' (406). According to the authors, a curriculum with these characteristics 'is interactive (not linear), context-dependent (not abstract), and flexible (not rule-bound)' (407). In some way, this overlaps with the idea of *improvisational performance* defended by Sawyer (2004) (to be developed ahead).

Some recent attempts to transition from traditional practices to this dynamic multicultural curriculum have not been very successful, reducing the level of relevance of some music making approaches by removing them from the real-life context. For example, referring to the opening of traditional teaching systems to popular music, Swanwick (1999, 33) states that 'in order to make itself respectable and to become appropriately institutionalised, popular music has to be modified, abstracted and analysed to fit into classrooms, timetables and the aims of music education.'

> Elliott (1995, 242) affirms that 'for most of the last two thousand years, curriculum has been synonymous with *content* [and] the prevailing assumption about teaching and learning was that students learned content in one way: through a teacher's lectures.' Despite some positive changes in recent decades, what I see in my personal context are some isolated attempts from teachers to explore alternative approaches but, usually, focusing mostly on changing the repertoire, once again revealing an alignment with the view that relates curriculum with content. Although acknowledging a limited impact, this exploration must be valued by revealing a disquietude and an active stance from the teachers.

Related to a certain curricular rigidity is the fact that extra-curricular activities, even if they are more in line with the students interests and learning needs, are considered less important or even irrelevant to the school curriculum, being this belief widely argued against in music education settings (Hallam and Creech 2010; Westerlund 2006). Considering alternative models to schooling, but where learning also happens, it is possible to distinguish between contexts of 'intentional learning as a result of deliberate instruction […] situated and peer-directed learning […] in communities formed around a particular practice […] and informal learning arenas' (Johansen, Holdus, et al. 2020, 1), commonly associated to formal, non-formal and informal education (Bois-Reymond 2003). Especially relevant for this thesis is non-formal education, by perceiving possibilities of implementing some of its characteristics in formal educative systems.

Having critically discussed the most important fundamentals that give ground to traditional curricula, what follows is the identification of some of the concrete aspects that profoundly condition pedagogical practices in the field.

Practice – focus on technical skills

Don't say practice; say play

Chelsea C. Green (2011, 2)

Musicians within the classical tradition value excellence in musical, technical and reading skills, in contrast with other musical languages that value more expressive aspects and activities like improvisation, memory and communication (Creech, Papageorgi, et al.

2008). In the *classical conservatoire culture* many students do not have the opportunity to make an authentic contribution in their instrumental classes (Swanwick 1999, xi; Zander and Zander 2000, 39-40). Likewise, in large ensembles, instead of students being stimulated to be 'reflective musical apprentices-practitioners', the teacher or conductor 'finds, solves, and reduces all musical problems himself or herself' (Elliott 1995, 287). This approach, ingrained very early in instrumental learning, is maintained through all the levels a music student needs to pass before becoming a professional musician or music teacher. However, even when reaching professional orchestras, typically musicians respond to the conductor's interpretation as uncritical 'instruments' instead of as highly skilled, not only technically but also expressively, musicians (Zander and Zander 2000, 68). This passivity leads orchestral musicians to adopt 'infantile and submissive' behaviours, explaining why some orchestral musicians 'experience a job satisfaction level just below that of prison guards' (Paul R. Judy, quoted by Zander and Zander 2000, 68).

Elliott and Silverman (2015) state that the traditional concept of practice 'is commonly thought of as mindless repetition' (443) with the goal to achieve a given passage accurately without having to think about it. These disconnected and acontextual efforts focused mainly on technical and repetitive work can often lead to frustration and boredom (444). Asking students to spend hours studying exercises and scales fit with 'a positivistic understanding of knowledge and its transmission' (Schmidt 2005, 3), this being reinforced by Cope, referring to a study about instrument instruction in Scotland (Hall 1999), stating that playing an instrument is viewed 'as a technical, rather than cultural activity' (Cope 2002, 94). The focus on technical achievement is also related to the second and third myths reported by Sloboda (2005, 312), 'that musical excellence grows from within by solitary effort' and that 'work and pleasure are separate.'

Contrary to this 'technical rationality', Swanwick (1994, 1) defends that we can only learn music through activities that are really musical. Therefore, besides technical goals, music education should value 'communicational, social, inter and intra-personal, linguistic and affective possibilities' to lead students to meaningful experiences (Schmidt 2005, 8), because the contrary to this would be to assume that 'music "learning" is reduced to *training* students' technical, notational, and aural skills, or stuffing learners' heads with abstract concepts about music' (Elliott and Silverman 2015, 112). Schmidt (2005, 5) criticises music education approaches that are based 'on routine activities that do not foster communication […] but upon syntactic intricacy and technical excellence alone' and Green (2011, 3), although acknowledging that 'practice is crucial' argues for an alternative approach, defending the focus on 'playing' instead of 'practicing', affirming that, contrary to what should be expected, 'emphasizing play over practice' is more demanding (Green 2011, 2).

> It is not my intention to question the high level of personal commitment and technical training needed to achieve the so called 'musical competence' or 'technical mastery' (wrongly assumed as similar concepts), this being an important condition for achieving musical fluency (Johansson 2012; Swanwick 1999). What is debated is the overemphasis of this dimension in instrumental teaching, where musical and expressive dimensions are, often, subordinate.
>
> The discussion about the role of technical development is central in the questioning of what do we want to achieve in music education systems and what are the goals for music education in our society. If one of the immediate answers is the engagement of everyone in meaningful music-making experiences, we need to be aware that **the traditional approaches to teaching usually require 'practice levels far in excess of cultural norms**

because of its unique properties with respect to particular instruments and the specific requirements of that culture to master a technically demanding canon' (Sloboda 2005, 293) thus excluding the learners that are not available to invest that amount of time. This awareness forces us, teachers, to decide if we want, or not, to include these students as beneficiaries of our music teaching system and, if we do, to be flexible to accommodate all the diversity existent in our society. Some of the most important aspects to address in this respect are related to competition and assessment practices that have in their fundamentals the intention to compare, select or even exclude students.

Competition

One of the most striking and impactful features of neoliberal education systems is the promotion of **competition** as a pedagogical strategy, a practice that is diametrically opposed to activities based on cooperation and collaboration defended by critical pedagogy and constructivism (Engeström 1987, 25). According to Kohn (1992, 45), competitive approaches promote ***comparison*** between students, for example, making a ***selection*** of the best ones by sorting 'children into winners and losers' setting them 'against each other [and being told] that their success comes at the price of someone else's failure and vice versa […] or, in the stronger variety, only by actively making others fail'. Reinforcing Kohn's words, for Austin (1990, 23) competition 'always produces few winners and many losers; one person's success requires another person's failure', and for Sloboda (2005, 341) the aim of competition is 'weeding out all but the "really talented"'. Even when discourses defend cooperative and collaborative settings[24], the practices contradict those discourses, leading Kohn (1992, 48) to affirm that 'the predominant experience with cooperation in our society consists of having a group of people work together in order to defeat another group of people.'

Despite all the questioning and doubts of maintaining a focus on competition, the class of music teachers 'clings to the tradition of competition and contests with a level of singlemindedness that defies logic' (Austin 1990, 25). Referring to different authors who present some benefits of 'healthy' competitive activities (*motivation*, *group spirit*, *pursuit of excellence*, *discipline* and *sense of accomplishment*, *improvement of performance standards*, among others), Lowe (2018, 80) states that 'no empirical evidence is presented to support these benefit claims'. Austin (1990, 22) highlights the arguments of some authors in favour of *healthy competition*, stating that it is 'an effective means of generating student interest, stimulating students toward higher levels of achievement, measuring students' achievement in relation to that of other competitors, and preparing students for the eventualities of winning and losing in the real world', the contrary to this being to 'wallow in a sea of mediocrity'. Addressing the reasons why research findings and teachers' beliefs and practices are not in accordance, Austin (1990, 22) defends that this is due to a difference in perspective, having, on the one hand, 'competition connoisseurs […] naturally drawn to the excitement and thrill of victory that surround extraordinary performances and winning performers' and, on the other, researchers who are more concerned 'with larger populations that include not only elite performers but also average and struggling

24 Several times in this thesis the concepts of 'collaborative' and 'cooperative' learning were used. Although acknowledging differences between a collaborative setting, where 'the emphasis [is] on student interactions rather than on learning as a solitary activity', and a cooperative setting, usually more structured in order to achieve, as a result of the students' collaborative work, a common goal (Prince 2004, 1), these concepts are used interchangeably in this thesis.

performers.' A problem in music teaching is the existence of teachers who are 'immersed in the race to be number one', using students as objects 'toward validating their own egos rather than toward accomplishing educational goals [investing] a majority of instructional time in high-ability students who, from the teacher's perspective, represent the ticket to competitive success' (Austin 1990, 22-24).

It is not difficult to find arguments in research against the promotion of competition in music education. For example, Kohn (1992), referring to several other authors, states that 'competition typically reduces or retards perspective taking, empathy, and generosity' (50), teaching children that 'other people are potential obstacles to [their] own success' and it 'not only sabotages relationships and undermines self-confidence but also impedes achievement and long-term interest in learning' (45). Sloboda (2005, 341) affirms that 'it is unsurprising that young people are discouraged from participation in an activity where there are so few winners and so many losers', mentioning negative experiences of students in music education contexts and research that 'roundly condemned music competitions for their damaging effects on the development of young talented musicians' (2005, 186). Austin (1990, 23) highlights that activities structured around competitive contexts and events are a motivational failure for the large majority of students and participants because they show those people that 'they are incompetent'. Regarding musical achievements, Kohn, quoted by Austin (1990, 22), says that 'competition does not improve performance quality [and,] on complex tasks that require higher order thinking skills (such as creativity or problem solving), competition may actually interfere with learning and subsequent achievement', stating also that there is 'no solid evidence to indicate that competition enhances musical or extra-musical growth among students' (Austin 1990, 24-25).

Several authors question the inevitability of promoting competition in music education (Lalonde 2013, 22; Mantie 2015, 176; Tregear et al. 2016, 283), leading Austin (1990, 22) to ask: 'Is competition a worthwhile educational tool, or does competition, by its very nature, undermine the learning process?'. Competitive events are a kind of brutalisation and an ethically questionable strategy because it serves the purpose of motivating the 'musically gifted' at the expense of the 'less gifted', their musical self-image deteriorating even more with the reinforcement of their sense of musical incompetence (Austin 1990; Kohn 1986; Salvador 2015). Regarding the impact on music making, Zander says that 'it's dangerous to have our musicians so obsessed with competition because they will find it difficult to take the necessary risks with themselves to be great performers' (Zander and Zander, 31).

Lowe (2018, 90), after conducting a study about large-scale cooperative music ensemble festivals, concluded that '1) competition in music education may actually hinder long term student engagement and motivation [and] 2) competition is not necessarily desired by students'. These conclusions defy some beliefs and practices regarding the use of competition as a strategy in music teaching and learning contexts, being clear that those who have good results in competitive activities can have a great motivation boost, these being 'perceived as being valuable, if not essential, experiences' (Austin 1990, 22). This is why 'some students — typically, those who win frequently — continue to insist that it is the irreducible pleasure of trying to beat other people that they seek', but it is the responsibility of the teacher to be aware of the consequences of its promotion for the ones who always lose (Kohn 1992, 51). For this majority of students, competition can promote negative feelings and consequences and, for the ones who say that 'losing' can be positive and a promoter of growth and the will to do better next time, Kohn (1992, 52) remembers that 'the psychological benefits of failure are often overrated [and] the experience quickly becomes redundant and gratuitously punishing', with a negative impact on the motivation

to continue engaging in music learning (Austin 1990, 23). Mantie (2015, 179), not wanting to assume that competition is inherently good or bad, defends that teachers need to understand and be aware of the implications of using competition as a pedagogical strategy, emphasising that 'when competition becomes the sole *raison d'etre*, participation ends when the competition ends', transforming music making into a temporary activity.

> According to my professional experience, it is clear that competition can have a positive and negative impact, depending on the students. However, my belief is that, at least in the context of primary and secondary education, competition goes against a humanistic view of education. For that reason, I believe that competition should be eliminated from the classroom context because, as Kohn (1992, 50) states, 'any arrangement in which one person or group can succeed only at the price of another's failure is inherently destructive'.

Assessment, evaluation, and grading

Assessment or evaluation practices are one of the main indicators of the values and principles ingrained in a given educational context. Illich (1972, 3) states that students are 'schooled' not to distinguish between 'grade advancement with education [and] a diploma with competence', this having a real impact on the students' immediate and future life (Dewey 1916; Nyberg 2015, 50; Torrance 2007). According to Swanwick (1999, 63), *assessment* is normal in our daily life but, when 'moving away from informal assessment' to the world of school, assessment becomes problematic, this being more evident in the field of arts, where additional research is necessary to assess, for example, musical achievements (Kiehn 2003).

Related to settings aligned with the practices of the *classical conservatoire culture*, Swanwick (1999, 64) describes most of the assessments in formal music education as 'a brief statement, a number, a grade or a degree classification'. Most of the time, *assessment* is confused with *evaluation* or with *grading* (Elliott and Silverman 2015, 418; Nyberg 2015, 50-51) but these are grounded on different conceptions. While *assessment* assumes a more holistic view of the student's learning processes and achievements, namely non-musical skills (Bois-Reymond 2003), *grading* is linked to competitive settings. Although a holistic approach and humanistic view of education and art is defended in educational speech, at the end almost everything resumes to the students' 'grading on a curve' (Kohn 1992), not by assessing their individual achievements but creating a serial list where the best students are highlighted. As a model of evaluation, this seldom gives relevant information for the students, having as its major goal 'student promotion and curriculum evaluation' (Elliott and Silverman 2015, 418). Reinforcing this idea, and referring to Dewey, Nyberg (2015, 52) states that 'in traditional education, assessment was not necessarily used to discriminate among goods [but] as a method for discriminating amongst people'.

Cultural invasion, extension, brutalization and domestication

Another aspect that frames teaching practices in the *classical conservatoire culture* is the belief that 'all Western European classical practices are inherently superior to rock, pop, or avant-garde practices' (Elliott 1995, 210). Despite the introduction of jazz and other experiences in the 'academy', the CCC promotes a monolingualism that is related to 'elitism or high art' that, according to Sloboda (2005, 342), conveys the message that the classical tradition is 'the paradigm and paragon of what music "really" is, and what it is to be a

musician', justifying the control of music education 'by those who have been through a full classical training themselves, since this remains the pinnacle of the musical pyramid' (Sloboda 2005, 369).

The elitism referred to above works against a closer relationship between formal music education and the students' musical interests (Sloboda 2005, 342) and can be inserted in the concept of *extensionist action* and *cultural invasion* presented by Freire (1983). Criticising different practices in society, Freire (1983, 7) presents the concept of *extension* as going to 'another part of the world' to 'normalise it' according to a certain belief system, objectifying people and impeding the creation of knowledge through intersubjective processes. This has a close relation of the concept of *cultural invasion*, denying the students' real-life experiences, including the students' musical interests. Another misconception in music education is that what most educators propose, as Rancière (1991) says, 'is to perfect the dumbing down[25] by perfecting the explanations' (121), and it is because the teacher is 'knowledgeable, enlightened, and of good faith' that he is more effective, the quality of his explanations being that which gives him authority (7). When the teacher imposes a belief system, 'manipulating' students, he creates a relationship of *domestication* disguised as apparently harmless actions (Freire 1983, 53). In relation to this, Rancière (1991, 59-60) associates the *brutalisation* with the 'Socratic method', that defends the existence of only one correct result, or answer, to be achieved. In this kind of intervention, the teacher commands all of the path followed by the 'ignorant' that, at every step, increases his admiration for the 'explainer', deepening the 'brutalisation' when he realises that, alone, he would not follow that path and reach the true knowledge.

'... il est d'autant plus efficace qu'il est savant, éclairé et de bonne foi.'

'O educador, num processo de conscientização (ou não), como homem, tem o direito a suas opções. O que não tem é o direito de impô-las. Se tenta fazê-lo estará prescrevendo suas opções aos demais; ao prescrevê-las, estará manipulando; ao manipular, estará "coisificando" e ao coisificar, estabelecerá uma relação de "domesticação" que pode, inclusive, ser disfarçada sob roupagens em tudo aparentemente inofensivas.'

In summary, in the *classical conservatoire culture*, practices of *extension*, *cultural invasion*, *brutalisation* and *domestication* promote the *monolingualism* of the classical repertoire by ingraining passive and docile behaviour in the students, ignoring or disregarding the musical culture in which they are immersed and viewing as natural the total control by the teacher of the students' learning. Contrary to this, Rancière and Freire defend an active posture on the students' part, with the promotion of their critical posture in order to intervene in their own specific contexts. The final goal should be to *emancipate* students but, for this to happen, teachers also need to be emancipated (Rancière 1991, 15).

Teaching in the *classical conservatoire culture*

Most of what was said above by different authors, although referring to contexts different from my own, resonates with my professional experience as a teacher. It represents my current view about what is at the basis of most music teachers' practice in the field, but I include myself as one of those responsible for propagating some of the principles and practices presented above. However, my critical stance led me

25 Despite this translation in this version, I prefer the word 'brutalisation', being more approximated to the original Portuguese word 'embrutecimento'.

to reject some of those practices or, when conditioned by my teaching context, to be aware of the possible impact of some of those teaching approaches. This awareness leads me to address, in this section, the aspects related to the music teacher identity that, in my professional opinion, is highly framed and even reinforced by current music teacher training programmes.

The music teacher identity

According to Daniel Isbell (2008, 162), when entering college, and influenced by their previous learning experiences as music students, many future music teachers carry 'strong musician identities' that, after a gradual process of socialisation, increase their identity as a teacher but only as a secondary role, considering themselves primarily as musicians. Experiencing the teaching practices of their teachers for many years leads them to 'internalize such roles and attitudes, and make them their own' (Isbell 2008, 163) in a process that Lortie (1975) cited by Isbell (2008, 163), calls *apprenticeship of observation*. Becoming the new *masters* in a pedagogical instructional paradigm, 'arisen from tradition and habit, unquestioned over many years' (Gaunt 2007, 226), new teachers refuse a critical stance and reproduce old practices 'because that is the way it was done in earlier generations' and not due to 'a convincing rationale for maintaining it' (Elliott 1995, 303). Kratus (2015, 344) states that within the *classical conservatoire culture* it is still 'with pride that a violinist can claim that her teacher's teacher's teacher's teacher's teacher's teacher was Paganini' and highlights the way some composers and musical works are revered, making the performer subservient to the perceived intentions of the composer, leading to the maintenance of 'performance practices that existed 100 and 200 years ago'. This approach is clearly represented in the picture by Sempé (Fig. 1), illustrating the *instruction* or *apprenticeship* model of teaching. Commenting on this picture, Swanwick (1999, 92-93) describes the scene as follows: 'The insignificant student is coached by the musical guru who is the mediator between her and the great composer', this being the beginning of a process that will take a long time until the little girl is fully initiated.



Fig. 1
The Music Lesson – Wladimir Hernsingern and Brigitte by Sempé (New Yorker Magazine, January 22nd, 1979)

The *instructional* model of teaching (Westerlund 2006), also designated as the *master-apprentice*, *master-disciple* or *apprenticeship* model, is criticised by progressive pedagogues for promoting 'a linear delineation of power and control over decision-making' (Claire 1993/1994, 23). Westerlund (2006, 120) claims that the *apprenticeship model* does not promote the students' problem-solving skills because 'the only person who knows the top-level goals, who recognizes and solves problems, and who is likely to gain expertise from the process is the teacher'. According to Schiavio and Cummins (2015, 4), the *apprenticeship* model adopts a 'unidirectional view of learning' and is characterised by a process of learning governed by mechanistic principles reduced to (i) *explanation*, (ii) *concrete example by the teacher*, while the learner observes and (iii) *repetition* of the example by the student. In this teaching culture, the students are usually evaluated by the quality of the performance (product). Mainly in instrumental learning, the dependence on the teacher's guidance can lead students to be 'unprepared to develop their own style and take responsibility for their interpretative choices without their teacher' (Schiavio and Cummins 2015, 3), working against a desired increase in student autonomy (Gaunt 2007, 215;).

A mismatch, in some teachers, between what they would like to be doing and what they actually do to earn a living, creates a conflict between their musician/teacher identity that 'can contribute to burnout amongst early-career music teachers' (Ballantyne, Kerchner and Aróstegui 2012, 219). This is aggravated by the fact that some still assume that their main task as teachers is to 'train' future professional musicians, the success in this aspect being perceived as an indicator of effective teaching. Notwithstanding this, some teachers invest in their pedagogical and didactical training, developing skills to work with students and starting to see their teaching activity as meaningful. However, in many cases, the process of identity creation as musician and performer is reinforced because, when musicians make a transition to be a teacher, they often feel that what is recognised is their musical abilities, and not their teaching expertise (Isbell 2008, 164).

Teachers' training

> *Music educators have relied on the thinking of too few to do the work of too many*
>
> Jorgensen (2001, 354)

In 1990 Estelle Jorgensen wrote that undergraduate and graduate courses in music education 'often amount to summaries and distillations of others' ideas, with the result that music teachers acquire a secondhand rather than a firsthand acquaintance with the source materials and, as a result, a superficial understanding of the philosophical underpinnings of music education' (1990, 17). In the same vein, Kratus (2015, 343) highlights the 'stagnation in our music teacher education programs [that] goes back much further than 50 years' as being similar to what was taught in the European conservatoires of the 19th century. Related to this 'stagnation' is the fact that many musicians engaging in other types of music alternative to the classical language are less likely to be accepted in teacher training programmes. In this respect, Koza (2008), cited by Nichols (2011, 6) states a concern about the fact that students from fields other than classical music 'will never be admitted to schools of music' and the ones that undertake music courses are not offered 'culturally relevant pedagogy and content'. The implications of this are that 'in their desire to be good teachers [future teachers will] perpetuate a musical monolingualism that will foster a vast cultural divide between themselves and many of their students' (Koza 2008, 149 in Nichols 2011, 6), transferring to the students and to the society 'the notion that classical music is superior to the popular and folk idioms with which they more naturally identify' (Sloboda 2005, 271).

> Regarding the Portuguese music-teaching system, it is my professional opinion that in recent decades we have been facing a tension between the attempts to maintain the tradition on the one hand, and on the other, the new educational policies that have allowed the entrance of a great number of students that do not fit in the concept of 'talented'. Generically speaking, higher education institutions in Portugal assume two main goals: performance studies and pedagogical courses but, in both cases, graduates can become music teachers. However, in both instances, the different goals are pursued by replicating the traditional models, valuing the interpreter instead of the creator, and favouring the application of didactical approaches or methods in every pedagogical context. When attempts are made in order to question the classical culture philosophy and its implications in music making and teaching,

they are not sufficient to change the deeply ingrained goals and values of music education (Isbell 2008). Being, at the same time, both cause and consequence of a systemic philosophical stance that perpetuates the traditional values, often those who are invited to teach in universities are the best soloists, the orchestras' 'concertino' and section leaders (that were already, as students, more aligned with the practices of the traditional conservatoire). Related to this aspect, Elliott and Silverman (2015, 110) warn that some teachers may think that, because they are talented musicians, 'teaching is something anybody can do with a little experience' and for that reason, there is no need for additional pedagogical or didactical training.

One of the characteristics of some music education programmes is that they 'have essentially looked and functioned the same for generations' (Benedict 2012, 156). A lack of belief of musicians in the pedagogical and didactical training is highlighted by Hallam and Creech (2010, 232) referring to an Ofsted report (2009), saying that 'music teachers tend not to take advantage of opportunities to update their skills and frequently are unaware of current developments'. According to Kratus (2015, 345), referring to a system that is 'mismatched for their own times', music teachers in the 21st century are indoctrinated to have a focus primarily on performative activities 'that discourages individual initiative and encourages following an autocratic leader' and, for that reason, it is normal that they replicate the traditional practices. The same author states that 'it is not an exaggeration to say that the type of music education provided to contemporary collegiate music majors has deep roots in the conservatoires of European capitals of the 19th century' (2015, 343). **Most of the teachers do not know why they teach how they teach**, a consequence of 'their lack of training as teachers or opportunities to reflect, experiment with and evaluate generic learning and teaching issues', and it is more than probable that future music teachers will not question its rationale (Gaunt 2007, 225-226).

One of the major consequences of a misalignment between the training of future music teachers and the current needs of students and schools is that teacher training courses are perceived as ineffective, leading school leaders and policymakers to justify the implementation of teacher-proof curricula 'designed not to educate music students but to prop up unqualified teachers', perpetuating 'unmusical teaching' (Elliott 1995, 252). In this respect, Elliott and Silverman (2015, 241) criticise 'skill-and-drill teachers' obsessed with technical precision who do not foster the students' critical thinking, independence and empowerment to make music, being themselves experts 'in the task of accommodation with the world and not that of its transformation' (Freire 1996, 143). Following these critics, Estelle Jorgensen (1990, 19) states that music educators must examine 'ideas and methods dispassionately, deciding individually and collectively which stances they will adopt, and justifying their decisions in philosophically sound ways'. This implies a more holistic approach that sees *action* and *reflexion*, and *practice* and *theory* as complementary dimensions in teaching practice (Allsup 2016; Freire 1983; Jorgensen 2001; Mezirow 1997).

'Daí o caráter desesperançoso, fatalista, antiutópico de uma tal ideologia em que se forja uma educação friamente tecnicista e se requer um educador exímio na tarefa de acomodação ao mundo e não na de sua transformação. Um educador com muito pouco de formador, com muito mais de treinador, de transferidor de saberes, de exercitador de destrezas' (Freire)

1.1.3 Starting point for research

In recent years I have been participating in several events where I share my view about the Portuguese music education system where I stress the need to promote a systemic change. Although, surprisingly to me, some reactions are positive, many music teachers state that what I present is a mischaracterisation of the system, and that the philosophical approach I defend would lead to a blurring between what distinguishes music teaching in music schools and conservatoires from music in general education. My response to them is that their evaluation of the current teaching system tends to focus exclusively on best students' achievements, concealing or suppressing all the students who did not achieve the goals, namely regarding technical skills and musical fluency.

Notwithstanding what was said above, my belief is that, at a structural level, the Portuguese music-teaching system has the potential to become a reference among most western countries. For this to happen, the path to be followed by all the institutions and stakeholders should lead to an increase in the level of positive impact it has on individuals and in the community, this being the main argument to be used in favour of the generalisation of music education and long-term music practice.

The positioning at the base of this thesis argues in favour of an effective connection between all the different sectors of the music education system. General education, specialised education, higher education and institutions of the community (in formal, non-formal and informal settings) must engage in a dialogue about the general and common values and principles of music education, these values and principles being articulated with the specific and complementary goals and practices of each one of the contexts. What I defend is a more ambitious desire to include all students in relevant music making, by seizing the opportunities given by the unique characteristics of music schools to deepen the students' musical abilities and skills. The intention is also to try to transform a teaching system that, in some ways, is elitist, to a practice that is inclusive, humanist and aiming for a long-term connection with music making. This implies a differentiation and personalisation of the teaching strategies in order to promote, for all students, the same goal of achieving authentic, relevant and meaningful musical experiences independently of their technical and musical levels.

The contextualisation made up to now clarifies the starting point and the motivations for research. The following section presents the themes that are more closely related to what I consider to be a more positive approach to music teaching and some strategies to facilitate the process of change.

1.2 *Critical Approaches to Education and Music Education*

In the previous section I critiqued the *classical conservatoire culture*, the predominant model in some music education systems including, according to my professional experience, the Portuguese *music specialised artistic teaching*. The argument followed in this thesis stems from the belief that the traditional approach to instrumental teaching neglects

the interests and characteristics of the current music school population in Portugal. Arguably, this is contributing to a diminishing of relevance that this type of education has to a considerable part of the students' population. Most of what was questioned about the classical approach to music teaching, including its values and practices, served as a basis for the creation of an alternative rationale that could frame an exploratory intervention with students in a field project.

1.2.1. Philosophy, Critical Pedagogy and Constructivism in Music Education

> *The purpose of philosophy is not to destroy our confidence in our beliefs, but to question our reasons for holding them.*
>
> Roger Trigg in Elliott and Silverman (2015, 29)

At the beginning of the research reported in this thesis some questions related to the role of philosophy in my pedagogical practice were raised: *Regarding philosophical thinking, what comes first? Do we need a philosophy to guide our practices? Or should we develop a philosophy departing from our practices in the field?* After undertaking the field project, it seemed obvious to me that these movements were parallel.

Having started my teaching career accepting willingly what was given to me by tradition, my practice as a teacher and the consequent reflective process led me to search for a 'philosophical place' from where I could reconfigure myself and my teaching practices. This research is the culmination of a personal search for my own philosophy of music education.

Having diagnosed and critiqued the Portuguese music-teaching system, the following section discusses the reasons for – and benefits of – engaging in philosophical inquiry, i.e., the *practice* of philosophy in music education. According to Estelle Jorgensen (1990), 'a philosophy of music education represents a series of tightly reasoned arguments or justifications that explicate the assumptions accompanying or underlying and preceding action' (18). These ideas, ingrained in a given belief system that informs the way we think and act, address the epistemology of issues like knowledge, questions of governance, aesthetic, artistic and ethical questions. With practical implications for music teaching settings, Jorgensen (18) engages in critical questions like: '"Why is music education important in today's schools?" "What musics should we be teaching and why?" "What specific objectives ought we to be espousing as a music teaching profession?" "How should music education be carried forward?" "Who should be responsible for music education?" "Should change be effected in music education, and if so, how can we effect it? If not, why not?"'. With close connection to the question made above regarding the primacy of philosophy or real-life experiences, Jorgensen (19) states that philosophy in music education can be derived **inductively** (evidence-based study of the practice) or **deductively** (through inferred connections with other philosophical approaches). However, a combination of both approaches is suggested, offering 'a potentially rich reward for the development of theory and practice'. In practical terms, the teacher's pedagogical intervention is guided by a given philosophical perspective but, at the same time, that

philosophy is constantly influenced by the outcomes of a reflective practice (19). This active reflective inquiry and solid philosophical ground leads music teachers not to accept uncritically any preconceived ideas, models or methods, equipping them to make informed decisions on which to base their practice in the field and, thus, increasing their power by being focused on issues that are closely related to the real problems of a specific reality (20-21).

Arguing in favour of the development of a philosophical mind, which music teachers fail to adopt, Elliott and Silverman (2015) state that a philosophical inquiry in music education should address aspects like 'the natures and values of music, education, personhood, musical processes (i.e., all forms of music making and listening), musical products, musical-emotional experiences, schooling, teaching, learning, creativity, curriculum, artistic citizenship, and ethical issues related to these dimensions' (13). The authors define philosophy as 'the human process of formulating reasons, supplying evidence, and drawing logical conclusions about a challenging problem' (25) and also reinforce the fact that philosophy must be seen as a social practice that fights against the uncritical assumption of dogmas and common sense (26). Defending the ideas of Paulo Freire. Elliott and Silverman suggest that one of the goals of philosophy is the empowerment of people to reflect upon their own circumstances and understand the belief systems in which they are immersed, being this the path to challenge the power structures in order to achieve a more just society (32).

Wayne Bowman (1998, 10) also criticises teaching practice that 'unthinkingly replicates all unexamined status quo' and advocates for a philosophical and critical posture as the best way to fight against common sense (1998, 5), challenging and renouncing received doctrines and 'the security and comfort of dogma' by exposing inconsistencies and evaluating alternatives (1992, 4). Bowman asserts the need to think about music inserted in a given cultural and social context, classifying as a serious mistake 'the distinction between the musical and the social' (1998, 8), and acknowledges that in music education it is impossible to engage in critical action without having a predefined concept about what the values and goals for making and teaching music should be (1998, 7). Regarding music teachers, Bowman (1998, 11) highlights the fact that 'extensive training in specialized skills is necessary, but not sufficient' and, defends the need for teachers to be 'musically educated', i.e., to adopt a philosophical inquiry stance. Criticising teacher training curricula, Bowman (2015, 44) states that they are 'bloated with how-to courses, largely without consideration of such crucial issues as whether-to, under-what-circumstances-to, when-not-to, and why – to say nothing of foundational issues like the nature and value of music or education'. According to the author, if teachers understand what they do and why they are doing it, engaging with problematic situations instead of accepting aphorisms and slogans as truths, they 'are better equipped to demonstrate and explain the true significance of their undertakings to others' (1998, 9), being more effective in their intervention. However, engaging in the practice of philosophy can also 'confuse and disturb', this not necessarily being negative because 'philosophical inquiry which fails to disturb and disrupt has not truly done its job' (1998, 10). Being familiarised with a wider range of philosophical approaches and their impact on teaching practices distinguishes between teachers that were educated from those that were merely trained. Bowman (1998, 11) defends a philosophical inquiry that promotes **divergence and diversity**, refusing the adherence to any 'point of view without critically examining other alternatives', this being especially dangerous 'in a field where the dominant mode of training is imitative apprenticeship'. Given the multiple forms and functions of music in societies that are in constant transformation, the value of philosophy in music education 'does not rest on its capacity

to arm us with the kind of definitive answers that obtain for all musics, everywhere, for all time' (1998, 9), being the outcomes of the practice of philosophy subjected 'to interpretation, critique, and continual modification' (2015, 49).

Critical Pedagogy

> *Quem ensina aprende ao ensinar e quem aprende ensina ao aprender.*
>
> Paulo Freire (1996, 23)

"Who teaches learns when teaching and who learns teaches when learning"

Critical pedagogy was not a new concept to me when I engaged in this research. I believe that, as a school manager, I was already practising most of its values and principles, but the transference of those principles to my practice as a teacher was much more problematic. I always felt conditioned by the fact of being isolated regarding my diagnosis of the system and the need to operate a transformation and I was not confident about how to do it... and it was that empowerment I was trying to achieve when I engaged in this research!

Before addressing specifically *critical pedagogy*, it is important to make a brief contextualisation of *pedagogy*, a science that is seen as essential in the context of schooling and always assumed as inherently positive. Giroux (2011, 3-4) speaks of an 'increasingly prevalent approach to pedagogy that viewed it as merely a skill, technique, or disinterested method [where students are] shamelessly reduced to "cheerful robots" through modes of pedagogy that embrace an instrumental rationality in which matters of justice, values, ethics, and power are erased from any notion of teaching and learning.' This conceptualisation that sees pedagogy 'simply as a set of strategies and skills to use in order to teach prespecified subject matter' (Giroux 2011, 4), is the result of a certain view of schooling and education that should be subjected to critical analysis. According to my professional view, in some dimensions, the concept of *pedagogy* shared by some teachers is almost in opposition to *critical pedagogy* and is more associated to the concept of *didactics* and the replication of teaching methods. Derived from the Greek word *paidagogos*, that was a slave responsible for taking boys to learn, the current word, *pedagogue*, can also convey the message that learners are passive, being taken by someone who will lead them to acquire knowledge. Associated to this difference of posture between the learners and teachers is the fact that *pedagogy* is associated to the act of teaching and not learning, leading us to constantly refer to 'teaching systems' (as I have done recurrently in this thesis) and not to 'learning systems', denying learners the role of equal contributors to the educative act.

The general positioning assumed in this research is aligned with *constructivist* and *critical pedagogy* principles, that we can insert in a wider *critical social theory* that includes, among others, the fields of *sociology, philosophy,* and *psychology*. *Critical pedagogy* was first known as a teaching approach, but also considered a philosophical and a research positioning, and a social and educational movement against power structures, social domination, exclusion and poverty (Bingham, Biesta and Rancière 2010; Boog 2003, 428; Giroux 2011, 4). According to Henry Giroux (2010), Paulo Freire, who was one of the founders of *critical pedagogy*, highlighted a praxis-oriented educational movement where students were guided to 'develop consciousness of freedom, recognise authoritarian tendencies, and connect knowledge to power and the ability to take constructive action'. Reinforcing this idea,

Giroux (2011, 4) states that critical pedagogy stems from the recognition that education is important for promoting in individuals an awareness of cultural beliefs and practices that will assist them in the construction of a more just, free and democratic society, preparing them to question the basis and manifestations of the 'official power'. Giroux's use of critical pedagogy allows him to question and criticise school models that reproduce social, political and cultural domination based on propaganda that promises jobs, economic growth and, thus, social wellbeing, reducing traditional pedagogy 'to a transmission model of teaching and limited to the propagation of a culture of conformity and the passive absorption of knowledge' (Giroux 2011, 5). Instead, the author values the role of the critical pedagogue as liable to mobilise his or her authority 'against dominant pedagogical practices as part of the practice of freedom', rejecting the 'dominant notions of pedagogy as an a priori method, technique, or rationality that simply has to be implemented' (Giroux 2011, 5).

Critical pedagogy can be described as 'a postmodern teaching model that views teaching and learning as a conversation among teachers and their students' (Abrahams 2006, 2), being central to this philosophical approach the engagement in a collaborative process of *emancipation*, described as the transformative path from the initial situation, that is perceived as 'repressive', to 'a new (utopian) future which is characterized by social justice and where all men are equals' (Boog 2003, 427). In terms of *critical research*, this implies the engagement of all involved in a shared dialectic process that intends to emancipate all the participants that they may take an active voice regarding their own realities, implying a high level of capacity to reflect critically about all the conditions of their specific context, namely those who contribute to the perpetuation of domination ideologies and control exerted from policy makers (Boog 2003; Giroux 2011; Wright 2018).

One of the first principles of *critical pedagogy* is not to accept as true any preconceived ideologies or practices that are based on tradition or dogmas that, although they may be true in some contexts, should not be assumed as valid in others without questioning them through a dialectical process (Bingham, Biesta and Rancière 2010, 26; Colwell 2005, 1; Bowman 1992, 4). This principle carries, in itself, a rejection of neoliberal educational systems that, under the veil of an equal opportunities policy, implement a common national curriculum to guarantee that all students, regardless of their own individual conditions, receive exactly the same 'education'. Associating this to the prevalence of accountability systems in schools, the educational offer is reduced and 'equality of opportunity hardly ever translates into equality of outcomes because of the role of structural factors that are beyond the control of schools and teachers' (Biesta 2009, 34). According to critical pedagogues (Biesta 2013; Bingham, Biesta and Rancière 2010; Giroux 2011; Rancière 2002), this is considered a sign of *oppression*, *domination*, *brutalisation* or *colonisation* that must be politically and socially fought against.

Another important principle in *critical pedagogy*, shared also with *constructivism*, is the acknowledgement that learners are not 'empty containers' to be stuffed but, conversely, they are carriers of previous learning, resulting from life experiences that can be used as a base and as a bridge to new learning (Abrahams 2006). This implies a belief, on the teachers' part, in the students' capacity as social beings, which implies the building of a relationship of trust (Martignetti, et al. 2013, 12) in a permanent and bidirectional relationship and dialogue between teacher and students in order to promote *conscientisation*, one of the most important steps in a critical thinking transformative process (Freire 1983; Schiavio and van der Schyff 2018). This bidirectionality transforms *subject-object* 'abusive' power relations into democratic *subject-subject* dialogues where knowledge is co-constructed

in an intersubjective process, this being related to the concepts of *socialisation*, i.e., 'the ways in which, through education, individuals become part of existing orders and traditions' and *subjectification*, described as 'ways of being that are not entirely determined by existing orders and traditions' (Biesta 2013, 18). This horizontal and bidirectional *subject-subject* relationship should not only be applied to educational contexts or research (Boog 2003, 427), but to all other social dimensions by dissolving such dichotomies as individual-society and subject-object (Walker 2000, 31), but clearly refusing 'the integral pedagogization of society, that is, the generalized infantilization of the individuals that compose it' (Rancière 2002, 138).

Paulo Freire and Jacques Rancière

The characterisation of critical pedagogy made above could be considered sufficient to introduce all the research presented in this thesis. However, I decided to include a special reference to Paulo Freire and Jacques Rancière due to the impact that the reading of their work had on the planning and implementation of the field project with students.

Regarding the work of Paulo Freire, and trying to achieve a more fluent discourse, I will try to give a perspective of the main principles and ideas present in the works Extensão e Comunicação[26] (1983) and Pedagogia da Autonomia: saberes necessários à prática educativa[27] (1996). In respect to Rancière's work, I will follow his thoughts in the book Le Maître Ignorant: Cinq Leçons sur l'Émancipation Intellectuelle[28] (1987), the English translation being used here for practical reasons.

As a philosopher, Paulo Freire contributed to post-Marxism and anti-colonialism movements, refusing any kind of 'extensionist action' that is based on the belief that it is necessary to invade the space of 'the other' in order to 'normalise it' according to the dominant view of 'superior intelligence'. Referring to the concept of *cultural invasion*, Freire stresses that people who believe in their inferior intelligence are victims of a system of values in which they are seen as mere objects of the action of the most intelligent. Despite the good intentions of those who assume to be in the group of superior intelligence (for example, teachers), they tend to *domesticate* instead of liberate, going against humanistic values that are based on dialogue between equals. This *domestication* process starts by persuading those who have been invaded to take a passive stance, accepting and being convinced that the integration of elements from the invading culture is for their own benefit. According to Freire, those who affirm the ignorance of others 'reveal their own ignorance', denying the 'ignorant' the right to have an active voice that would allow effective communication between equals. Contrary to this relationship, based on the principle of inequality of intelligence, a critical approach defends that it is necessary that the learner views himself as capable of creating the conditions to construct his own knowledge, refusing to be manipulated and treated like an object. Freire defends that humans are 'beings-in-a-situation' and, for that reason, it is not possible to separate them from their context, despite attempts of the educational systems to do it. Every educative interaction between people and the world is always transformative and, through

26 *Extension and Communication*

27 *Pedagogy of Autonomy: Knowledge Required for Educational Practice*

28 *The Ignorant Schoolmaster: Five Lessons on Intellectual Emancipation*

problematisation, individuals assume an active stance in relation to their own context. This process is called *conscientisation* and rejects the role of learners as passive *objects*, transforming people into *subjects* whose intention is to contribute to the transformation of the world, being humanised by that process. The role of the teacher in this kind of educative setting is to draw the students' attention to provoking the questioning of problematic situations, instead of following the usual arguments of traditional (and politically controlled) teachers that keep saying that there is a curriculum to follow. Freire criticises educators who refuse to engage in real dialogue and promote the alienation of the students by passing a content knowledge that 'must be passively received and memorised for repetition later' (1983, 35). Instead, the educator must try to keep alive the students' curiosity and defiance, stimulating their capacity to take risks that will make them 'immune' to the banking approach. The initial 'naïve curiosity' of students, through successive approximations, can be transformed into 'epistemological curiosity', initiating a path that will increase the students' autonomy in dealing with and overcoming real problems they face. Being successful in their attempts and achievements, the students will be compensated and gratified by this process of growing understanding, being motivated to engage continuously in the process of knowledge acquisition through practice ('learning by doing') and, even if curiosity and freedom are framed by some limits, they are perpetually exercised (1996, 85). For Freire, the task of the teacher should be to reinforce the critical skills of the students, developing strategies to help them approach to 'knowable objects' by establishing an 'intimacy' between the knowledge that they acquire as students and their social experience as individuals. For this to happen, educators must be open to take risks and accept what they still do not know, assuming themselves to be 'adventurers' in a process of individual and collective transformation (1996, 50).

'... cujo conteúdo "dado" deve ser passivamente recebido e memorizado para depois ser repetido.'

'aprendendo à custa de sua prática mesma que sua curiosidade como sua liberdade deve estar sujeita a limites, mas em permanente exercício.'

The problematisation and *conscientisation* processes also concern the teacher, a coherence between the defended values and the pedagogical practices being necessary, for example, by promoting the construction of the students' ownership of their learning and their ability to fight for their own rights and against injustice. If the teacher does not engage in this kind of action, he passes to the students a testimony of irresponsibility and, thus, cannot ask them to engage in the same critical action (1996, 65). Teachers cannot be in the world refusing a real engagement in a process that 'implies decision, choice, intervention in reality' (1996, 77), being necessary to take risks and making informed decisions because 'it is by deciding that one learns to decide' (1996, 106). To help students overcome their 'ignorance', teachers need to continuously overcome their own (1996, 95), the maintenance of a **coherence between what is said, what is written and what is done** (1996, 103) being necessary.

'Como posso continuar falando em meu respeito ao educando se o testemunho que a ele dou é o da irresponsabilidade, o de quem não cumpre o seu dever, o de quem não se prepara ou se organiza para a sua prática, o de quem não luta por seus direitos e não protesta contra as injustiças?'

'Não posso estar no mundo de luvas nas mãos constatando apenas. A acomodação em mim é apenas o caminho para a inserção, que implica decisão, escolha, intervenção na realidade'

'É decidindo que se aprende a decidir.'

In summary, Freire criticises the educational ideology framed by a technical rationality where the teacher is required to excel at the 'task of accommodation to the world instead of its transformation', i. e., a trainer or 'a skill exerciser' (1996, 143). Instead, the school system needs to constantly instigate 'the student's curiosity instead of "softening" it or "taming it"', transforming the students into creators of knowledge instead of passive recipients (1996, 124). In critical pedagogy, teaching and learning combine two different types of knowledge: the existent and that which will be produced as a result of the dialogue between all involved in the pedagogical relationship. With this in mind, and always promoting and aiming for the autonomy of the learner and viewing the school as a space of effective freedom, the task of the teacher is to create the conditions for the learner to assume himself to be a subject because he is able to recognise himself as an object (1996, 41).

'se requer um educador exímio na tarefa de acomodação ao mundo e não na de sua transformação. Um educador com muito pouco de formador, com muito mais de treinador, de transferidor de saberes, de exercitador de destrezas.'

'é imprescindível portanto que a escola instigue constantemente a curiosidade do educando em vez de "amaciá-la" ou "domesticá-la" [...] É preciso por outro lado e, sobretudo, que o educando vá assumindo o papel de sujeito da produção de sua inteligência do mundo e não apenas o de recebedor da que lhe seja transferida pelo professor'

'ser social e histórico como ser pensante, comunicante, transformador, criador, realizador de sonhos, capaz de ter raiva porque capaz de amar. Assumir-se como sujeito porque capaz de reconhecer-se como objeto.'

Another main source of inspiration for this research was the work of Jacques Rancière, who engaged in a perspective of 'theory' that was more connected to the real life of people. In *The Ignorant Schoolmaster* Jacques Rancière describes the pedagogical intervention of Joseph Jacotot (1770-1840), a French teacher and philosopher. Jacotot developed what he called the method of *intellectual emancipation* or *panecastic* method, the main principle of which is the belief that 'all men have equal intelligence' (1991, 18), defending that students are capable of learning by themselves, without the teacher's assistance, as long as they are emancipated to use their *intelligence* and driven by their *will*. In this book, it is not a simple task to differentiate between the voice of Rancière and that of the real-life character of the book, Jacotot, being both voices entwined or even merged. For that reason, at some moments, when referring to 'the author' or to 'Rancière', it is possible that, sometimes, he serves only as a *messenger* of Jacotot's voice.

'toutes les hommes ont une égale intelligence'

Rancière highlights many of the misconceptions, contradictions and consequences of the weight of tradition in education. Based on the principle that 'all men have equal intelligence', Rancière asks a philosophical question: is the act of receiving the knowledge from the Master a testimony of *equality* or *inequality?* In the *Preface* for the Brazilian edition of *The Ignorant Schoolmaster*, Rancière states that most schools are still contributing to the perpetuation of a class society model and an instructional pedagogical paradigm, being this a form of 'giving the poor the chance to individually improve their condition and give everyone the feeling of belonging, each one in his place, to the same community'. In this case, the 'intelligence' is divided between 'inferior' and 'superior' and, for that reason, the less intelligent need to follow *the method* of the teacher that divides the knowledge into smaller sections and conducts the students from the simple to the more complex, making them believe that, without the teachers' guidance, they would be incapable of understanding or reaching a given knowledge. This is based on the 'principle of *explanation*' that, according to Ranciére, is the principle of *brutalisation* because, contrary to what is perceived by the learners, 'it is the explainer who needs the incapable and not the other way around; it is he who constitutes the incapable as such [because] to explain something to someone is first of all to show him he cannot understand it by himself'" (1991, 6).

'Não se trata de uma questão de método, no sentido de formas particulares de aprendizagem, trata-se de uma questão propriamente filosófica: saber se o ato mesmo de receber a palavra do mestre — a palavra do outro — é um testemunho de igualdade ou de desigualdade' (2002, 11)

'conceder aos pobres a possibilidade de melhorar individualmente sua condição e de dar a todos o sentimento de pertencer, cada um em seu lugar, a uma mesma comunidade' (Rancière 2002, 13)

'c'est l'explicateur qui a besoin de l'incapable et non l'inverse, c'est lui qui constitue l'incapable comme tel. Expliquer quelque chose à quelqu'un, c'est d'abord lui démontrer qu'il ne peut pas le comprendre par lui-même » (Rancière 2019, 15)

'Et la meilleure chose à faire pour cela, c'était de les instruire, c'est-à-dire de leur donner la mesure de leur incapacité » (2019, 213)

'Mais qui a pris ce parti n'a qu'un moyen de le mener à bout, c'est la pédagogisation intégrale de la société, d'est-à-dire l'infantilisation générale des individues qui la composent » (2019,221)

'Ils étaient allés comme on ne doit pas aller, comme vont les enfants, à l'aveuglette, à la devinette. Et la question se posait allors : est-ce qu'il ne fallait pas renverser l'ordre admis des valeurs intelectuelles? Est-ce que cette méthode honnie de la devinette n'était pas le vrai mouvement de l'intelligence humaine qui prend possession de son propre pouvoir? » (2019, 21-22)

'La conscience d'émancipation est d'abord l'inventaire des compétences intellectuelles de l'ignorant. Il sait sa langue. Il sait aussi en user pour protester contre son état ou pour interroger ceux qui savent, ou croient en savoir, plus que lui [...] Il doit commencer à réfléchir à ces capacités et à la manière dont il las a acquises » (2019, 63)

Rancière states that, besides being philosophical, education is also political, although arguing that education should not be a responsibility of the political system because 'government doesn't owe the people an education, for the simple reason that one doesn't owe people what they can take for themselves'. However, traditional *schooling* tries to avoid that people are aware that they can learn autonomously and, for that reason, aims to normalise and control people by educating or instructing them to be aware of their inability (1991, 130), leading to 'the integral pedagogisation of society [and] the general infantilisation of the individuals who make it up' (1991, 133). In opposition to many schools' practices, Rancière suggests a type of learning similar to mother tongue acquisition, by observing, experiencing and associating new learning to the previous experience, mostly by just guessing and following and solving 'riddles'. This is what some might call the 'non-method of chance' (1991, 10-11), to which Rancière associates the 'method of equality' and the 'method of the will' (1991, 12), being clear that the students can learn without the master's explanations as long as they want, or need, to learn, in a movement that implies always genuine and authentic participation. In this model, the role of the teacher is to be an *emancipator*, meaning that he needs to believe in the students' capacity and autonomy to learn, being this capacity inherent to all humans. Being aware that they are already social and political beings and carriers of relevant knowledge, learners can use that knowledge to emancipate themselves and to actively assume more responsibility for their own lives (1991, 36). For this to happen, the teacher needs to abdicate from total control of the pedagogical settings and engage in a truly democratic relationship, giving the initiative and voice to the students but taking the lead when he notes characteristic 'lazy' behaviour, i.e., when he sees that students are not searching.

'Quem estabelece a igualdade como objetivo a ser atingido, a partir da situação de desigualdade, de fato a posterga até ao infinito. A igualdade jamais vem após, como resultado a ser atingido. Ela deve sempre ser colocada antes' (2002, 10-11)

'L'égalité ne se donne ni se revendique, elle se pratique, elle se vérifie.' (2019, 227)

Despite some educational speeches that defend democratic and egalitarian pedagogical relationships, in some Western educational systems, as Freire also affirmed, democracy does not really exist. Rancière states that 'who establishes equality as an objective to be achieved, from the situation of inequality, in fact postpones it forever' and, for that reason, 'equality never comes after, as a result to be achieved. It should always be placed before' (2002, 10-11) because 'equality is not given, nor is it claimed; it is practised, it is *verified*.' (1991, 137).

'... on peut enseigner ce qu'on ignore si l'on émancipe l'élève, c'est-à-dire si on le contraint à user de sa propre intelligence.' (29)

'Le problème n'est pas de faire des savants. Il est de relever ceux qui se croient inférieurs en intelligence...' (168)

Despite being previously aligned with critical social theories, mainly by adhering to what I considered to be Freire's *utopian ideals*, one of the 'breakthrough moments' in this research was when, thinking about and planning the field project with students, I read that 'one can teach what one does not know if one emancipates the student, that is to say, if one forces him to use his own intelligence' (Rancière 1991, 15). Being already 'informed' about some of the type of activities that could promote in the students a more creative and active posture, I was struggling against the fact that, as a musician and as a teacher, I had never experienced similar approaches to music making (improvisation, exploration, composition, ...). In a kind of double impact, Rancière's suggestion *emancipated*

me to *emancipate* students to engage in a shared journey of exploration and discovery, abandoning the idea that they were 'inferior in intelligence' (1991, 101). To be an *emancipator* required from me, as a teacher, almost an **anti-didactical approach**, being aware that the great learning potential was 'the consciousness of what an intelligence can do when it considers itself equal to any other and considers any other equal to itself' (1991, 39).

'Ce que peut essentiellement un émancipé, c'est être émancipateur: donner non pas la clef du savoir mais la conscience de ce que peut une intelligence quand elle se considère comme égale à toute autre et considère toute autre comme égale à la sienne. (68)

Critical pedagogy in music education

Although with roots in the 20th century, critical pedagogy has entered more significantly into music education already in this century, being addressed by some music pedagogues referred to in this thesis (Abrahams 2005; 2006; Allsup 2004; Benedict 2012; Colwell 2005; Jorgensen 2001; Martignetti, et al. 2013; Regelski 2009; Schmidt 2005; Silverman 2015). The basic principles defended by these authors do not differ from those referred to above, the relevant aspect in this section being the presentation of some practical applications of these principles in music education.

According to Abrahams (2006, 5-6), critical pedagogy approaches to music teaching can contribute to foster 'transformational experiences that will move music education in the schools from the peripheral to a more worthy place in the center of all learning experiences', following key principles where music education 1) is a conversation, 2) broadens the student's view of reality, 3) is empowering, 4) is transformative, and 5) is political (Abrahams 2-3). All these principles, put into practice, promote a transformation from the 'banking model', based on hierarchical relationships, to more democratic settings where students have an active voice and transition from a posture of being consumers to that of active contributors. To apply these critical approaches, teachers need to ask themselves four questions when engaging in teaching: *Who am I? Who are my students? What might they become? What might we become together?* (Abrahams 2006, 10).

Regarding concrete musical activities, critical pedagogues argue for the need to create personal musical challenges using *problem-solving* and *problem-posing* strategies with the goal of questioning, changing and transforming music education (Schmidt 2005, 7). Besides the development of musical and technical goals, music education should also be a place where dialogue is nurtured in order to empower people to transform their own realities, thus contributing to the achievement of higher goals such as a more democratic and just society (Dewey 1916; Elliott and Silverman 2015, 29; Schmidt 2005, 10). In respect of the application of the critical principles in music education, and as seen in this research, Gorzelsky (2009, 64-65), quoting Durst, refers that 'this pedagogy inherently evokes student resistance' being this a result of a 'commodified society', where students are trained to be passive consumers and reproducers and to reach predetermined outcomes (van der Schyff 2017, 14), created by a school system that does not provide 'the tools for critical thinking and transformative action' (Schmidt 2005, 3). Perhaps one of the most important concepts of a critical action in music education is *praxis* (not to be confused with *practical activity* such as playing an instrument). This concept is mainly related to social practice and includes the seeking of social justice and freedom by fighting against power structures or, according to Colwell (2005, 2) is 'an activity by which individuals create culture and society and, thereby, become more conscious (critical) human beings'. *Praxis* implies a coordinated movement that involves 'reflection and action' or, in other words, a 'fusion

of active reflection and reflective action' always with the goal to intervene in the reality in order to transform it and, consequently, 'to humanise it' (Elliott and Silverman 2015, 44). Defending the emancipation of students and teacher, *critical pedagogy* increases their social-political dimensions and responsibilities, as opposed to the technical rationality of music teaching in the *classical conservatoire culture*.

> Some dimensions defended by critical pedagogy are difficult to implement in music education systems where the classical tradition is predominant, the unidirectional teaching practice being focused on reading skills and technical development. Not to put the music teaching system at risk, an alternative view defends the prevalence of dialogue over monologue in the pedagogical relationships, where dogmas and ancient formulas are questioned in favour of practices that take into account the social context (Bowman 2009, 113), being necessary 'to prepare future performers, composers, conductors, or teachers to put their creativity to work for pressing problems in the real world, including poverty, disease, civil rights, war, and so forth' (Elliott and Silverman 2015, 268).

Constructivism and the concept of knowledge

> *Education is not the filling of a pail, but the lighting of a fire*
>
> W. B. Yeats

With a direct consequence on how the process of knowledge acquisition is seen, *constructivism* is closely related to the field of psychology, having amongst its defenders some of the most relevant pedagogues of the 20th century (Dewey, Bruner, Montessori, Piaget and Vygotsky, among others). According to Bada (2015, 66-67) constructivism 'triggers the student's innate curiosity about the world and how things work […] applying their existing knowledge and real-world experience, learning to hypothesize, testing their theories, and ultimately drawing conclusions from their findings.' For Allsup (2003, 27), some of the most important constructivist processes are *hypothetical thinking*, *intuitive thinking*, and *problem-posing* and which, as in critical pedagogy, aims for a process of transformation through 'constant reorganizing or reconstructing of experience' (Dewey 1916, 76). Going against some approaches that see knowledge acquisition as an individual dimension or construct, a *social constructivist theory* defends that students learn by a variety of factors that are related to their real-life context (Lampert 1997) and where 'new knowledge emerges from collaborative, exploratory discussions among learners […] in which no participant knows what will emerge, and in which no participant is allowed to control what emerges [creating] its own knowledge, sometimes in a way that no teacher could have managed or planned' (Sawyer 2004, 199). In this case, *constructivism* recognises that all students have different backgrounds and different value systems and, for that reason, the way in which each student learns will necessarily be different.

Unlike traditional curricula, that assume that all the students should learn the same things and through the same methods in isolation from their contexts (Biesta 2013, 18; Gorzelsky 2009, 68), *constructivism* values intersubjectivity and co-construction of meanings (Bowman 2009, 113). This implies a recognition of the individual as

contributor in a dialogical relationship between different subcultures that, at its limit, can include 'sub-cultures of one' (Fox 2001). Learning is co-constructed using pre-existent knowledge of each one of the individuals in a collaborative learning process that includes interaction, perspective taking and negotiation between peers (Engeström 1987, 19; Schiavio and van der Schyff 2018, 5), in a process that Elliott and Silverman (2015, 450) affirm to be 'a central goal of humanistic education: self-understanding through other-understanding'. Regarding the role of the teacher in a constructivist pedagogical setting, it is 'fundamentally improvisational, because if the classroom is scripted and overly directed by the teacher, the students cannot co-construct their own knowledge' (Sawyer 2004, 190).

In summary, applied to educational systems, *constructivism* values student-centred methods that, like *critical pedagogy*, requires from the learners an active stance in the construction of knowledge (Abrahams 2006; Bada 2015; Biesta 2013). The teacher's role is to collaborate with the students in the construction of new knowledge, scaffolding their learning and foregoing a higher hierarchical position (Allsup 2003; Gorzelsky 2009, 66-67) in an educative environment that nurtures the students' responsibility, risk-taking and problem-solving skills (Biesta 2013, 1; Burnard 2002, 169; Robinson 2011, 12). In this approach, students' curiosity is valued and used as a 'spark' to fuel a dialogical process that uses critical thinking strategies, leading the students to deal with different points of view, developing perspective taking, and dealing with contradictions about their own thoughts and beliefs (Jorgensen 2001; McGillen and McMillan 2005). Combining the active stance of teacher and students, namely by increasing self-assessment skills (Prince 2004, 1; Salvador 2015, 16; Swanwick 1999, 77) and a horizontal communication between all involved in the educative act will allow a shared process of meaning-making in authentic problematic situations (Engeström 1987, xxiv; Schiavio and Cummins 2015, 5).

Constructivism in music teaching and learning

Elliott and Silverman (2015, 189) state that policy makers and educational leaders 'fail to understand the nature and complexity of personhood' and, for that reason, 'they look for educational values where they are not: in "measurable" test results of so-called learning, data-driven teaching, or simplistic curricula'. Referring specifically to the traditional approach to music teaching, Cope (2002, 102) states that 'social constructivist and socio-cultural explanations of learning in instrument playing are uncommon', one of the reasons for this being 'the cultural hegemony of the classical style', focusing on 'works' of music with inherent meanings instead of personal and social constructs. Schiavio and Cummins (2015, 5), opposing a traditional approach to teaching an instrument (a stimulus-response process), offer an example of the application of a constructivist approach in instrumental teaching, suggesting that the teacher should use the student's self- knowledge and agency by, for example, making a critical examination of different possibilities and giving examples which the student can relate with and participate actively in. Contrary to a strict lesson plan, or scripted instruction, where all is previously decided regardless of who learns, the responses of the students regarding each proposed activity can lead to very different paths, being necessary that the teacher intervenes according to those responses in an improvisatory way (Sawyer 2004, 199). However, teachers used 'to follow[ing] the ideas and practices designed by others [that leave] them bereft of important conceptual, critical, and practical skills' (Jorgensen 2001, 2), even if convinced and willing to engage in

constructivist action, will have difficulties to make a transition to a pedagogical approach in which emphasis is placed on the student's activity instead of the teacher's intervention (Biesta 2013, 45). As reported regarding processes of change in several educational contexts (to be addressed later), this transformation will be stressful for teachers because they have to respond to the anxiety created by that change, not only in themselves but also in the students, one of the biggest challenges for the teacher being to take a step back, thus empowering and giving responsibility to the individual or the group (Burnard 2002, 168). Kohn (1992, 7) assumes that only if the students converse without any kind of intervention on the teacher's part, the class passes to their control and only in this case the setting is really constructivist. During this process of transition from a context where the classical style is predominant to a constructivist setting, perhaps 'largely through intuition and trial and error' (Martignetti, et al. 2013, 4-5), teachers will need to constantly ask themselves in what context they are intervening, instead of assuming a top-down curriculum that does not take into account the students' personal characteristics and social contexts.

Transferring to music the fundaments of constructivist theories, it is clearly assumed that 'no child is without the capacity for musical expression' (Reynolds, et al. 2015, 210) and, refusing the 'myth-of-talent', it is recognised that with 'qualified music teachers, most children can achieve a competent if not a proficient level of musical understanding' (Elliott and Silverman 2015, 455). A constructivist approach values the students' previous musical knowledge that, often, is not related to the classical tradition, and uses it as the starting point for engaging with more relevant and meaningful musical experiences and achieving increasingly higher levels of musical understanding (Bada 2015, 66; Beegle 2010, 2), this being the path to an increase in participation and well-being (Elliott and Silverman 2015, 441; Hallam 2015, 104-105).

Alternative theories to cognition and learning

Constructivism is associated to a specific conception of knowledge that was described above and assumed as being one of the framings of the research reported in this thesis. However, in the course of the project, other concepts and approaches to knowledge acquisition (or construction), cognition and learning emerged and can offer a high potential for future debate. Not being the place to deepen this discussion, it is important to highlight two of them due to the possibility they raise regarding the discussion of the outcomes of this research.

The first one is *expansive learning*, presented in 1987 by Engeström as an alternative to the dominant *Cartesian* concept of cognition and learning that separated body and mind. Engeström (1987, xv-xvi) argues that the individual must be considered as a part of a system that involves dialogue and interaction between multiple perspectives, experiences and voices. The way to apply *expansive learning* to formal learning contexts is by engaging students in a dialectic method of *expansive learning cycles*, following these stages: questioning, analysing, modelling, examining the model, implementing, evaluating the process and consolidating.

The second approach is known as *4E cognition*, being based on recent cross-disciplinary research in the fields of music and cognitive and psychological sciences that conceive learning as an *Embodied, Embedded, Extended*, and *Enactive* phenomenon. According to Schiavio and van der Schyff (2018, 2), describing these different learning processes, ***Embodied*** cognition is not an abstract mental process and involves the entire body of the living system (brain and body); ***Embedded*** cognition assumes that learning is not

an isolated event separated from the context of the individual, being related to physical, social, and cultural aspects of the world; ***Extended*** cognition assumes that individual mental processes can be offloaded into biological beings and non-biological devices, and; ***Enactive*** cognition is related to the meaningful interaction between the individual and the environment, provoking a two-way transformation.

1.2.2. Meaning and Sense Making

> In my masters' dissertation (Costa 2010, 86) I mentioned the concept of 'musical sense' in the discussion section. However, at that time I was not capable of describing in words what musical sense was... and I am afraid that, despite close approximations to the concept, I still find it difficult to describe it through words!
>
> Influenced by the conclusions of that previous research, ***musical meaning*** and ***musical sense-making***, and other concepts that I can assume to be in the same conceptual frame, like ***musical understanding*** and ***fluency***, also emerged during the current research work. Also important to this research, and considered as being related and interdependent to the concepts referred to before, are ***embodiment***, ***musical experience*** and ***flow***.

Meaning making

> Addressing the concept of *meaning*, according to empirical experience and previous research, students' testimonies revealed that some musical activities they have experienced conveyed meaning but not for musical reasons (Costa 2010, 86). In most of these cases, meaning making was constructed, or co-constructed, in contexts where, although based on musical activities, the relational aspects had a major importance, confirming Vygotsky's claim that community plays a central role in the process of 'meaning making' (Vygotsky 1978). Although defending enthusiastically this type of *non-musical meaning* in formal music teaching contexts, in this section the goal is to focus on *musical meaning* resulting from music-making experiences.

In music education there is a philosophical discussion between those who argue that meaning is intrinsic to the great musical works of the classical repertoire, and the opposite view that defends that only by engaging in authentic music making, can meaning be constructed. Already in 1947, Theodore Green (1947, 308), referring to *The Problem of Meaning in Music and the Other Arts*, stressed the different opinions between those he called the 'formalists' and the 'expressionists'. In the following decades, this was fuelled by discussions between the 'aesthetical' and '*praxial*' view of music making and music education (to be addressed later).

Swanwick (1999, 27-29) argues against the claim that 'musical meaning and value transcend time, place, context and human purpose and usefulness' because they 'fail to account for the fullest range of meanings inherent in individual and collective musical actions'. According to Boyce-Tillman (2013, 31), referring to Lucy Green (1997), the musical intentions of the composer cannot be received in the same way by every person, because meanings are an individual construct dependent on previous individual

experiences. Despite this, some music teachers, by focusing on the interpretation of the composers' perceived musical intentions, pass the message that musical meaning is 'in the music' and insular to those who make it, devaluing, or even censoring, alternative interpretations of the piece and the construction of a personal voice, maintaining allegiance and submission to the composer's will (Swanwick 1999, 92-93). This is in line with a concept that views knowledge as static and complete, promoting passive behaviours in the students, leading to 'rote learning of material, instead of creative appropriation and deeper understanding' (Sawyer 2006, 42). An alternative path is the promotion of an active stance from the students, developing a personal musical voice (Gaunt 2007, 215), this idea being reinforced by a wide range of authors who defend that meanings are constructed differently by each individual (Almén and Pearsall 2006; Elliott 1995; Gorzelsky 2009; McGillen and McMillan 2005; Nichols 2011; Schiavio and Cummins 2015; Swanwick 1999; Walker 2000). According to Wayne Bowman (1994, 51), 'musical meanings are negotiated, not absorbed; constructed, not given; appropriated, not bestowed [and] the processes and experiences we call musical, then, never reside in a hermetically-insular "aesthetic" realm, but are part of our lived, social reality'. Meaning is not inherent to objects or individuals but situated somewhere in a space 'located *in-between* those who constitute the social practice through their interactions' (Biesta 2013, 31), 'constructing' meanings that are 'multiple, fluid, and generated collaboratively' (Elliott and Silverman 2015, 176).

Musical Knowledge, Musical Experience and Embodiment

A traditional concept of *musical knowledge* is erroneous for still fostering the positivistic view that it is something static that can be transferred from the teacher to the student or from the master to the apprentice (Schmidt 2005, 3). Many practices in formal music education are based on 'cumulative or mechanical learning', with no real connection to previous learning from the students, but hoping that that learning can later be 'recalled and applied in situations mentally similar to the learning context' (Illeris 2003, 402), namely in what is related to technical skills. In opposition to this 'meaningless' type of learning, Illeris (2003, 402) defends a transition for a *transformative learning* or *expansive learning*, that requires from the learners a 'simultaneous restructuring in the cognitive, the emotional and the social-societal dimensions.' Arguing in favour of the revision of the existent learning theories and the concept of knowledge, Illeris (2003, 396) states that, besides content knowledge and skills, people need 'also a range of personal qualities and the ability to perform adequately and flexibly in well-known and unknown situations.' Learning includes a process in which the learner interacts with his own context and is based on three main dimensions: 'the cognitive dimension of knowledge and skills, the emotional dimension of feelings and motivation, and the social dimension of communication and cooperation—all of which are embedded in a societally situated context' (Illeris 2003, 396). Learning and knowledge are less dependent on the genetic and biological conditions of the students (Illeris 2003, 397), contradicting the belief in the 'innate talent' concept.

Regarding the concept of *musical experience*, includes not only motor and auditory skills but also 'a range of cultural and contextual factors' (Sloboda 2005, 168). Biologically speaking this includes the need to think differently about cognition and experience and, regarding music education, this means to value *experiential* and *embodied cognition* (Leman and Maes 2014; van der Schyff 2017). In respect of traditional practices in music education, this implies a change in the paradigm, acknowledging the relevance of different learning dimensions because 'music depends on active doings of all kinds' (Elliott and

Silverman 2015, 103-104), this being related to physical and sensory experiences that differ from individual to individual (Abrahams 2006; Boog 2003; Dewey 1938; Walker 2000; Wright 2018). Some practices in music schools are based on formulas and low-level, unidirectional and predefined activities (Martignetti, et al. 2013, 17-18), focusing solely on 'fragments of the total experience' (Swanwick 1988, 148). Swanwick (1999, 59) argues that, independently how the teacher organises the lessons and guides their students in the class, 'what ultimately matters is the *quality* of musical experience'.

Although apparently devalued by many teachers (Robinson 2011, 107), with negative implications for teaching practices, the body is central in learning (Schiavio and van der Schyff 2018, 4; Walker 2000, 30) and closely related to the concepts of *musical experience* and *musical knowledge*, this being exposed in the concepts of *embodied cognition, embodied knowledge* or just *embodiment*. A dualism of mind-body in learning music is referred to by a considerable number of authors (Elliott and Silverman 2015; Nyberg 2015; van der Schyff 2017), learning situations being reported where teachers 'see movement as extraneous, as something added on, or evoked by the sounds rather than an integral part of musical involvement' (Walker 2000, 35), separating intellect and emotion (Robinson 2011, 140). Stressing the importance of the body in learning music, Johnson (2006, 50) relates the body-mind (and not body *and* mind) to different forms of meaning making, speaking of 'body-based meaning' (2006, 52). Clifton (1983, 285) says that 'the essences of music […] are primordially acquisitions of our own bodies' and Johnson, quoted by Walker (2000, 33-34), refers that musical knowledge and meaning are based 'on covert representations of the physical experience of music'. Walker (2000, 36-37) continues by saying that 'the meanings of both music and movement become in many ways inextricable [gaining music] some further level of meaning through the movement' despite the attempt, from the Western society, to create an artificial 'mind-body dualism'. *Embodied knowledge* is also valued by the enactive approach to cognition (van der Schyff 2017, 13) that views learning in a holistic way (Dewey 1916) and, according to Walker (2000, 35), without 'human movement of some kind, music cannot exist' and 'even a gestural metaphor is meaningless without some type of prior physical experience with which to link it'.

Sense making

> *Sensemaking starts with chaos.*
> Weick, Sutcliffe and Obstfeld (2005, 411)

> *Living is a process of sense-making, of bringing forth significance and value.*
> Thompson (2007, 158)

Although not being completely certain that the 'formalist' concept of *musical meaning* can be separated from *musical sense-making*, I decided to address them as being different. Belonging to the same wide concept of cognition described above, my concept of *musical sense-making* is related to the domain of the musical language, that I can also relate to *signification*, *musical fluency* and *musical understanding*, being these concepts approached similarly by different authors (Almén and Pearsall 2006; Elliott and Silverman 2015; Schiavio and van der Schyff 2018; Swanwick 1999; Walker 2000). There is a relation to the concept of *music literacy* but, not to risk it being confused as the narrow view of 'to

decode and encode a system of musical notation' (Elliott and Silverman 2015, 219), or to be associated with information about music, I decided not to include it in the same conceptual frame.

Music is a universal language! As some authors warn, this statement may suggest that 'anyone can listen to a piece of music and understand it in the same way as everyone else' (Burkholder in Almén and Pearsall 2006, 77). This belief is at the basis of some practices in music education, with teachers controlling every step of the learning process, dividing the music into elements that, although intending to facilitate learning and the 'understanding' of music, mean nothing to the students because teachers isolate 'learning processes from [the students'] real-life connections' (Westerlund 2006, 122). Elliott and Silverman (2015, 94) criticise the Enlightenment scientific reasoning that, transferred to music, leads to the belief that 'the meaning of and reasons underlying the beauty of pure instrumental works could be discovered by breaking down pieces of music into their constituent "elements" to reveal the sources of their so-called inherent values'.

According to Weick, Sutcliffe, and Obstfeld (2005) *sense making* is essentially a continuous, collective and communicative process through personal exchanges of 'symbolically encoded representations' of real-life situations (413) where meanings are materialised and contribute to identity construction and, thus, being central in the determination of human actions and behaviour (409). In this process people label and categorise their experiences (411), continuously redrafting their views about reality until reaching a perceived balance, the initial 'unbalance' being seen as positive for motivating individuals to a continuous and active search (415). The importance of the relationship between the individual and the context is also stressed by Robinson (2011, 128), suggesting that, as in every dynamic process, 'we make sense of the world by a process of "successive approximations"'. Similarly, Schiavio and van der Schyff (2018, 5) state that a positive result in achieving sense making only happens 'when considering the entire brain-body-world system', going beyond 'the physical boundaries of the individual because active sense-making entails action, interactions, and other forms of adaptive behavior within the socio-material niche we inhabit and are thus *embedded* in'. Reybrouck (2012, 394-395) stresses 'the importance of sense-making as an act of deliberate attention and epistemic autonomy', and highlights the social dimension of the process.

Musical understanding and musical sense-making

One the main statements of the *Praxial* Philosophy (Elliott and Silverman 2015) is: 'Musical understanding is *what* we teach', being described as the combination of *musicianship* and *listenership* and 'a form of knowledge that is internally generated in students through their musical actions, transactions, and interactions with carefully selected musical praxes and challenges' (432). Developing this concept, the authors associate it also to 'the "working integration" of procedural, verbal, experiential, intuitive, appreciative, ethical, and supervisory MTKs [musical thinking and knowing]' (243) in experiential contexts where knowledge is constructed through problem-finding and problem-solving processes in authentic music-making settings (222).

Musical understanding is also closely related to *musical sense-making*. According to Schmidt (2005, 8), music education 'has privileged expert knowledge over understanding' and 'directive information over dialogue and interaction', reinforced by Elliott (1995, 70), who refers to pedagogical approaches where 'verbal knowledge is primary in music

making, that musical actions always follow from verbal thoughts, and, therefore, that the actions of musicing are essentially mind-less', being this a barrier to *meaning* and to *musical understanding*. Music education discourses and practices promote a dichotomy between 'musical skills and verbal knowledge about music history, theory, and so forth' (Elliott and Silverman 2015, 199), underlying a simplistic mind-body separation instead of assuming musical experience as global or holistic. Contrary to this, Elliott and Silverman (2015, 203) defend that 'musical understanding is fundamentally a form of action-based, tacit, embodied, and affective doing- knowing-thinking.'

The multidimensional features associated with *musical understanding* make it difficult to assess or evaluate students' achievements and, because different activities show different levels *of musical understanding*, 'it is usually unwise to rely only upon one type of evidence or just a single "product" when trying to assess the work of students' (Swanwick 1999, 75). For example, instead of evaluating repertoire pieces played from memory, disregarding musical decision-making, activities like improvising and composing create 'opportunities to engage more richly with more layers of musical discourse' (Swanwick 1999, 77). Swanwick (1999, 77) defends that, instead of favouring the piece's complexity, impeding students' focus on the musical discourse, the priority should be given to more musical activities in which students usually take a step back 'to a technical level within which they were able to make musical decisions, judgements about speed, about expressive shaping, about structural relationships', allowing that music understanding can be revealed through awareness and control of sound materials, expressive character and musical form, also being revealed by the awareness of the personal and cultural value of music (Swanwick 1999, 71).

Fluency

Fluency is a concept that can be approached in two opposite ways, leading to its defence or rejection by music educators.

Swanwick (1999) states that one of the main goals of music educators should be the promotion of *musical fluency* in music or in the musical discourse, describing it as 'the ability to share, produce and collaborate in the production of […] sonorous images, unimpeded by the restrictive use of notations' (xi). According to this view, 'musical fluency is analogous with but not the same as fluency in a language: it's discourse *in* music *not* about music' (xi-xii) and, according to the author, 'musical fluency takes precedence over musical literacy' (49). Other authors relate *fluency* with *creative thinking* and with 'a *proficient* level of musicianship [that] is characterized by fluent thinking-in-action and reflecting-in-action' (Elliott 1995, 71). Making a connection with some realities in the Western classical tradition, where a musician's main focus is on performance activities, students are given a narrow concept of what music is and what is at the base of its practice (Swanwick 1999, 91) and, for that reason, 'neither student autonomy nor musical fluency' are developed (Swanwick 1999, 93). Contrary to this, musicians outside this classical culture extensively *play by ear* (Allsup 2003; Schiavio and van der Schyff 2018; Swanwick 1999) and also engage in other type of musical activities such as sound exploration or improvisation where *fluency* is developed and also more clearly assessed (Swanwick 1999, 49).

The concept of *fluency* is also approached relating it to the development of technical skills (Bowman 2009, 112; Swanwick 1999, 51-52). Criticising the overvaluation of technical skills in music education, Sloboda (2005, 284) states that reading and technical fluency are

not the final goal to achieve but the starting point to 'artistic excellence'. In the same vein, for Illich (1972, 3) the technical rationality represents a confusion between process and substance, leading students to be 'schooled' into misconstruing 'fluency with the ability to say something new'.

Flow / optimal experience

Going back to the concept of ***musical experience*** that, as seen earlier, is multidimensional, a relevant and meaningful *musical experience* will more easily lead to *flow experiences*, which, according to Elliott and Silverman (2015, 412), is one of the aims of a *praxial* approach to music teaching. Also known as *peak* or *optimal experiences*, these are associated to a metaphorical process and 'characterised by a strong sense of internal integration, by high levels of attention and concentration and – at times – complete loss of self-awareness' (Swanwick 1999, 15), or a 'state in which people are so intensely involved in an activity that nothing else seems to matter [because] the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it' (Csikszentmihalyi 1990, 4). Thus, contrary to other activities made with secondary goals or rewards, the result of flow is an autotelic experience, i.e., an activity that is rewarding by itself (Csikszentmihalyi 1990, 67). *Flow* is one of the goals of music education because, according to Elliott (1995), it implies the use of 'attention, cognition, emotion, intention, and memory' to achieve effective integration (116), overcoming challenges that lead to *self-growth* and *constructive knowledge* (121). In order to achieve continued peak experiences, it is necessary to stretch skills by engaging in increasingly challenging activities in which high challenges and skills are balanced, other important aspects being the setting of achievable or realistic goals, intense concentration and focus on the task (Csikszentmihalyi 1990).

Peak experiences imply effort, time, energy and hard work. Csikszentmihalyi's research reports that flow experiences are more likely to happen in professional activities than in leisure or free time (Bakker 2005, 28). Of interest to discuss in music is the hypothesis raised by Bakker (2005), suggesting that there is a positive correlation between the music teachers' flow experiences and the flow experienced by their students (31), reinforced by Westman (2001), who says that 'positive emotions may crossover from one person to another', being especially relevant the fact that '*teachers' intrinsic work motivation*' can have a positive impact on the students (38). This process of transference of positive emotions works in two ways between teacher and students and, more generically, between all the participants in music-making settings. This means that the existence of motivated teachers will probably lead them to 'put more effort and energy' into their actions, being also more attentive regarding what motivates the students in the classes (38). **So, if motivated teachers are more likely to experience flow, and if this has a positive impact on the students** (41)**, music education should also seek the well-being and motivation of the teachers, including them as important targets of the musical goals, being not only mediators, observers and/or evaluators but also active contributors**.

1.2.3. *Praxial* Approach to Music Making

My research started with a disquietude, nonconformity and inner conflict regarding the practices of the system. The 'discovery' of Elliott's *praxial* approach (which I owe to Andrea Creech) was a turning point in my initial

> investigation and opened up a completely different range of possibilities but, at that time (I recognise now) perhaps what I was looking for was not much different from a 'method' to tell me how to start and conduct the field project. The engagement in a *praxial* approach allowed me to make connections between my own reality and the path I needed to follow in order to promote a desired positive transformation in myself as a teacher, and in my students.

In this section the goal is to present the concept of a *praxial approach* or *praxial philosophy* in music education as seen by David Elliott (1995), a model he later expanded in collaboration with Marissa Silverman (2015).

The concept of a *praxial* approach to music education fits in the *critical pedagogy*, *critical action* and *constructivist* principles, and is much more than the implementation of musical activities in music teaching settings. It represents a clear and profound transformation in the rationale of music teaching that goes beyond pedagogy and didactics, implying an in-depth philosophical and personal transformation in order to detach from the fundamentals and practices of the *classical conservatoire culture,* critically addressing its values, principles and teaching and learning practices by applying 'a philosophical guidance system' (Elliott and Silverman 2015, 35). A *praxial* philosophy of music education emphasises '(1) that music should be *active reflection and critically reflective action* dedicated to supporting and advancing *human flourishing and well-being*, the *ethical care* of others, and the positive *transformation* of people's everyday lives; and (2) that each instance of music should be conceived, taught, and learned as a *social praxis* – as a fusion of people, processes, products, and ethical "goods" in specific social-cultural contexts' (Elliott and Silverman 2015, 52).

This chapter intends to state the initial conditions in the process of searching for an alternative *zeitgeist* for music education, trying to detach from the rationales of the 19th century, mainly regarding the deification of the composer, the work-concept of musical knowledge and the apprenticeship model of a musical transaction between teacher and students, all these features being promoters of passiveness instead of critical action, intersubjectivity and effective appropriation of musical learning.

A praxial approach to instrumental music education and its relationship to principles of critical pedagogy[29]

A consistent principle underpinning the praxial perspective as developed by Elliott and Silverman (2015) has been that 'music is not simply a collection of products or objects … music is something that people do' (Elliott 1995, 39) and is understood to be related directly not with motor and technical skills, but rather with musical and expressive skills. This praxial perspective on musical understanding highlights the practical dimension of music-making as a multidimensional activity that must involve performing, improvising, composing, arranging, and conducting, with listening implicated across all of these areas (Elliott 1995, 70). Elliott and Silverman (2015, 16) subsequently expanded this model, adding 'recording, sampling, sound sculpting, musicing and moving, musicing and dancing, musicing and healing, musicing and worshipping'.

29 Excerpt of the chapter '"Teaching and learning in unfamiliar territory"' (Costa and Creech) in Expanding the Space for Improvisation Pedagogy in Music; edited by Guro Gravem Johansen, Kari Holdhus, Christina Larsson and Una MacGlone (2020).

In the context of music education this praxial perspective requires active roles by the students, whereby the learner experience is participatory, empowering, and involves the development of transformative self-knowledge (Freire 1996; Rancière 2002). Transformative practices are also fundamental to critical pedagogy, a theoretical framework that challenges the traditional power structure in classrooms, promoting instead a conversation between teachers and students and recognising the students' knowledge as a basis for new learning that is connected with their social realities, affecting the way they perceive the world and giving them an active voice in their own reality (Abrahams 2005). In instrumental music education, this active voice involves emancipating students to work autonomously and expressively within collaborative rather than hierarchical student-teacher relationships (Hallam and Gaunt 2012, 136).

Advocates of the critical, praxial approach in instrumental music education (Allsup 2003; Creech and Hallam 2011; Elliott and Silverman 2015) have challenged, in particular, the traditional master-apprentice model that is premised upon student reliance on the teacher's superior knowledge (Cope 2002; Elliott 1995; Gaunt 2007; Gorzelsky 2009; Sloboda 2005). These critiques have underpinned the rationale for a shift towards practices influenced by critical pedagogy, characterised by an egalitarian teacher-student relation whereby students are positioned in the centre of their own learning processes (Collens and Creech 2016). Such an approach requires that the musical interests and prior musical experiences of students are central, that students and teachers are engaged collaboratively in creative musical activities that support musical and personal development. Therefore, in accordance with the principles of critical pedagogy (Abrahams 2005; Boog 2003; Elliott and Silverman 2015; Freire 1970; Gorzelsky 2009), a praxial understanding of instrumental music education may involve activities such as improvisation, composition, arranging, conducting, interpretation, and performance, each offering the potential for a transformative rather than a regulated process, whereby collaboration, creativity, innovation and risk-taking are prioritised (Elliott and Silverman 2015). These activities, by themselves, do not guarantee an alignment with the goals of a critical pedagogy. They must be developed within a democratic context, where the teacher promotes 'processes such as analysis (orientation), hypothesis generation, testing, (data) interpretation, and evaluation' (Gijlers and de Jong 2005, 265). In contrast to regulative pedagogies, where the teacher intends to control and monitor all the steps of the learning process, music learning can thus become a 'transformative journey' (O'Neill 2015, 13), where students and teachers together occupy 'spaces of the possible' (Benson 2001). Such spaces promote meaning making through mutually respectful musical conversation, discussion and exploration where knowledge is built through collaborative approaches (O'Neill 2015).

Praxial VS Aesthetic

One of the aspects that can be considered central to the discussion around music education, due to the implications regarding its principles and practices, is the dichotomy between a *praxial* and an *aesthetical* approach, that can be considered opposite poles in some philosophical and practical dimensions. The interest of this discussion lies in the belief that we can only really grasp the meaning of a concept by knowing its opposite because, as Rodari (2006) states, concepts do not exist in isolation. By saying this, we do not mean that *praxial* and *aesthetic* are opposite in every sense, but it is clear that they are based on different assumptions.

David Elliott and Marissa Silverman (2015) criticise the *aesthetical* approach to music teaching and the negative impact it has on most of music education curricula and

practices, stating that the creation of notated music was the historical symbolic moment that transformed the musical work into 'a construction that a composer established once and for all, without assistance from a performer' (Higgins 2011, 22 in Elliott and Silverman 2015, 93). This led to a gradual transition from 'the praxial natures and values of classical styles', that included some level of contribution from the interpreter to the product during the performance, to a narrow work-centred concept of music, where the performer was expected to play in a 'correct style' and rigorously what was written in the score (85). This changing of the role of the interpreter contributed to increase the 'privileged status of "classical music"' to the detriment of all the other musical languages (93). The *praxial/ aesthetical* dichotomy is represented by the capacity to act valued by the praxial approach, as opposed to assuming a 'consumption' and passive behaviour as listener.

Reimer (1995, 23) defends the importance of *aesthetic experiences* in music education, highlighting the possibilities of going 'beyond creating' and agreeing with the statement that 'the understanding and appreciation of works of art are as educationally valuable as creating art [and] that experiencing works of art aesthetically is as significant as producing them' (Smith 1987, 4). Analysing the principles of the *Discipline-Based Art Education* (DBAE) programme, Reimer (1995, 24) states that 'we can no longer rely entirely or dominantly on performance as the be-all and end-all of music education'. Criticising a hierarchisation of the national standards regarding music education, that maintain the status quo and the focus of music education on 'making all children musicians' (1995, 24), Reimer defends the central importance of the standards that are at the end of the list, these being '6) listening, analyzing, and describing, 7) evaluating, 8) understanding how music relates to other fields, and 9) viewing music in historical and cultural contexts', allowing a balance of what he considers 'a too narrow, technical bias' (24). What must be questioned, according to Reimer, is whether performance should be the central focus of music education or if it 'can also go beyond it to include a variety of learnings heretofore greatly neglected because of the overwhelming predominance of performing activities and all the requisites such activities entail' (25), clarifying that, going '"beyond" means "in addition to" - not "the elimination of."' Reinforcing the idea of *aesthetical experience*, Reimer states that the activities referred to above have a direct influence on 'the quality of listening, composing, performing, and improvising' (31), contributing to authentic music experiences. In his critique of *praxialism*, which he considers as suffering from a traditional narrow vision, Reimer (26) states that it is a 'performance-obsessed view' centred on 'the development of performance craft', all the other learning being an accessory to this, representing 'the fundamentalist right wing in music education [that] so elevates the virtues of performance as to deify it' (26). Assuming a more *dialogical* approach (as opposed to Elliott's confrontational speech), Swanwick (1999, 6) states that 'the important point, though, is that the "aesthetic" is but *one* element of artistic activity'.

Elliott (1995, 23) highlights the main wrong assumptions of 'aesthetic education': 1) the work-concept of music, 2) the valorisation of aesthetic listening (focusing on the formal structure and other elements from the work), 3) the belief in intrinsic qualities and meaning conveyed by the music pieces, and 4) the guarantee of relevant aesthetic experiences by listening 'correctly'. Especially criticised by Elliott is the belief that these *aesthetic experiences* supposedly arise through 'exclusive concentration on the aesthetic qualities of a musical work', not taking into account the circumstances (moral, social, religious, political, personal) of the individuals (1995, 23). Swanwick (1999, 6) reinforces this claim, although stating that what aesthetic music education seeks in the students is also desirable and possible because arts are symbolic forms and, for that reason, meanings can be shared or transferred from one person to another.

Perhaps instead of making an option for one or the other perspective – the focus on 'the perception and contemplation of things rather than their creation' (Elliott 1995, 30) – it would be positive to present music educators with both perspectives and give them critical thinking skills that allow them to make decisions contextually on how to balance both music teaching approaches in their reality. In this respect I agree with Reimer (1995, 26), who defends the need to find a 'middle ground' between 'the extremes of a musical academicism that can enervate musical experience, and a performance obsessiveness that can restrict musical experience', with the goal of trying to reach the majority of people with positive connections to music.

Praxial philosophy holistic principles

David Elliott's *praxial* philosophy ignited the interest of many music educators who widened some of its principles and practices. The *praxial* approach stresses that music is 'not as a collection of works, but of practices' (Nichols 2011, 8), reinforcing Elliott's statement that 'the eventual outcomes of musical practices are not only musical works but new musical practices' (1995, 68). *Praxial* music making and teaching also argues against an excessive dependence on technical training, defending that music involves processes of many different kinds that also include embodied knowledge and previous experience, and refusing the Cartesian separation of body and mind. The *praxial* concept transforms the dualisms, seen as opposite movements, into cooperating forces in music learning: 'body and mind become body-mind; thinking and feeling become thinking-feeling; likewise with knowing-doing, classical-pop, reflection-practice, musical-extramusical' (Elliott and Silverman 2015, 103-104). Instead of focusing on the 'atomistic movements, isolated patterns, or acontextual drills' (Elliott and Silverman 2015, 434), features shared by traditional teaching practices, a *praxial* approach to teaching aims to promote and achieve holistic and authentic experiences.

Elliott acknowledges that the word *praxial* was used previously in the field of music education by Philip Alperson (1991), saying that 'the results of human action cannot be adequately understood apart from the motives, intentions, and productive considerations of the agents who bring them into being.' Reinforcing this idea, Elliott (1996-1997, 22) states that praxial is closely associated to purposeful, contextual and critical reflection and highlights 'the nature of music as process-and-product (action and outcome) intertwined: music as goal-directed action'. A *praxial* philosophy includes a learning theory inserted in the socio-constructivist paradigm, defending that, besides the individual dimension of learning, the interplay between individual and external conditions is central. That is why this paradigm of a multidimensional concept of *musical knowledge* and *learning* can be connected with recent research that perceives learning as an 'Embodied, Embedded, Extended, and Enactive (or 4E) phenomenon' [see page 64] (Schiavio and van der Schyff 2018, 1).

As said above, 'music is something that people do' and this sentence highlights the need to focus on active music making and, thus, active learning. To achieve effective learning, methods or strategies should value an active posture from the learner in order to promote an effective appropriation of learning. According to Edgar Dale's *cone of experience* (1969, 108) (Fig. 2), the appropriation of new learning depends on the level of involvement of the learner. Dale distinguishes between ***passive methods***, that include *verbal* and *visual inputs*, and **active methods of learning** that include *participating* and *doing*, stating that in the case of active learning, there is an incomparable higher level of appropriation of learning.

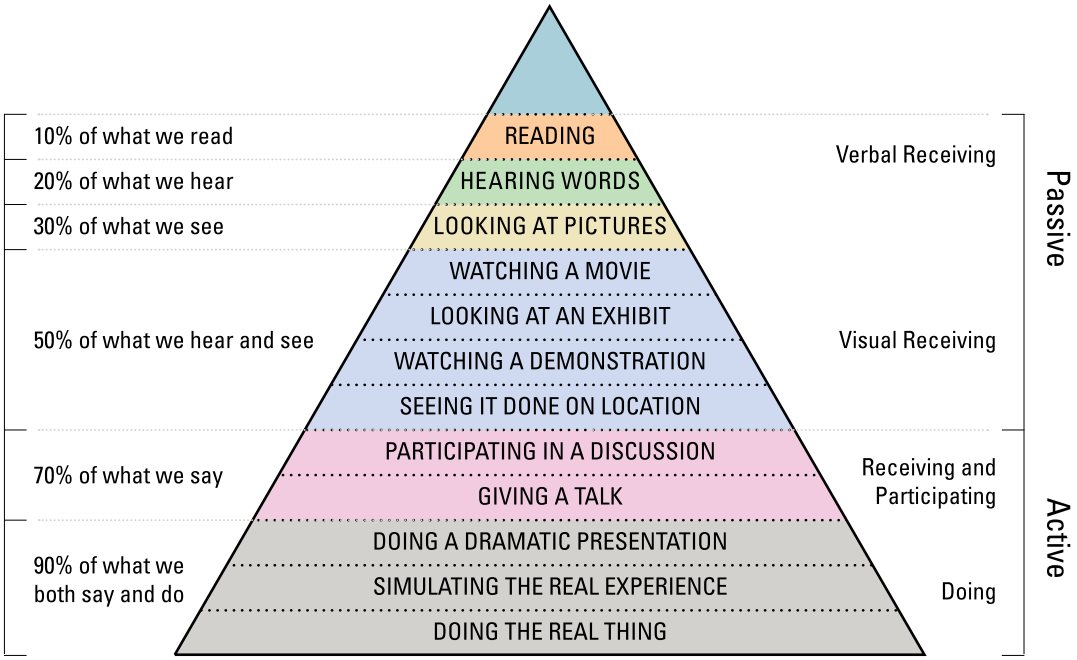


Fig. 2
Edgar Dale's Cone of Experience in Teaching

However, Elliott and Silverman (2015) call attention to the fact that, if *praxis* is translated 'simplistically as "to do" or "to make"' (43), the concept is misunderstood. *Praxis* in music education needs to be understood as a multidimensional concept that implies the widening of the focus of traditional practices (mostly performance-based), teaching and empowering 'students to learn *all* forms of music making and listening', this being the path to more satisfying and meaningful music experiences (2015, 44). The *praxial* philosophy gives a valuable contribution to the nature and significance of music and, thus, to a better understanding that will have a relevant impact on the teaching and learning practices in music schools.

Music as a social activity

Social constructivists, including the followers of a *praxial* approach to music making, value the collaborative and relational dimension of learning, peer collaboration and co-construction of meanings, 'the creation of community [being] the main reason for the presence of music in world cultures' (Anthony Storr quoted by Boyce-Tillman 2013, 31). This social approach leads to the development of higher-level educational goals like perspective taking, critical discussions, negotiation, democracy and social justice, among others (Boog 2003; Qi and Veblen 2016), in contexts where humans are 'beings-in-a-situation', acting, reflecting, influencing and being influenced by their actions (Freire 1983, 17). This permanent dialectical relationship between the individual and the group, characteristic of cooperative learning settings, is what teachers should look for in classroom contexts, always trying to maximise social interaction and fostering and developing 'both goal similarity and a sense of positive interdependence among the participants' (Hill and Hill 1990 in McGillen and McMillan 2005, 2). The concept of music

making as a social activity is more associated to contexts 'where music is not notated' (Hallam and Gaunt 2012, 97), asking of musicians a more creative and active posture, being emancipated to assume the role of active contributors to the transformation of the society in which they are embedded (Boog 2003, 427; Tregear, et al. 2016, 279). This valorisation of a participatory culture in schools 'offers a way for music educators to align more closely with musical engagement in current times while looking ahead to a future connected to musical life beyond school' (Tobias 2013, 35).

Praxial Activities

> Disclaimer: in this section I do not want to convey the message that individual practice is not needed or positive. Being clear that 'while practice is crucial, it is ultimately secondary to the importance of play in music-making' (Green 2011, 3), my goal is to question the exaggerated emphasis on this dimension, devaluing other important aspects that, arguably, can lead to more rewarding and meaningful experiences and effective learning regarding musical knowledge and, as a consequence, technical development.

As seen before, the concept referred to here as *praxis* is wider and 'quite different from a practical activity in the classroom' (Colwell 2005, 2) that may be associated with the narrower concept of *practice*. In some traditional teaching approaches, *practice* refers to long hours of solitary technical study (Hallam and Gaunt 2012, 7; Sloboda 2005, 293), this being related a technical rationality (Elliott and Silverman 2015, 406; Bowman 2009, 112). Although technical development, music theory and listening (seen here also as a *praxis* and not passive activities) are important to achieve the goals of *praxial* music education, the main focus should be placed on 'music making' that connects to the students' real life. Arguing against hegemonic practices in some traditional teaching contexts, some recent approaches in music learning refer to the positive aspects of engaging students in active participation in musical settings where they are challenged to make real contributions through exploration and creation in musical languages more associated to their own music interests, for example, by playing by ear and improvising (Allsup 2003; Elliott and Silverman 2015; Schiavio and van der Schyff 2018). Although common beliefs assume that the best music students are the ones who invest in more hours of instrumental 'deliberate practice' (McPherson 2005, 7), Sloboda (2005, 270) raises a doubt by saying that the students who show better results are not always those who spend a lot of hours on 'formal task-oriented practice' but those who spend more time 'messing about' in explorative and creative musical activities, endeavouring 'efforts to solve authentic musical problems through active music making' thus converting 'formal musical knowledge into musical knowing-in-action' (Elliott 1995, 61) to the detriment of the development of technical skills through 'unmusical' exercises. The concept of *knowing-in-action* can be also related to the similar concept of 'knowledge-in-use' (Molander 2004) used by Johansen (2020, 246) to designate 'competence'. Despite this belief in the primacy of *musical meaning* and *sense making* regarding technical achievement, Sloboda (2005, 270) states that 'successful musicians are those who have been able to achieve a proper balance between these two types of activity.'

Referring to specific activities to engage with in the classroom to achieve the goals of a *praxial* music education, Elliott started by suggesting *performing*, *improvising*, *composing*, *arranging*, and *conducting* (1995, 70), to which he later added *recording*, *sampling*, *sound sculpting*, *musicing and moving*, *musicing and dancing*, *musicing and healing*, *musicing* and

worshipping (Elliott and Silverman 2015, 16). The active engagement in these activities contributes to the development of *musicianship* and *listenership*, the combination of these two being 'interdependent and mutually interactive dimensions of musical thinking and knowing' that can give us an approximate idea of what *musical understanding* is (Elliott and Silverman 2015, 206). From all of the activities proposed by the *praxial* approach, perhaps the only one that is widely implemented and developed in *classical conservatoire culture* is *performing*. However, often it is viewed as a passive activity by not requiring *problem-solving*, *decision-making*, or any other kind of musical contribution on the part of the students, all the musical decisions being determined by tradition (Swanwick 1999, 92-93), devaluing also the real contribution of the teacher, who is transformed into a *thought-less mediator.*

The main innovation (although some of the proposals were generalised practices of most musicians until the 19th century) of a *praxial* music education regarding the activities in the classroom is the focus on creation, collaboration, active voice, and ownership of the learning on the part of the students. This implies the questioning of learning exclusively preconceived products (the work-concept concept of musical learning), valuing real music making in activities that promote risk-taking, exploration and experimentation. To include in the *classical conservatoire culture* this almost radical change of paradigm implies a transformation of the overall system, including the curriculum (with reference to values and goals, including the assessment models of students' musical achievement), the students' role regarding their own learning, and the teachers, by widening their technical, musical and pedagogical skills, alongside ethical and philosophical questioning.

Among all the activities proposed by Elliott, *improvisation* can be representative of much of what is required in a *praxial* music education context, requiring an active stance from the students, giving them an active voice and engaging them in musical decision-making. Creech et al. (2008, 18) state that in the use of improvisation lies a major difference between the practice of classical musicians, that attach 'greater importance to musical skills associated with the drive to excel musically and technically as well as notation-based music-making skills', and non-classical musicians that value 'non-notation musical skills such as memorizing and improvising'. Allsup (2003, 24) referred to teaching/learning settings in the classical tradition as being 'unproductive for group composing or community-making', while in jazz or popular music styles they are 'conceived of as fun, nonobligatory, self-directed, and personally meaningful' and with 'an emphasis on interpersonal relationships, peer learning and peer critique'. The two opposite poles (*work-concept* versus *improvisational* approaches to music making) represent the difference between a ***regulative process*** (in the classical teaching approach) and a ***transformative process*** that is focused on the generation and development of musical ideas (Gijlers and de Jong 2005, 265). For example, in the context of group improvisation, this transformative process offers opportunities to engage in musical transaction, collaboration, dialogue, negotiation and co-construction of shared meaning (Beegle 2010; Burnard 2002; Larsson 2020; Sawyer 2004).

Improvisation as a practice in the classroom is presented as an alternative to traditional models that value 'knowledge transmission and reproduction of the score' (Schiavio and van der Schyff 2018, 4), being necessary that teachers encourage risk-taking in the students and promote their confidence and problem-solving skills to make 'decisions on the spur of the moment' (Hallam and Gaunt 2012, 5). Christina Larsson (2020, 66) states that the rare the use of improvisation in traditional teaching approaches is due to a lack of understanding regarding what improvisation is and to the fact that music teachers have no

practical experience of improvisation as musicians or do not know 'how to incorporate improvisation activities in their teaching'. In the same line of thought, Burnard (2002, 168) states that the resistance from teachers to engage with improvisation, namely in groups, can be associated with a lack of training that leads to a lack of confidence to assume any kind of risks in their teaching practice. In these cases, engaging in improvisation with students 'involves taking risks and being exposed to judgements of teachers and peers [and] also means stepping out of a private sphere into a public space' (Larsson 2020, 68).

Despite highlighting the benefits of improvisation in educational settings in aspects such as student agency, ownership and independence of the individual student, these benefits should not be taken for granted. The 'practice' of improvisation can lead to negative and frustrating experiences and 'must therefore be problematised and investigated further in concrete practices' (Johansen, Holdus, et al. 2020, 4). For that reason, it is also important that the teacher, in a reflexive process in-context, decides if, when, and how to use improvisation in his teaching contexts. A specific case in a critical and socio-constructivism educational setting is *group improvisation*, whose nature is 'socially and musically inclusive' (Burnard 2002, 157), with a great potential impact on 'developmental benefits and learning outcomes' in music making settings (2002, 169). Positive examples of improvisation in groups include programmes that promote free improvisation, horizontal relationships and student autonomy (Wright 2018, 23), achieving highly positive results when developed with very young students, providing them with opportunities 'to expand upon their individual musical potential through verbal and nonverbal social interaction [being] capable of structuring creative music products in meaningful ways with minimal intervention from adults' (Beegle 2010, 1).

Theory and practice in the praxial approach

Contrary to what the concept of *praxis* or *praxial* may suggest, there is not a conflict or tension between theory and practice, neither a refusal or an undervaluation of the role of theory in music education. Nyberg (2015, 20), referring to Dewey's holistic approach, stresses that *theory* and *practice* 'are prerequisites for each other, and thus not opposites', the separation between these two concepts being a result of a Cartesian view present in traditional learning theories, still predominant in many educational settings, that focuses 'on the cognitive dimension and perhaps also the assimilative type of learning' (Illeris 2003, 405). Despite criticism of traditional practices, Allsup (2016, 276) makes reference to '*great* evidence of teacher professionalism that *integrated* reflection and doing and *integrated* theory and practice', believing that teachers, if emancipated to reflect upon their own practice, will also deal with many of the theoretical questions that were addressed by several authors before them. Grounded in the belief that *theory* and *practice* cannot be separated, Freire (1983, 26) states that 'reflection on our actions reveals the theory, without which the action (or practice) is not a true one [and practice] acquires a new significance when

'... a reflexão sôbre a ação ressalta a teoria, sem a qual a ação (ou a prática) não é verdadeira. A prática, por sua vez, ganha uma significação nova ao ser iluminada por uma teoria da qual o sujeito que atua se apropria lucidamente'

it is illustrated by a theory'. Similarly, Jorgensen (2001, 355), referring to a tension between theory and practice in music education, affirms that they are interdependent and useful to for helping music educators address their conceptual and practical dilemmas, with being necessary 'imaginative approaches to forging theoretical paradigms and grounded practices' being necessary, and these approaches being developed through dialogical discussion The use of 'the theory-practice dialectic' in educational interactions (Jorgensen 2001, 348) should be permanent and dynamic and leading to a blurring of the traditional separation between theory and practice, and in to the search of for a '"ground between" educational theory and practice' (Jorgensen 2001, 345).

In summary, in a holistic conception of musical knowledge it is not possible to fully separate a 'three-part combination of theory, practice, and expression/emotion' (Allsup 2016, 276) and, for that reason, to be effective, a music teacher must possess a combination of 'strong music-making abilities and knowledge' and 'having a solid understanding of major concepts and principles in the fields of educational philosophy, educational psychology, sociology' (Elliott and Silverman 2015, 110-111).

1.2.4. Resistance to change and the process of change

> *Change in all things is not an option; it is mandatory and inevitable*
>
> (Kratus 2015, 340)

In this section, the goal is to address the concept of **resistance to change** in collaborative music-making settings, and also to focus on the dichotomy between the positive and negative aspects of that resistance (both of the teacher and of students). As in the previous section, I will again start by presenting sections of the chapter wrote in collaboration with Andrea Creech.

Resistance to change in students-centred educational settings[30]

Resistance to change in educational settings has been investigated widely (Gorzelsky 2009; Illeris 2003). Classrooms are, traditionally, settings where changes are difficult to implement and failures in implementing change processes in classroom settings can occur when teachers or students: (a) believe they can't change, (b) don't want to change, (c) don't know what to change, or (d) don't know how to change (Dembo and Seli 2004, 2). Fear of failure has also been highlighted as a factor contributing to resistance to change and Yılmaz and Kılıçoğlu (2013, 18) enumerate some of the barriers to change within school systems: the person's need for fulfilment, habit, fear of the unknown, and threats to power, stating that change can create 'uncertainty, frustration or fear [and] people often exhibit a defensive and negative attitude and resist to change initiatives'.

According to Illeris (2003, 404), resistance refers to an active response in the moment of the new learning situation and 'contains a very strong learning potential, especially for accommodative and even transformative learning. Often when one does not just accept

30 Excerpt from 'Teaching and learning in unfamiliar territory' (Costa and Creech 2020)

something, the possibility of learning something significantly new emerges.' As Illeris argues, while mental resistance can be inconvenient and problematic for teachers, 'it should be a central qualification of teachers to be able to cope with and even inspire mental resistance, as precisely such personal competencies which are so much in demand – for example, independence, responsibility, and creativity – are likely to be developed in this way' (Illeris 2003, 404)

Responding to resistance: Scaffolding and disciplined improvisation in teaching

While deep musical understanding may require pedagogies that privilege musical creativity (Elliott and Silverman 2015), a dilemma thus arises when teachers encounter student resistance to pedagogical change (Illeris 2003). A potential response is to scaffold the transition to new ways of learning, including critical thinking strategies and skills for problem-solving. According to Wood, Bruner and Ross (1976, 90), scaffolding is 'a process that enables a child or novice to solve a problem, carry out a task, or achieve a goal that would be beyond his unassisted efforts', helping him to reach, step by step, a higher level of independence and competence in musical skills by reducing gradually the level of teacher intervention. Smit, van Eerde, and Bakker (2013, 819) refer to the *handover principle*, *fading* and *transfer of responsibility* where the teacher has the responsibility to provide space for 'free cognition', respond in real time to student contributions, and maximise social interaction (McGillen and McMillan 2005). Applied in music education, scaffolding can involve several types and levels of support, and crucially 'enables students to move beyond their current skill or knowledge' (Creech, Varvarigou, et al. 2013, 3).

The use of *scaffolding* strategies can have positive impact in musical activities (Hargreaves, Marshall and North 2003; Gijlers and de Jong 2005; Beegle 2010; Hallam and Gaunt 2012; Creech, Varvarigou, et al. 2013), referring not only to one-to-one settings between adult and child but also between peers, adults and in different groups (classrooms, choirs, orchestras). Sawyer (2004, 17) states that the teacher needs to have some structure or previous plan of the classes but '*not too much*' because 'if the collaboration is overly structured, the students are prevented from co-constructing their own knowledge, thus, preventing the benefits that collaboration was intended to accomplish'. In contrast to 'teaching as performance', where the teacher is a solo performer acting for their students, a passive audience, Sawyer (2004, 12) argues that '*creative teaching is better conceived of as* improvisational performance' where 'the flow of the class is unpredictable' and 'collectively determined by all participants' (13). The same author (2004, 17) states that 'the most effective teachers are those that can effectively use a wide range of degrees of structure, shifting between scripts, scaffolds, and activity formats as the material and the students seem to require', conceptualising these actions as 'improvisational responses to the unique needs of that class'. The balanced level of structure and freedom leads to *disciplined improvisation*, a combination between planning and improvisation (Sawyer 2004, 13).

Hallam and Gaunt (2012, 137) affirm that facilitating musical groups requires numerous skills that can include scaffolding strategies such as listening, explaining, demonstrating, leading, communicating, questioning, challenging, critiquing, facilitating, encouraging, supporting, negotiating, and organising. A disciplined improvisatory pedagogical approach, in response to resistance to learning, therefore requires expert navigation of this scaffolding landscape, and furthermore may involve shifting flexibly among the roles of teacher as collaborator as well as 'teacher as performer, teacher as decision maker, and teacher as facilitator' (Sawyer 2004, 17). It is thus in the articulation between the concepts

of scaffolding and 'disciplined improvisation' as a pedagogical orientation that the potential lies for the teacher to respond creatively to mental resistance to learning, and together with students work towards transformation in understandings.

Resistance to change in educational settings

Educative systems are in a constant tension between permanence and change (Freire 1983, 67), exposing a tension between the traditional 'banking model' of teaching and a dynamic process, involving all the participants in the learning process in real-world problematic situations. This opposition reveals two views of knowledge, the first being 'associated with formal instruction to the whole class and with rote learning', and the second, where students work 'individually or in groups and explor[e] their own interests and opinions' (Robinson 2011, 200).

Some music education systems face a real danger of losing relevance by resisting, or even opposing, any attempts to change, replicating with pride ancient practices and methods without taking into account the societal and individual changes (Elliott and Silverman 2015; Kratus 2015; Nichols 2011). Despite some surface changes, for example in curricular content (Finney 1999, 237-238), traditional systems still lack the engagement of its protagonists in critical thinking, the result of a society that accommodates and is accomplice to social reproduction and the maintenance of the status quo in music education (Schmidt 2005, 3).

Dent and Goldberg (1999, 39), quoting Zander, refer to resistance to change as a 'behavior which is intended to protect an individual from the effects of real or imagined change' (Zander 1950, 9) and see resistance as 'part of a constant tension between tradition-bearing and crusading' (Johnson 1992). When imposed in a *top-down* movement, without taking into account the voices of teachers and students, changes in educative settings lead to individual and, consequently, collective resistance and defensive behaviours. Kratus (2015, 345) affirms that change in formal music education is 'even more problematic, because those who would promote change are in the minority', putting into conflict the intentions of a few individuals to transform the system with the opposition made by a lot of 'others within institutions who see themselves as responsible for upholding revered standards of the past' both sides being convinced that 'they hold the moral high ground'. As will be seen in the field project implemented in this thesis, changing from a 'neoliberal' system to a pedagogical context where critical thinking and active participation are promoted naturally invokes systemic resistance, including in institutions, teachers and students (Engeström 1987; Illeris 2003; Gorzelsky 2009).

In respect of institutional resistance to change, starting by referring to higher education in the field of music teachers' training courses, perhaps the best-positioned institutions to implement an effective systemic transformation, many of them have 'remained isolated, resistant to change, and too frequently regressive rather than progressive in its approach to undergraduate education' and, for that reason, 'fundamental changes in priorities, values, perspectives, and implementation have not occurred' (Sarath, Campbell and Myers 2014, 2). According to Dent and Goldberg (1999, 26), quoting Kotter (1995, 64) in relation to studies about institutional transformation, when an organisation implements a change, most of the time the highest level of resistance comes from the organisational structure and only in rare situations are the main obstacles due to individual resistance. This happens because those who can be more affected by an institutional transformation, where the status quo is altered, are the ones who hold the power. That is the reason why when institutions related to music teaching 'attempted to adapt to social change [they had] been

unable to escape the power of hegemony' and domination of the classical tradition (Wright 2018, 20). For that reason, if and when teachers and students change, new and more demanding challenges will be waiting in order to achieve a systemic transformation.

Traditional teachers will also resist the change to a critical and constructivist pedagogical setting because it implies reframing the hierarchical relationship by transferring to the students the responsibility for most of their learning (Abrahams 2006). Similar to what happens in institutional change, there is less willingness at higher levels of decision-making to implement radical changes in the pedagogical relationship because aspects like democratic and egalitarian relations between teachers and students can be seen, by some teachers, as a threat to the status quo regarding power and control issues (Kratus 2015, 345; Tobias 2015, 115), challenging the teacher's self-esteem (Kratus 2015, 344) and self-image as the 'superior intelligence' in the relationship. This leads teachers to remain on the 'safe side', maintaining a total control over all aspects related to the teaching-learning process 'which is usually a narrow one with only limited options – especially when compared with the level of diversity in the pupils and their ideas' (Schrittesser, Gerhartz-Reiter and Paseka 2014, 152).

Regarding students' resistance to change, those who are already acculturated to the classical tradition will also resist approaches that give them more responsibility and a more active role, being natural the tendency to maintain familiar learning practices, even if the results are poor and motivation is low (Dembo and Seli 2004, 4). For example, changing study habits is extremely difficult, mainly for older students that are more resistant due to study skills acquired over many years (Dembo and Seli 2004, 2), having students reveal that 'it takes too much effort and time to learn new methods of learning' (2004, 4). Most of the resistance to change occurs in students who 'often display an unrealistically high sense of self-efficacy or overconfidence' (Clark 1991 in Dembo and Seli 2004, 4) because, being successful students in a traditional setting, any transformation can risk their self-image by, most certainly, dropping their ratings (Felder 2011, 131), affecting their sense of competence and achievement. These are the students comfortable with most of the characteristics of a controlled and directive learning setting (Dembo and Seli 2004, 4), being also 'well indoctrinated by social-cultural norms' that promote 'authoritarian pedagogical models and objectives, coupled with expert knowledge [that are] more than tolerated […] they are expected' (Schmidt 2005, 4).

Resistance as a possibility

Resistance to change is, often, responsible for the creation of 'a state of turbulence and conflict' (Nyberg 2015, 22) and, for that reason, it is seen as a negative aspect that needs to be 'overcome', usually by the intervention of the teacher. Contrary to this view, and regarding collaborative work, resistance can be seen as a transformational and an essential dimension of the change process, and its importance must be acknowledged and well accepted (Gorzelsky 2009, 68). Illeris (2003, 404), although acknowledging that resistance can be problematic, mainly for teachers, clearly values its occurrence in educational settings because it can facilitate the students' path to 'independence, responsibility, and creativity'. In the same vein, Elliott (1996-1997, 33) assumes that 'change is difficult; but change is also the necessary requirement for growth in knowledge and professional practice', and Hallam and Gaunt (2012, 7) believe that 'the capacity for change is now one of the main drivers in societies'. If students are interested enough to resist new teaching approaches, the opportunities for critical thinking and problem-solving activities in

the classroom increase (Mildred and Zúñiga 2004), those resistant behaviours being an opportunity for deeper levels of engagement and learning, transforming the relational dynamics and perspectives, and allowing the production of new knowledge. One of the risks of trying to 'escape' from situations in which resistant behaviours will arise, is that this can lead to the following of 'beaten tracks shaped by habit [that] can easily lead to routine' (Nyberg 2015, 3) and, in this case, the perceived possibilities and choices in learning are considerably reduced. The tensions encountered during the process of change, that intends to reach a situation of 'optimal balance' after 'friendly excursions into disequilibrium' (Kohn 1992, 41), are encountered in individual and intersubjective processes, and should be valued for their contribution to changing practices and habits in accordance to specific social circumstances and not dictated by dogmas (Bowman 2009, 113).

Facilitating the process of change – institutional and individual transformation

The theme presented here seems to be contradictory because, on the one hand, resistance is seen as a positive behaviour that must be nurtured and, on the other hand, it causes problems that teachers are eager to solve, searching for the best strategies to overcome it. Dealing with this tension, and viewing resistance as part of the process of individual and collective transformation, I address possibilities for dealing with, coping with, integrating, potentiating or overcoming resistance to change. Depending on the individual or contextual aspects, the strategies used, or responses given to the ones who are provoking, implementing or assessing the processes of change (school managers or teachers, for example), are different.

Kotter (1995, 64) states that, most of the time organisational change is made difficult by a structure that 'makes people choose between the new vision and their own self-interest', leading to resistant behaviour. So, it is important to acknowledge the difficulty inherent to change processes independently of its intentions (Kratus 2015, 340), although, from an opposite perspective, if we believe that resistance is inevitable, the process of change can be implemented with less effectiveness, this being 'the fundamental flaw of these change efforts' (Dent and Goldberg 1999, 26-27). In systemic processes of transformation in educational contexts 'real change must be internally motivated' (David Seitz in Gorzelsky 2009, 82), being necessary to ensure the individual and social conditions to prepare the individuals to that change (Yılmaz and Kılıçoğlu 2013, 14). This is especially evident in cases where the initiative for a change process is not a collective vision, a clarification of the goals to be achieved being necessary, involving all participants in decisions about the best way to implement that change (Dent and Goldberg 1999, 36). If this does not happen, the tension between those who are prone to accept the challenges that change processes involve and those that, for different reasons, resist it, will probably reach a level of conflict that will impede the goal it was meant to achieve and, instead, mobilise even more resistance and block the entire process, leading Kratus (2015, 345) to affirm that 'the mechanisms of change in music education, therefore, cannot be confrontational'. Clint Randles (2015, 337), referring to a *Conceptual Model of Change in Music Education* and the need to take action, suggests that '1) change is articulated locally, 2) change is the product of imagination in conjunction with a lot of hard work, and 3) change is the result of the work of people whose histories and culture impact the community, divisions of labor, rules, tools, and signs as they relate to the process'.

In a pedagogical relationship prone to self-transformation (individual and collective), where resistance is viewed in a positive way, teachers need to take on the role of 'main

agents of change' (Nichols 2011, 6). It is important that the teacher sees transformation as necessary (Elliott 1996-1997, 33), is internally motivated to undertake that change (Gorzelsky 2009, 82) and knows how to do it or, at least, which are the best strategies to follow. To be effective, all those involved in the change process need to be aware of the planned structure, goals and activities, even if, most of the time, they are experimental and based on decisions taken in action. However, although active participation can contribute to a reduction in resistance – being inversely proportional to the level of resistance (Dent and Goldberg 1999, 31) – sometimes the opposite behaviour occurs, at least temporarily (Goodman 2001). Besides being focused on what to change and the final goals to be achieved, teachers need to develop 'strategies for teaching students how to change' that can help students to develop metacognition skills, being aware of learning characteristics that can help them to promote self-regulatory and self-management skills (Dembo and Seli 2004, 10).

Even when the followed strategies seem adequate to deal with resistant behaviour, attempts to change may fail because those attempts are not applied long enough to convince the most resistant of the benefits and positive outcomes of that process. According to Felder (2011, 132), **the results in change processes take a long time, even several years, to produce results**, mainly if using 'a more complex technique such as cooperative or problem-based learning'. In these cases, it is essential to recognise that the students have the right to resist and, for that reason, mainly when discussions or students' reactions escalate, teachers must be prepared to shift or adapt the plan made for the session, and use these moments constructively, always trying to incorporate and value the students' arguments (Mildred and Zúñiga 2004, 372). Although a transitioning to a more self-regulated and student-centred method can risk the students' sense of competence, a positive transition 'can enhance academic achievement and a sense of self-confidence or efficacy' (Dembo and Seli 2004, 3), and help students coping with change by encouraging them to take a more active role in their own learning in approaches such as active, collaborative, cooperative and problem-based learning (Prince 2004). A more egalitarian relationship implies maintaining the students' awareness of the changes and, whenever possible, negotiating with them some aspects of that change, making an effective connection between the musical activities and the students' interests and musical 'real life', with them participating actively in all the phases of the process of change (Dent and Goldberg 1999, 31). Although it can take some time until positive results can be seen, some conditions that can help to decrease the resistance levels include peer learning, clear information and discussion, and the development of activities assigned to students where they can have opportunities to be successful (Goodman 2001).

1.2.5. The Roles of the Teacher in a critical and *praxial* approach to music teaching

> According to empirical knowledge as a musician, music teacher and school manager in a traditional music teaching system, three types of music teacher come to my mind: 1) those who believe that the music teaching system is getting good results and it needs no transformation because the goal is to 'filter' the talented students who will become professional musicians; 2) those who think that the system is not having good results but the responsibility for this situation rests with the students because they do not practice enough, and 3) those who defend alternative values and goals for music education

> and believe that every child should be included in the system's concerns, independently of their future goals regarding music and also independently of the skills they show in an early stage of their musical development. According to this last group of teachers, traditional practices are not suitable for the majority of students in the system, resulting in demotivation and early drop out, or inexistence of contact with music making after leaving music school.
>
> Although I include myself in the group of teachers who think that the music teaching system needs to be questioned, the 'fear of change' is always present. In my practice as a teacher I find it extremely difficult to engage in pedagogical and didactical exploration, mainly because I feel isolated in my context (Kratus 2015, 345), being seen, by some of my colleagues, as an undemanding teacher for not following the *classical canon*. In this research, fuelled by the need not to be contradictory to the philosophical stance assumed as teacher and researcher, I made an extra effort to fight against the conformity and passiveness criticised in traditional teaching.

The subtitle of this thesis focuses on the need to reconfigure the different roles attributed to the teacher. This reconfiguration means to abdicate from the 'instruction' paradigm based on the *apprenticeship model*, in favour of a more horizontal relationship, where students' voices and active participation are valued, and where the teacher responds 'in action' to the context-specific challenges. In this section I will focus on the teachers' roles and the possible strategies to pursue the goals of music education stated and defended above, being aware that, even when the values and goals of music education are clearly defined, there is always a major difficulty transitioning to what John Dewey calls 'progressive education', because there are no 'methods' to follow.

Four authors and pedagogues that defend *constructivist* and *critical pedagogy* principles had a great impact on the planning and implementation of my *participatory action research*.

The first important author was **David Elliott**, by defending a *praxial* approach to music teaching where, contrary to the hegemonic practices of the *classical conservatoire culture*, students should engage in creative activities in real and authentic music making, refusing the 'banking model' and the technical-rationality stance that values technical skills to the detriment of meaningful musical experiences and *musical understanding*.

Being myself a product of the traditional approach that is now questioned, with no prior experience nor training, as a musician or teacher, in almost none of those *praxial* activities, undertaking a *praxial* stance was a problem. **Jacques Rancière** (1987) helped me to solve this tension, suggesting that it is possible to teach what one does not know, it being 'just' necessary to provoke and feed the students' curiosity and emancipate them to 'keep searching' for something, valuing the process over the result (or product) to be achieved.

Having clarified the philosophical stance, the 'scripted curriculum', characteristic from traditional teaching practices that still follow the 'work-concept' approach, was refused. The idea of a 'teacher-proof' curriculum was abandoned, the students' autonomy being favoured, having the teacher respond contextually to the interactions in the classroom and putting into practice the critical and constructivist principles. This is in line with what **Keith Sawyer** calls a 'disciplined improvisation' regarding the teacher's intervention, relinquishing being in total control of the sessions and allowing a 'free-flowing discussion' among the students, the results of these interactions being the goals to achieve: 'not [a] collection of works, but of practices' (Nichols 2011, 8)

The last important author for the intervention in the field project was **Gianni Rodari**. In his 'Grammar of the Fantasy' he speaks about ways to engage with students in a creative manner, trying to make them (and the teacher) use the imagination and 'to derail the overused lines of meaning' (2006, 57) or diverging from traditional habits and beaten tracks. Although destined for creative writing, many of the suggestions made by this author are liable to be adapted to other pedagogical contexts, being extremely helpful in moments when students were 'blocked' due to resistance behaviour.

Regarding the authors referred to above, the first two were already widely presented and discussed. Leaving for later the contribution of Rodari to this thesis, more specifically to the planning of activities, in this section I will focus mainly on the contribution of Sawyer.

Although included in the background literature, this section could also be considered for the *Introduction* section of the field project because it contains already many of the concrete strategies and activities proposed to implement in the field project with students, being an example of articulation between empirical knowledge, critical thinking and the contribution of the reviewed literature.

To become a music teacher

> In a traditional and neoliberal system, teachers are supposed to follow a clear 'do-it-this-way' prescription of what to do in the classes, independently of their individual contexts, being this, in Portugal, still a reflex of the administrative centralism and a lack of confidence in the teachers' initial training and pedagogical intervention in the field. However, according to my professional view, in recent years educational policies in Portugal allowed a loosening of the strict top-down policies, favouring some movements towards an increased autonomy of schools and teachers. Despite this, many teachers resist and look for 'safe' methods to implement in their classes. According to my professional experience, in the Portuguese music schools and conservatoires there is a perception that a 'higher guidance' must be followed, dictating what students should do and achieve, following lists of works (and not real curricula) with almost no differences between different contexts.

In Portugal some teacher training programmes are focused on improving 'old methods', leading teachers to base their practice on 'the research and opinions of the experts in the field, and shying away from developing their own inquiries, inside their own classrooms' (Schmidt 2005, 5) viewing themselves as technicians or mere 'script followers' (Sawyer 2004, 12). This focus on following a curriculum with 'ultraspecific verbal plans or scripts', according to Elliott and Silverman (2015, 410), goes against what the practice of a good teacher should be, by not engaging teacher and students in communication and transactions in the classroom and also by not promoting a reflective practice. By replicating the 'work-concept' approach to music teaching and devaluing the *multidimensional artistic-social constructions*, the practices of some teachers are compared to the action of 'political dictators' instead of 'reflective coaches and mentors' (Elliott and Silverman 2015, 426). For teachers that assume the role of mere mediators between an 'objectives based' or 'technical-rational' curriculum that, as Sawyer (2006, 47) says, are *teacher-proof* curricula, 'teaching is reduced to acting out scripts and managing information' having as a final consequence their *deprofessionalization* (Elliott and Silverman 2015, 397). Referring to the adherence to critical pedagogy principles, Bowman (1992, 4) defends that teachers

should always question the widespread practices, not assuming them to be absolute truths, exposing inconsistencies and exploring and evaluating alternatives instead of accepting 'the security and comfort of dogma'.

Sawyer (2006, 47), criticising the option of *teacher-proof curricula* that are welcomed by most teachers, proposes a *disciplined improvisation* regarding the teacher's role in the class, defending that this is more a promoter of a constructivist conception of knowledge than traditional approaches that are based on the acquisition of information. According to Sawyer (2004, 18), *teacher-proof curricula* and *scripted curriculum* are obstacles to creative teaching: in the first case, by rigidly specifying what the teacher should do and how, removing the judgment of the teacher in relation to each specific context and, regarding *scripted instruction*, by emphasising 'lower-order skills that are particularly easy to measure with standardized tests'. In opposition to this, more creative and effective teachers base their action on the real context, responding to students individually. Although assuming that a predefined lesson plan can exist, teachers must be prepared 'to relinquish control' and assume the constructivist behaviour of allowing a 'free-flowing discussion' (Sawyer 2004, 195), not totally controlling the flow of the class (Sawyer 2004, 14). Thus, criticising the fact that most teachers still rely on a scripted curriculum and structured plans decided by 'expert educators' to apply in their classes, Sawyer (2004, 18) defends that 'creative teaching' implies the engagement of teachers 'in local participatory solutions'.

According to Regelski (2009, 1) we need to clarify the criteria and conditions that allow someone to be qualified as a 'professional' music teacher, **being necessary to distinguish between 'teaching as *praxis* from just any instructional practice'**. Regelski (2009, 3) addresses aspects related to the formal conditions to become certified music teachers, such as training in 'studies of teaching and assessment techniques, curriculum design, and teaching methods and materials', but warns of the fact that, sometimes, what is certified or licensed is the 'practitioner's incompetence'. For that reason, the *ethical dimension* is settled as one of the primary conditions to aspire to the professional category of music teacher (Regelski 2009, 14), the capacity of music teachers to 'think ethically, as professionals, [scrutinising] all their inherited ideas about methods and pedagogy' being valued (2009, 22). According to the background literature, the teachers' reflective process should guide their options in relation to the transmission of ethical values that must be always present in the pedagogical intervention. This practice must be permanently accompanied by a reflection that admits the possibility of risking and even failing in its attempts, and the results should not be evaluated only by the amount of information or skills that students (or most of them) acquire, but by the positive impact, at various levels, it has on students (Biesta 2013; Bowman 2009, 119; Elliott 1995, 227).

The teacher also has a central role in defining the type of relationships and behaviours between students that are acceptable: his presence in the direct relationships between peers needs to be reduced, or 'decentred', but his role as facilitator or moderator should never totally fade (Elliott and Silverman 2015, 138), for example, leading students to define rules among themselves that can serve as standards of conduct negotiated and accepted by all (McGillen and McMillan 2005, 2). The 'progressive teacher' sees music teaching as a multidimensional activity that embraces, besides musical skills, humanistic values, leading Elliott (1995, 209) to affirm that 'a music educator who is genuinely concerned with teaching and learning MUSIC is also engaged in a unique and major form of humanistic education'.

The questions around the music teacher's profession are closely related to the multiple identities, or sub-identities, assumed by most music teachers, being especially relevant 'artist/musician' identity (Ballantyne, Kerchner and Aróstegui 2012, 222; Bernard 2004; Regelski 2007) developed during long years of immersion in the classical tradition. The tension, or even conflict, between the identities of musician *versus* teacher, conditioned by the level of musical and technical abilities (Ballantyne, Kerchner and Aróstegui 2012, 213), is 'potentially problematic' in music education by being prone to the replication of traditional practices that undermine educational knowledge (Ballantyne, Kerchner and Aróstegui 2012, 222). Sachs (2005, 15), quoted by Ballantyne et al. (2012, 212), highlights the importance of teacher identity in providing 'a framework for teachers to construct their own ideas of "how to be," "how to act" and "how to understand" their work and their place in society'. In the same line of thought, Stauffer (2009, 175), quoted by Nichols (2011, 5), suggests that the questions to be asked by a teacher are 'Who do we teach?' and 'Where do we teach?' instead of 'What do we teach?' and 'Why do we teach?', giving the teachers 'a critical lens with which to examine their individual contexts as sites for transformation in music education'. In this respect, it is important to state that 'to decide' what and how to teach is not a power that can be given, or not, to teachers, but a moral responsibility that teachers must assume (David Best in Elliott and Silverman 2015, 112). Being the teacher of an ethical subject (Elliott and Silverman 2015, 20; Holdus 2020, 201; Jorgensen 2001, 21), if he finds that the students still cannot reach a final result that is compatible with the basic ethical precepts, he must make an effort to guide students to reach the maturity to conduct an ethical reflection about certain moral norms or conduct (Elliott and Silverman 2015, 412) in collaborative spaces where 'practices are habits that are intersubjectively or consensually constituted, intersubjectively validated and consensually maintained' (Bowman 2009, 113).

Some music education systems, and perhaps also society, assume that music is intrinsically good and, for that reason, learning music is also inherently good (Regelski 2009). However, despite the strong arguments that defend musical learning and its multidimensional benefits, teaching does not, in itself, guarantee a positive impact. For this reason, **it is necessary to question what skills, values and types of knowledge are necessary for a musician to become a music teacher**, for example, understanding how technical, musical and study skills can be acquired through meaningful and authentic music making activities. In this respect, Elliott and Silverman (2015, 110) argue that music teachers need to have a good balance of performance skills with 'a solid understanding of major concepts and principles in the fields of educational philosophy, educational psychology, sociology.' Good music teachers develop a greater awareness of the ethical values of their profession, always questioning their teaching practices and methods, which often came from very ancient times, when societies and individuals were very different. This ethical way of reflecting implies an iterative cyclical process composed of **planning - action - evaluation – reflection** (Reason 2006 in Nyberg 2015, 114) where all decisions will have ethical consequences. Contrary to this desired situation, Elliott (1995, 271) refers to 'poor teachers' and some music programmes that do not promote authentic musical experiences, approaching 'musical works as one-dimensional abstractions instead of multidimensional artistic-social constructions' being also an example of an 'absence of a grounding philosophy'.

> Taking an ethical stance in education implies that the teacher *decentres* himself from the educational act, valuing the learners' interests and acting according to the individual and social context of the classroom. This may be difficult to assume by teachers/musicians used to following 'one-size-fits-all'

programmes (Martignetti, et al. 2013) where the traditional way of teaching knowledge and skills and the superiority of the classical language are not questioned. **An ethical guidance also implies the recognition that technical and music skills are not sufficient to qualify as a music teacher, and that prescriptive teaching methods cannot be applied in every context in the same manner**. The collaborative and democratic context where music is taught/learned/made is the space where ethical and moral values are discussed, negotiated and practised, being always fluid according to the interactions among all the participants.

The music teacher in a *praxial* context

> *…it takes a musician, however, to impart the essence and inner beauty of our art [music]*
>
> Mark Turner in Swanwick (1999, 28)

In this section my goal is to appoint some possibilities for the different roles of the teacher that are aligned with the personal and philosophical positioning defended throughout the thesis. Acknowledging that it is not possible to 'detach' completely from the limitations of working in a music school, the tension between a total freedom and constraints on the teacher's action will be always present.

The classroom setting and promotion of students' autonomy

Applying a *praxial* philosophy to instrumental music teaching implies horizontal and fluid pedagogical settings where the main intention of the teacher should be the promotion of active music making (Elliott 1995, 285) 'fostering self-generative forms of discovery [instead of] more prescriptive forms of exposure' through 'open-ended, exploratory, embodied, and improvisational action with instruments and sound that learners naturally tend to produce' (Schiavio and van der Schyff 2018, 9). Although intending to increase the students' autonomy and peer collaboration, the role of the teacher is never passive, intervening by promoting discussions, suggesting possibilities to facilitate the process of achieving a given musical goal. Freire (1995, 378) highlights the dialogical communication immersed in a specific social context, where the construction of knowledge is shared but where the teacher maintains some authority (not authoritarianism) due to being more prepared regarding the subject matter to be addressed during the pedagogical act. Engaging in non-hierarchical discussions with the students, the teacher has the opportunity to include his multiple musical identities (teacher, performer, arranger, composer) in the pedagogical setting, alternating between those roles (Hargreaves, et al. 2007), this mutuality being a promoter of intersubjective construction of knowledge (Gorzelsky 2009, 67; McGillen and McMillan 2005, 15).

Jorgensen (2001, 347) suggests that, instead of prescriptions of what to do with their students, teachers must be given 'conceptual tools and skills' that will prepare them to analyse and reflect upon their own contexts, meeting 'the needs and interests of students in their own particular situations rather than follow uncritically the dictums of others'. A more active posture on the students' part must be valued by focusing on 'less predictable

and exploratory possibilities that emerge and develop constantly' (Schiavio and van der Schyff 2018, 12), in a context where 'a teacher's knowledge-in-action is what gives meaning to the teaching-learning situation' because 'objectives emerge in and achieve specification only during teaching-learning transactions' (Elliott 1995, 251). Finally, and more importantly, to potentiate the students' musical autonomy and growth, the teacher needs to facilitate a closer relationship between the world of school and 'the wider musical world' (Swanwick 1999, xiv).

To describe an effective music teacher, Elliott refers to the concept of *musicianship*, described as the 'subject matter knowledge' that if the teacher does not possess, he cannot know what the students should learn, this being closely connected to 'the nature of musical practices, musical works, musical values' (Elliott 1995, 252). Another concept is *educatorship*, that Elliott describes as 'flexible, situated knowledge that allows one to think-in-action in relation to students' needs'. Music teachers must not be seen as 'intermediaries in an educational delivery system' but, instead, 'reflective practitioners who can think-in-action and know-in-action in relation to highly complex and fluid teaching-learning situations' (Elliott 1995, 252). Assuming a detachment from curricula that are insular to the specific teaching realities, music teachers must: '(1) orient themselves to the music teaching-learning situation; (2) prepare and plan music teaching and learning in relation to their orientations and their individual teaching situations; (3) teach by thinking-in-action in relation to their orientations, preparations, plans, and the contextual demands of their own teaching situations; and (4) evaluate the first three stages of curriculum making.' (Elliott 1995, 256).

One important consideration regarding curriculum is that, instead of clear descriptions about what music education should be and how it should be taught, '**an excellent music curriculum […] is largely an excellent music teacher in action**' whose positive characteristics include being 'musically, pedagogically, philosophically, psychologically, and politically savvy' (Elliott 1995, 309). Elliott (1995, 75) states that music educators need to be capable of shifting 'back and forth between the products and the processes of students' musical thinking' and, instead of basing their intervention on reading skills and rigorous lesson plans, they should put an emphasis on 'the practical, situated, and improvisatory nature of teaching' (Elliott 1995, 251-252), transitioning between teaching and learning strategies like *modelling*, *coaching*, *scaffolding*, *articulating*, comparative reflecting, and *exploring*. It is this proper response to the situations occurring in the pedagogical relationship that can be considered a sign of the teacher's ***musicianship* and *educatorship*, two complementary and interdependent forms of expertise** (Elliott 1995, 251-252). This is in line with Sawyer's view or the teacher's action as 'improvisational performance', having as its main goal an increase in the students' autonomy and critical self-awareness, and a gradual reduction, or fading, of the teacher's support in the musical and non-musical problem-solving activities.

According to Swanwick (1999, xi) there are three principles that, independently of specific contexts, must always be followed by music teachers: 'care for music as a vital form of musical discourse; care for the contribution that students bring to musical transactions; the promotion of musical fluency'. Above all, the *praxial* music teacher must contribute to '*spark, support, enliven, arouse, sustain, and advance positive personal experiences* of musical emotions, personal-artistic meaningfulness, self-confidence, self-identity and musical identity, optimal flow experiences, and the fullest possible personal and musical growth' of students (Elliott and Silverman 2015, 203).

Although seeming contradictory by constantly defending the need to transfer much of the centrality of the classroom to the students, increasing their autonomy and self-regulating skills, the role of the teacher is also central for achieving the goals of education and music education in a *praxial* paradigm.

Disciplined improvisation

One of the common features of those who defend constructivist and critical perspectives is that curriculum and the teachers' practice should be context-specific and not decided by centralised top-down policies that promote standardisation (Cope 2002; Cope and Smith 1997; Giroux 2011). According to Elliott and Silverman (2015, 47), 'it would be illogical and potentially harmful to insist that there is one music education methodology, or one set of "national curriculum standards" that is valid for every teacher and learner in every situation' and, for that reason, instead of following uncritically guidelines decided by others, teachers should follow the 'moment-to-moment, fluid, and local nature of classrooms' being this why teaching is 'an extremely challenging endeavour'.

Also valuing the relation to each specific context in which the pedagogical relationship occurs, Sawyer (2004, 17) defends that a certain level of structure or planning needs to exist, but it is necessary to prevent it hampering students from co-constructing knowledge, in a collaborative setting, with the teacher and between peers. In the case of overly structured planning, Sawyer (2004, 12) criticises the concept of *teaching as performance* because it leads the teacher to assume the role of 'a solo performer reading from a script, with the students as the passive, observing audience [reducing] teaching to an individualistic focus on the teacher as an actor [and suggesting that] an effective actor could be an excellent teacher even without understanding anything'. Going beyond the view of the traditional music teacher's role, Sawyer (2004, 19) argues in favour of an improvisatory dimension in teaching, where the unpredictability of the interactions contributes to the development of different skills in action, being this 'the essential role of creativity in teaching and learning' (Sawyer 2004, 19). This way, 'teaching as performance', characteristic from traditional systems is transformed into 'teaching as *improvisational* performance' (Sawyer 2004, 17). A *disciplined improvisation*, refusing overly structured planning, implies a blending between *reflection-in-action* and *reflection-on-action*, combining the response of the teacher in 'situations that are unfolding', 'building new understandings of situations to inform our actions' and articulating decisions 'in-the-moment' with a reflection 'after the event' (Hallam and Gaunt 2012, 260-261).

Addressing the concept of 'pedagogical improvisation', Heikinheimo (2020, 178) defends a balance between structuring elements and 'improvisational brilliance', stating that to be competent as a teacher includes 'the ability to improvise effectively within structures', and several authors refer to an alternation of roles or sub-identities (Ballantyne, Kerchner and Aróstegui 2012, 212; Hargreaves, et al. 2007). Kari Holdus (2020, 197), making an association between improvisation in music and pedagogical improvisation, that she relates to creative teaching, highlights 'open-scripted, dialogic and responsive' characteristics of pedagogical improvisation, although calling attention to the fact that 'merely copying aspects of musical improvisation is not sufficient to develop the field of pedagogical improvisation' and may not lead to the desired goals of teaching.

Scaffolding

The importance of *scaffolding*, widely defended as a positive and transformative teaching practice, with a great impact in music education (Beegle 2010; Creech, Varvarigou, et al. 2013; Gijlers and de Jong 2005; Hallam and Gaunt 2012; Hargreaves, Marshall and North 2003), was already stressed above [see page 80].

An extremely important question raised when referring to *scaffolding* in a constructivist pedagogical setting is the difficulty in perceiving where the limit of the teacher's intervention can be placed. As said above, it is suggested that in a scaffolding process, the teacher proceeds 'step by step', however, this way to guide the students can be seen as one of the characteristics of 'brutalisation' practices, where subject matter is divided in smaller units so the students are capable of learning it, always with assistance from the teacher, without whom they would be not capable of understanding (Bingham, Biesta and Rancière 2010, 135). Once again, this advocates for a critical posture from the teacher, constantly evaluating the context-specific situations not to fall into one of two possible negative situations: the total control of the learning process or the 'abandonment' of the students.

Assessment / self-assessment

Nyberg (2015, 173) argues in favour of a communicative model of assessment, with students and teacher working collaboratively in their assessment and evaluation. According to Elliott and Silverman (2015, 418) '**the primary function of *assessment* in music education is not to determine grades, but to provide accurate, constructive, and supportive feedback to students about the quality of their growing musicianship and listenership**', receiving continuous 'formative assessment' in the form of personalised *constructive feedback,* to the detriment of comparison with peers. This approach encourages students to develop their self-assessment and musical thinking-in-action skills, 'by learning what counts as competent, proficient, expert, and creative music making [giving students] regular opportunities to reflect on the results of their musicianship and that of their peers' (Elliott 1995, 264). This constructive feedback given by the teacher, assessing the students' musical achievements, is communicated 'via coaching, cueing, correcting, advising, discussing, modeling, approving, disapproving and encouraging' (Elliott 1995, 264), and is closely connected to musical problem-solving in an authentic music-making context, being 'embedded in the processes of learning' (Elliott and Silverman 2015, 418). Similarly, Swanwick (1999, 77) defends that students should 'evaluate their own work and the work of others', developing self-assessment and being given 'the possibility, freedom and responsibility for charting and following their own musical pathways'. Expanding the concept of *assessment*, Hallam and Gaunt (2012, 17-18), assuming that different 'types of assessment and level of feedback [have] a profound impact on learning', make a differentiation between '**assessment *of* learning'**, focusing on 'judging performance or achievement level at the end of a period of study', '**assessment *for* learning'**, being 'designed to assist the learning process' and '**assessment *as* learning'**, 'designed so that in itself it offers an important learning process'.

2. PART II
Methodology

Qui cherche trouve toujours. Il ne trouve pas nécessairement ce qu'il cherche, moins encore ce qu'il faut trouver. Mais il trouve quelque chose de nouveau à rapporter à la chose qu'il connait déjà.

Rancière (1987, 58)

2.1. Introduction

The methodological approach followed in this research was shaped by my professional experience and aligned with my worldview regarding society and education. With the intention **to transform a given reality through intersubjective processes**, I undertook an investigation framed by a qualitative research paradigm. Given the exploratory character of the research I did not advance with a concrete question at the start of this investigation, this being in line with what Campbell, Connell and Beegle (2007, 2) suggested: 'the expressed meanings of music by adolescents are not gleaned from directed research questions created by adult researchers, as this could possibly steer adolescent perceptions into preordained categories'. In perspective, I believe that the nonexistence of concrete research questions at an early phase was positive in that this allowed me to embrace fully the exploratory paradigm, without narrowing the focus of the research in ways that may have risked missing key points of learning. However, due to the wide scope of themes addressed during the research, when writing this thesis I felt that the formulation of research questions could help me to structure my arguments and, at the same time, allow greater clarity for readers. Therefore, the research questions that were implicit in the themes raised at the beginning of the investigation, and those that guided the writing of this thesis were: ***What is the student and the teacher experience of encountering musical sense-making?*** and ***What are the implications in that process of the pedagogical relationship, musical activities and musical language?***

These questions stress the intention of exploring ways in which a pedagogical relationship can potentiate the students' musical sense-making [see page 68], arguing that contexts where students are more fluent and autonomous in the use of musical language can lead to more relevant and meaningful musical experiences. A parallel goal was to address alternative possibilities for the roles of the teacher[31] in the pedagogical relationship, in a process that intended to transition from instrumental practices based on reproductive activities to musical activities based on creation.

31 In comparison to the traditional approach associated with the *classical conservatoire culture.*

Having restated the goals of the research, it is important to clarify that I am aware that all the research was, and still is, shaped by prior references which guided the thoughts, actions and perspectives about the 'objects' of the investigation. For that reason, from some research perspectives, my credibility as researcher could be put into question for addressing my own practices as a teacher. Accepting as possible a diversity of positions on ethical and validity issues, my position stems from a personal need to question both my own teaching practices and those of the Portuguese *specialised music teaching system*, which I considered inadequate for the individual and social reality of a group of students learning musical instruments in my teaching context. It would be possible to research the themes addressed in this thesis from a more neutral standpoint, for example through a naturalistic observation of a different school and a different teacher. However, apart from the risk of misinterpretation (assuming a critical stance towards the practices of 'the other'), **it was clear to me that the potential for this research to have a direct impact on my practice and my students' learning could only be achieved through a systematic research approach framed by an insider perspective within an action research paradigm**. Methodologically speaking, in this thesis many tensions arose by assuming the insider perspective, which is privileged in the participatory action research approach, as opposed to the 'neutral' and exterior observer. Arguably, this is the best approach within which to apply constructivist principles [see page 62], working collaboratively with the students in a democratic relational context where, by adopting an active voice, students are transformed into co-researchers.

One of the main tensions in this thesis is the adoption of different roles, multiple perspectives and the use of different 'lenses'. In this sense, my methodological choices were framed by Rancière's (1987) idea that, as a learner, I should be empowered to follow my own method, valuing my professional experience, adding new knowledge to prior learnings, and aligning this with my personal and professional goals. The 'personalisation' of the research method is also advocated by Illeris (2003, 397), who suggests that a process of trying to understand a given reality 'cannot be carried through in any neutral or objective manner'. As Illeris (2003, 397) stated: 'I have had to involve my personal and professional views as to what is basic, important and significant, and to employ continuously my own interpretations and judgements and make my own additions'.

It is clear to me that some connections with artistic research can be made, merging it with the field of pedagogy. As Wilén (2020, 83) stated, 'in artistic research, the researcher's own professional artistic practice and experience can be regarded both as a method and a source.' Similarly, in my research there were many times that my own lack of training in some aspects of musicianship and regarding the systematic research process undertaken in collaboration with the students enriched my awareness of the difficulties the students were experiencing, as well as the strategies I had to follow to 'solve' the musical problems.

A flexible approach to methodology allowed a constant adaptation of the initial research design, restructuring the model in accordance with the interactions in the field. This flexible approach enhanced the exploratory character of the research and integrated two important dimensions in the redesigning of the pedagogical intervention: the way students create knowledge and the role of the teacher-as-researcher.

A major concern in this research was the valorisation of the students' previous knowledge, this being the path for them to develop an active role regarding their learning, motivated by the construction of different individual and collective meanings that could be shaped through participation in authentic[32] and relevant musical activities. Central in the activities developed with students was the intention to transform their view regarding music learning, transitioning from music teaching practices based on regulative and linear pedagogies (in which they had been immersed for at least two years prior to participating in the research), to an alternative *praxial* approach that values creativity, active voices and more autonomy regarding the use of musical language.

2.2. Methodological stance

Quando Joana Carda riscou o chão com a vara de negrilho, todos os cães de Cerbère começaram a ladrar, lançando em pânico e terror entre os habitantes…

In ***A Jangada de Pedra*, José Saramago**

'When Joana Carda struck the ground with the elm branch, all the dogs of Cerbère began barking, throwing panic and terror among the inhabitants…' (Translation made by the author of this thesis)

In the work 'A Jangada de Pedra' (The Stone Raft) by Jose Saramago, a blow struck on the earth with an elm branch causes the separation of the Iberian Peninsula from the rest of Europe, sending it drifting across the Atlantic Ocean. This is a political metaphor, related to the perceived differences between Portugal and Spain (the Iberian Peninsula) and the rest of Europe at that time. Here it is used as a representation of my personal will to separate from the Portuguese *classical conservatoire culture*, which, according to my professional view, is a static system. With this separation my intention was to gain a wider perspective that allowed me to assume a critical view of its positive and negative aspects, believing that engaging in an exploratory project with students, without a strict plan, could lead to new discoveries and opportunities for musical development.

Despite the insecurity and anxiety resulting from exploratory research, it was an exciting idea that a blow struck by myself could cause my separation from this 'huge tradition' and set me adrift in a deliberately different, independent path, which, in the end, and because the research was undertaken within a formal context, would necessarily return to its initial location. It was a kind of Freirean 'adventure', a journey without a planned route…

The intentions described here had an impact on the methodological designs and actions developed during this research. Here I make a distinction between the concepts of *methodology* and *method*. Following Silverman's conceptualisation, *methodology* is related 'to the research paradigm or principles detailing how to conduct research', while *method* is commonly

32 Referring to the concept of 'authenticity', Bowman (2015, 49) refers to 'an intimate and dialectical relationship between the ends a practice serves and the ways true practitioners may be expected to pursue them' and Blair (2009, 43) describes a student-centred context where they are 'actively creating and performing music, making musical decisions [and] figuring out for themselves how the piece "works".'

associated to 'the tools used for gathering data' (Silverman 2015). The following sections will make an overview of all the methodological dimensions present in this research.

2.2.1. Qualitative research paradigm

This investigation was undertaken sharing with Miles, Huberman, and Saldaña (2014, 271) the belief that **qualitative approaches to research 'take place in a real social world and can have real consequences in people's lives.'** The methodology followed in this investigation included evolving research designs and methods, and different approaches to data collection and analysis. All these approaches were framed by a **qualitative research paradigm** that, according to Liora Bresler (1992, 64), contains the following main characteristics: '1) highly contextual description of people and events; 2) emphasis on interpretation of both emic issues (those of the participants) and etic issues (those of the writer); and 3) validation of information through triangulation'. Characterised by being explorative and flexible, the most important discussions regarding the methodology followed in this research are related to **the dichotomy between an *interactionist* and *noninterventionist* model**, and the approaches to data collection and analysis.

Regarding the first dimension, a *qualitative paradigm* can encompass a wide range of methods, including '*case study, field study, ethnographic research, naturalistic, phenomenological, interpretive, and symbolic interactionist*' (Bresler 1992, 64). In the case of this investigation, the main methodological approach was action research aligned with a critical paradigm [see page 52], where the demarcation between researcher and researched was blurred. This can be classified as 'interactive' qualitative research with the intention of emancipating and empowering all the participants in the research in a democratic setting (Boog 2003, 434).

In respect of data collection and analysis, 'methods and techniques of collecting documentary, verbal and visual data' and a narrative description in order to understand and describe a particular context were emphasised (Thiollent 2011). Qualitative data from different sources usually have as main strengths 'local groundedness, holism, temporality, access to causation [and] emphasis on meanings' (Miles, Huberman and Saldaña 2014, 281), allowing, through a process of thematic analysis, researchers to find 'patterns of meaning' that contribute to the construction of a clear image of a particular reality (Braun and Clarke 2006, 15). This wide approach also allows quantitative data to be included in a qualitative paradigm, 'testing for possible bias and seeing how robust our insights are' (Miles, Huberman and Saldaña 2014, 249).

2.2.2. Participatory action research

According to Boog (2003, 428), *action research* is inserted into a critical theory paradigm. From this perspective, whereby one principal goal is the emancipation of all who are involved, there is 'a subject–subject relationship between researchers and the researched subjects [and] a critique of the state and state apparatus and other cultural institutions representing the dominating ideology of the ruling classes' (Boog 2003, 427). According to Greenwood and Levin (2007, 1) *action research* is 'a set of collaborative ways of conducting social research that simultaneously satisfies rigorous scientific requirements and **promotes**

democratic social change' by contributing to 'build a better, freer, fairer society through collaborative problem analysis and problem solving in context' (Greenwood and Levin 2007, 3).

Focusing on the characteristics of *critical action research* in educational settings , several authors (Boog 2003; Greenwood and Levin 2007; Miles, Huberman and Saldaña 2014; Thiollent 2011) refer to aspects such as: the emancipation and/or empowerment of the researched objects to solve problems and reinforce decision-making; knowledge acquisition and critical thinking skills; the promotion of transformation by active participation; a dialogical interaction between researcher and researched subjects (participants) in an equal and democratic setting; a critique of dominant ideologies; and autonomy and self-learning. Valuing relational and collaborative settings, *action research* is widely used in group work, where all the principles mentioned above should be applied, but always taking into account the individual characteristics of the participants and, although not inherent nor exclusive to *action research* or to other *communicative methodologies*, most authors associate it with humanistic values and the quest for social justice and equality (Boog 2003; Greenwood and Levin 2007; Qi and Veblen 2016). Referring to the hierarchical separation between the participants in the research, *action research* assumes the opposite stance, supporting a shared learning process, transforming all into co-researchers, that share responsibilities in the development of the research. *Action research* marks its differences to other research designs by seeking and promoting *emancipation*, *empowerment* and *democratisation* in an active way (Boog 2003, 434).

According to Thiollent (2011, 164), *action research* can use a plurality of methods 'with no imposition of predetermined procedures, conducive to dialogue between various actors whose knowledge is different' and avoiding 'attitudes of truth monopolisation', also aligning with a *praxial* approach to music education, believing that 'action is the only sensible way to generate and test new knowledge' (Greenwood and Levin 2007, 6). Nyberg (2015, 113), referring to several authors, states that the methodology of *action research* is based in five central aspects: '1) situating the research in day-to-day practice; 2) getting in-depth knowledge about participants' actions in such a practice; 3) making records of these actions with a focus on the participants' learning and shaping of identity; 4) close co-operation between researcher and participants; and 5) making sure there is transparency within a project, internally as well as externally.'

The research reported in this thesis is ***participatory action research***, this approach being closely associated with terms such as *critical action research* or *emancipatory action research* (Boog 2003, 430). **Active participation** is one of its most important features, with 'interactive and collaborative as well as practice-based' dimensions being highlighted, for example through decision-making and problem-solving activities (Nyberg 2015, 105), increasing the likelihood of all the participants developing their own voice and by confronting them with possible choices and associated consequences (Reason 2006, 190).

In education, *participatory action research* rejects prescribed curricula where the knowledge content and the pedagogical and didactical strategies are already predetermined independently of the participants and their context. Following Freire's ideas, teachers/researchers should follow their curiosity and apply their efforts to acquiring knowledge in a critical way, assuming a sceptical posture against 'banking' models and pressure to accept dogmas, being 'committed to their own growth as well as their students' (Allsup 2016, 274). The critical teacher, besides being positioned as an object of the research, will always try to instil in the students the same stance as researchers and objects of their own critical reflection. In this respect, Freire states that the concept of 'teacher/researcher' does

'o que há de pesquisador no professor não é uma qualidade ou forma de ser ou de atuar que se acrescente à de ensinar. Faz parte da natureza da prática docente a indagação, a busca, a pesquisa. O de que se precisa é que, em sua formação permanente, o professor de perceba e se assuma, porque professor, como pesquisador'

not make sense because **teaching and researching are interdependent** (1996, 29) and that researching is not an added quality for the teacher but a 'part of the nature of teaching practice to inquire, to search, to research'. For that reason, **it is required that the teacher identifies as researcher as a consequence of being a teacher**.

The adoption of *participatory action research* was seen as the best way to gain a clear understanding of a given reality within the research context. However, the exploratory and fluid approach to research allowed forays into *phenomenology* and *grounded theory*, permitting a better understanding of the dynamics in the research context and all the participants' views and understandings in depth, and creating the basis for greater potential to achieve the goals envisaged in the beginning of the research.

2.2.3. Ethical issues

The option for participatory action-research prompted some self-questioning regarding ethical principles, as I asked myself if I would be able to remain faithful to the goals of the project and capable of resisting the temptation to guide it to achieve tangible results. Methodologically, all the research was based on a firm belief that the positive aspects of having an insider perspective would not only inform my actions in-context, but would also provide access to a rich reservoir of knowledge and deeper levels of understanding. This was reached accepting that 'biases' in the interpretation of the data also occur in other research approaches. The methodological approach presented here is, by itself, an attempt to guarantee the ethical principles I am obliged to follow as researcher. The rigorous following of, in a systematic way, the principles of a qualitative approach to research and the combination of a longitudinal period of fieldwork with diverse data collection sources and methods give strength and coherence to the research, achieving what Letts et al. (2007, 9-10) consider the overarching concept in a qualitative approach: trustworthiness.

The ethical dimensions of research are closely related to general ethical principles, but also necessary is a coherence with the philosophical and pedagogical principles and values affirmed by researchers. Some ethical dimensions addressed in respect of ethics are:

Objectivity

This research was framed by a rationale that values the participatory dimension of the researcher in a real-world pedagogical setting, where knowledge is co-constructed between teacher and students. This research stance can be contested by positivistic methodologies, but some procedures (Miles, Huberman and Saldaña 2014, 272) were followed in order to enhance this aspect:

- all the methodological procedures, such as the recruitment conditions, data collection methods and analysis, were described in detail;
- the outcomes and conclusions of the researcher were reinforced through the triangulation of multiple data sources;

• the polyphonic approach was adopted to report the research and its outcomes, allowing the researcher to differentiate between a more implicated and a more objective voice;

• alternative views, less positive outcomes and contradictions were exposed in the writing of the thesis; and

• almost all the activities included in the field project were video-recorded, being available for public scrutiny.

Impact on the research participants.

As this research was exploratory there were no guarantees that any positive transformation would occur and there was the possibility that the intervention with the students could have a negative impact or, as Boog (2003, 434) states, 'the research might turn out to be non-emancipatory or result in the de-emancipation of the researched subjects'. To prevent such possible negative outcomes for the students:

• students and parents were informed that at any time they could leave the project without any adverse consequences;

• the students attended all the classes of their usual curricular structure; and

• there was no evaluation and no impact on their academic training.

Informed consent

The communication between all the participants in the project was always a major concern before and during the field project. After having defined the main goals of the project, the conditions to participate, the calendar of the sessions and the target group, the information process was as follows:

Before the beginning of the field project:

• in the context of their orchestral classes, all the students participating in the school's orchestras were informed about the goals and conditions to participate in the project;

• all registered students in the school who fulfilled the conditions to participate in the project were invited through a written communication sent to their parents;

• after students had expressed interest in participating, individual meetings were undertaken with parents to inform them in more detail about the goals and conditions to participate; and

• students and parents were informed that all the sessions and other activities would be videotaped for later analysis and dissemination. In a consent form the parents authorised the audio and video recordings of all activities carried out as part of the research project[33].

During the field project:

• in the first session of the project, all students were, once again, and in more detail, informed about the goals of the project and what was expected of them;

33 In the final stage of writing the thesis the students (already adults) were asked to give the same written consent.

• going beyond mere information, during the field project the decisions with more impact in the project were discussed, negotiated and decided between teacher and students; and

• parents were kept informed about all the activities to be developed outside of the school, and were asked to sign a written consent.

Anonymity and confidentiality

Not knowing what data would result from the implementation of the project, parents and students were informed that student names used in all documents produced during the field project and in the writing of the thesis would be altered to maintain anonymity. However, to have access to relevant data for the research, it was necessary to use excerpts from the video recordings of the sessions and other activities developed during the field project. Therefore, parents and students were informed that the information and recordings collected would be used in activities related to the research project and its dissemination.

Important in this respect is the connection between the participants and their actions and responses during the field project. After asking myself whether or not I should relate specific comments or actions to actual students (pseudonyms), I realised that for this research it was essential to highlight the individual personalities of the students. Their personalities had a relevant impact on the way they responded to the activities and conditioned the path of the project. Not referring to individual students would have obscured the relational dynamics that were shaped by very specific characteristics. Accordingly, my decision was to relate students to specific actions and comments, using their pseudonyms.

Regarding other external participants in the project, all of them were informed that the concerts in which they were participating would be included in a PhD research project. The recordings were made only when there was explicit authorisation on their part.

2.2.4. Reflection on the evolution of the project and overview of the chapter

Berger (2009, 180), using Bourdieu's words, argues that what separates the researcher from the teacher is the domain of the research methods, making a distinction between the researcher and the object of the research. Given the exploratory nature of all the dimensions of this research, I decided that my methodology should be fluid and flexible within the broad parameters of an action research approach using qualitative methods. The following sections of this chapter provide an overview of my methodology, being clear that it was evolving during the research.

The main goals of the research being the implementation of a process of personal and collective change, my initial idea was to focus on my students' musical *sense-making process* and on my practices as a teacher that could promote a positive transformation. However, with the engagement in an exploratory, participative and constructivist project, other layers emerged during the implementation, implying additional perspectives and new fields of discussion in a project that, also responding to the events in the field, was extended from one to two years. The increased complexity of the research led also to the transformation of the initial research design, similar to an **Input, Process, Output** [see

page 102], adapting and responding to the 'cyclical and interactive nature of teaching and learning' (Elliott 1995, 253). Responding to the conditions in the field and having as a starting point the students' responses to the activities, always trying to integrate their inputs, the intervention started by addressing my self-reflections as a teacher 'in-action' and, subsequently, 'on-action' (Hallam and Gaunt 2012, 260-262). This also led to the integration in the research of other themes that were not initially planned but emerged during the fieldwork, or resulted from additional questioning. Trying to deal with the complexity and diversity of the questioning, the extension of the time span of the field project, and the correspondent amount of data, the methodology section was divided into three parts: ***research methodology***, ***intervention methodology*** and ***writing methodology***. Regarding the time in which these different methodological approaches were implemented, while the *intervention* was limited to the period of time devoted to the fieldwork with students, what is referred to as *research* accompanied the whole process, from the emergence of the initial research problems until the delivery of the thesis. The real confrontation with a writing methodology took place at the beginning of the writing of the thesis, several years after the end of the field project.

2.3. Research Methodology

The ***research methodology***, presented before the beginning of the field project, was always open to changes resulting from the process of 'reflecting-on-action' that, despite being a continuous process, was more visible at the end of each phase of the project, when the outcomes of that phase were discussed and a new design for the beginning of the next was presented.

2.3.1. Goals of the research

The *research methodology* accompanied the whole project. The initial research design aimed to maintain coherence between a positionality framed by social constructivism and critical pedagogy and the participatory, exploratory, collaborative and transformative action research. In parallel with the goal of promoting – or provoking – transformation, without clear outcomes to be achieved regarding musical products or technical or musical development, **the research aimed to understand that process of transformation in a music-making context**. Aligned with a phenomenological approach, it was important to understand how students and teacher could collaborate in order to transform a setting that was perceived by me, as a teacher and researcher, to be contrary to the goals of an educative approach that valued intersubjective construction of knowledge.

The option for a flexible methodology allowed a varied approach regarding the type of musical activities and relational dynamics developed in the course of the project, namely an increase in the students' autonomy, and the transformation of the role of the teacher. In this respect, especially relevant was the blurring of the traditional hierarchical separation between students and teacher and, on another level, between the practices of the teacher and the main system of values associated with the *classical conservatoire culture*. Making a parallel with Bronfenbrenner's ecological systems theory (1979), the evolution of the project led to the transition from a situation in which the activities developed were

influenced and shaped by 'outer cycles' (my teaching practices, that were conditioned by the traditional values that I was taught, as a musician and as a teacher) and the 'inner cycles', represented by the exploratory musical work and relational settings developed during the sessions.

The concept of *systemic* has been used several times in this thesis. However, this concept was not limited by Bronfenbrenner's ecological systems theory (Bronfenbrenner 1979) where the main focus is given to the impact of exterior factors in the human development (for example, the ways in which the *microsystem* is conditioned and affected by the *exosystem*). Following the words of Barbara Rogoff (2003, 49), cited by Vélez-Agosto et al. (2017, 906-907), this unidirectionality 'is not consistent with our understanding of the transformative and "mutually defining processes" between individuals and cultural practices'. In practical terms, there is an opposition between a vision in which the focus is the way inner circles are affected by the belief systems and rules emanated by the exterior levels, and a vision defending that individuals can and should engage actively in the transformation of their close and more distant contexts. Vélez-Agosto et al. (2017, 905) state that 'learning processes are related to cultural practices that dictate the type of engagement the child will partake in the community', i.e., it is clearly ingrained in the individual's microsystem.[34]

2.3.2. Research design(s)

The planning of the first sessions of the field project was intended to encourage a transition to a collaborative approach and to musical activities based on creation and musical decision-making. The image below (Fig. 3) shows the conceptual framework presented at the start of the research, adopting, as framed by an *action research* design, a cyclical approach that integrates continuously the results of the interactions in the field. Being an exploratory approach, the duration of the cycles would depend on the outcomes of the intervention in the field, and the themes to be applied could also be revised.

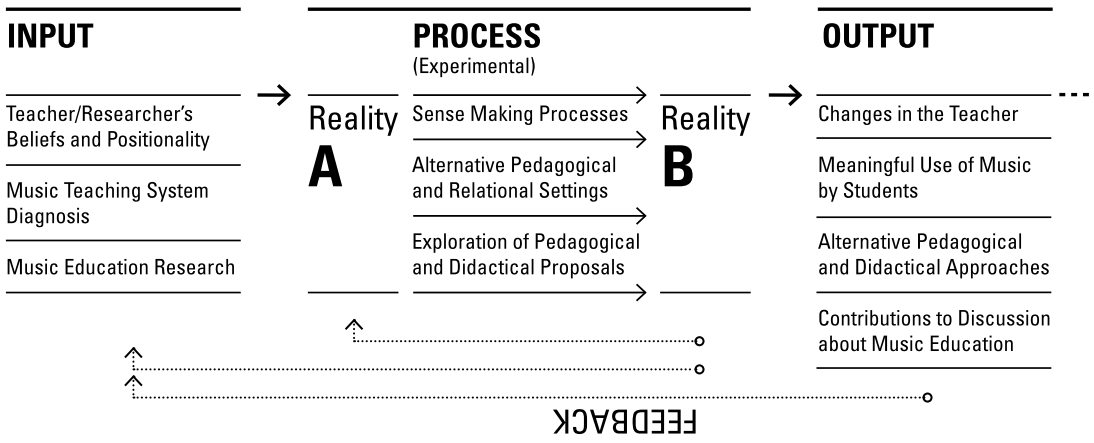


Fig. 3
Research Design 1

34 Evidence from data retrieved from the field project clearly indicate that the students were already highly influenced by practices and values of the classical tradition.

The *feedback* (from the students and from the teacher) was central in this approach, being the basis for reflection and for the planning of the subsequent cycles of the intervention. In this case, we can make a distinction between the *immediate feedback*, that we can associate with a scaffolding strategy as referred to by Creech and Varvarigou (2013, 5), that guides the teacher's decisions in the sessions ('in-action'), reacting, deciding and responding in an improvisatory way, and a more distant, and possibly more structured, feedback from the teacher's and researcher's reflections and from the students' opinions and suggestions given in the focus group interviews. This can be represented by the following illustration (Fig. 4) where it is clear that the overarching research trajectory was a long cycle divided by smaller cyclical units.

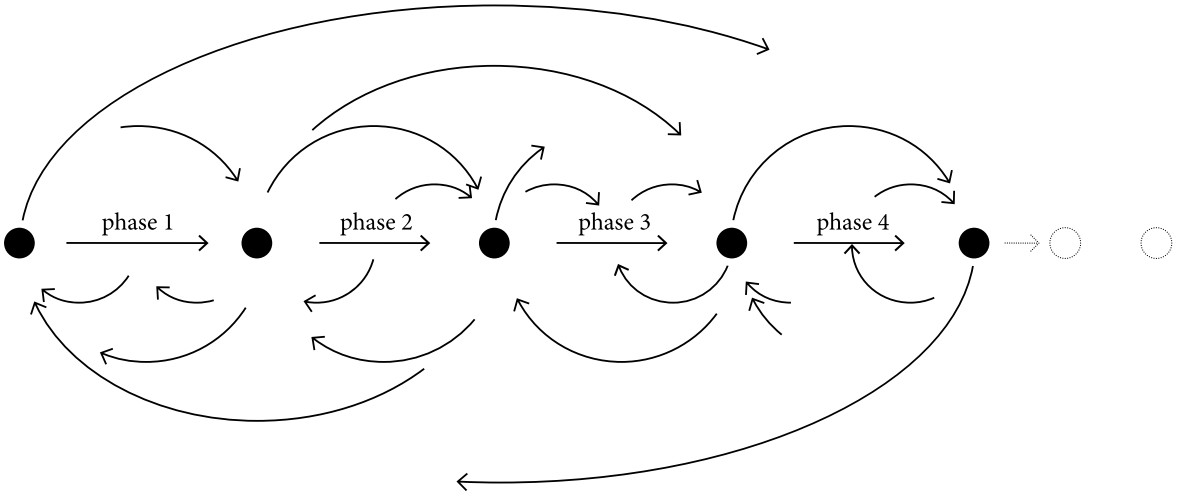


Fig. 4
Research Design 2

Following the *theory of expansive learning* presented by Engeström (1987, xxii), the scheme presented above can also be associated with 'large-scale transformations in activity systems' that, according to the author, can imply months or years of duration. It was later acknowledged that those cycles involved the division into 'numerous smaller cycles of learning actions' but including always 'intensive collaborative analysis and problem solving' (Engeström 1987, xxii). Arguably, this was what occurred in the research presented in this thesis, where the outcomes resulting from the intervention in the field project were unpredicted. The methodological and philosophical approach adopted valued the process over the outcome and the stance whereby claims are not made concerning the transferability of this research to other contexts.

The multiple cycles presented above can illustrate both the intervention and the research methodologies, representing, for example, a task given to students, the different cycles in a session or set of sessions, or a whole phase of the project. The processes described in the two previous images follow an iterative[35] or different form of a 'plan – act – evaluate – reflect cycle' (Cain 2008, 284) where, as a result of alternating between cycles of actions, 'in-the-moment' decision-making, and rounds of analysis, students and teacher integrate new learnings that they can use in the subsequent cycles.

35 In some approaches the iterative process intends to be convergent, i.e., to reach closer to the 'truth' by increasing the number of cycles. Conversely, in this work the intention is to focus on the musical and relational experience, being perfectly accepted, and perhaps expected, divergent paths that flow according to the interactions.

> As seen by the initial research design [see page 102], I followed a structure similar to an **Input, Process, Output (IPO) Diagram**, addressing possible changes in the pedagogical, didactical and relational settings conducive to the students' musical sense-making. However, aligning with the critiques offered by Schyff (2017, 14) regarding 'a mechanistic and depersonalized input-output understanding of what learning entails' that leads learners to assume the roles of 'passive consumers, processors and reproducers of information', later I decided not to adopt this terminology because it could convey the message that if we depart from similar conditions, following a given method, all the outputs would be the same. This is precisely one of the things I am arguing against in this thesis: the use of 'a method'. On the contrary, my goal was to adopt the 'improvisational response' defended by Sawyer (2004), focusing more on the pedagogical relationship and the students' active learning, instead of the musical product to be achieved. As stated by Rancière, the important thing is that the teacher, the 'ignorant master', constantly verifies not what the student should be trying to find, but rather whether the student is seeking new knowledge (1991, 33).

During the implementation of the field project, the students' resistance to the activities and the way I responded, as a teacher, to their behaviour led to a significant transformation in the relational dynamics, transitioning from moments of total dependence on the teacher's guidance to a complete fading of teacher direction from the musical group work. The intervention was planned in order to obtain continuous access to information, with the potential for immediate impact on the subsequent steps of its implementation. For that reason, the main features of the initial conceptual framework did not change significantly during the project in respect to its cyclical dimension.

2.3.3. Data collection

Following the principles of a *qualitative research paradigm*, the full action research process was documented via a set of varied (direct and indirect) data. In addition to my testimony as participant in the reflexive journal, most of the data comes from video recordings that include all the field project sessions and other activities related to the project. The three main data sources based on the information taken from video recordings are the session reports (researcher/teacher reflections captured a short time after each live session by viewing the video recordings), the post-session analyses (analysis of the video recordings of the sessions several months or years later), and the focus group interviews with the students at the end of each one of the four phases referred to in the research design.

To identify each one of the data sources, a series of codes was established. ***Video recordings*** are referred to as 'V' followed by the number or type of the session (example: V s3 or V ex.s. – extra session). The same rule was applied to the ***session reports*** which were coded as 'SR', and the ***post-session analyses*** 'SA'. The ***reflexive journal*** was coded as 'RJ' followed by the number of the entry (example: RJ e56). Finally, the ***focus group interviews*** were coded as 'FG' followed by the number of each interview (example: FG 2).

> Although not originally intended, when writing the thesis the possibility of allowing access to some videos was raised, providing a clearer image of what happened during the field project. For that reason, in some places a QR code is inserted to support some of the evidence described in writing.

Reflexive Journal (RJ)

The ***reflexive journal*** referred to above as a data collection method used in the field project was maintained for the total duration of the research, functioning as *a place to write without any kind of censorship* (RJ e1). In this document, the different roles that I occupied undertook a permanent dialogic process, helping to problematise and provide 'fuel' for the necessary personal, relational and institutional transformation. The *reflexive journal* 'captured the immediate experience of the facilitator "in-action", being focused on the session planning, the ideas, thoughts and doubts about the fieldwork as it evolved, immediate observations and also the shifts and decisions about the way the project should continue' (Costa and Creech 2020, 153). Other aspects, such as the position of this project in relation to background literature, contradictions or simply personal feelings, were also introduced. Yet, the *reflexive journal* was always shifting between a more implicated testimony on the one hand and a more distanced view of the sessions on the other, with the intention being to achieve a clearer and wider view of the whole process. This *reflexive journal* includes 132 entries during the two years' duration of the project.

Video recordings (V)

In the first three or four sessions the video camera may have had some impact on the students but gradually, I felt that the camera was unobtrusive and the students forgot its presence in the room, at least until the moment they had to present their individual or small-group work. Arguably, the discomfort of being exposed in front of their colleagues during the performance of their group's work could have been amplified by the presence of the camera. The technical conditions (there was only one camera) and the work configuration (mainly when the students worked autonomously in several smaller groups) did not allow full documentation of all the interactions in video. However, during the small-group work I was observing or participating actively, accessing relevant information that was documented in the reflexive journal.

The video-recorded material (approximately 70 hours) was viewed a minimum of four times, trying to get a more distanced and objective perspective about the sessions' evaluation, but still providing opportunities for a reflexive process that could have an impact on subsequent phases of the project. This immediate analysis and consequent response are in line with what is defended by a critical approach and action research methodology. The last viewings of the video-recorded material occurred several years after the end of the project, immediately before the start of the writing of the thesis, achieving an even more distanced view of the researched objects (teacher included).

Regarding the use of video recordings as a technique of observation, Webster (1989) refers to two possibilities in the context of a pedagogical relationship: as data to be studied by the researcher or as a part of a portfolio of the students' work. One of the advantages is the possibility to 'freeze interactions and re-examine them repeatedly, to subject them to scrutiny, and to capture behavioural nuances precisely' (Adler and Adler 1994, 383 in Burnard 2002, 159-160). During the sessions, sometimes the video recordings were used to show the students their work, this educational potential being highlighted by Elliott (1995, 284), serving as an opportunity for critical reflection, supporting and encouraging 'students to reflect collectively and comparatively; target their surplus attention; acquire formal, informal, and impressionistic knowledge; and share their supervisory knowledge'.

Session reports (SR)

The first time in which the video recordings were used was immediately after each session, in order to fill a *session report*, using a pre-existing form that intended to describe the sessions in detail and give account of the most significative moments of practical work with students. This included the opportunity to put together all the information of the session, also allowing space for **a reflexive process before, during and immediately after each session**. The form (Fig. 5) combined general information, the teacher's planning and reflexive process and the researcher's analysis:

• Session Information: number (reference); date; time; students present in the session.

• Reflexive Journal: structure; goals/expected outcomes; final comments at the end of the session; observations.

• Field Notes: time; activity; field notes; outcomes/musical products; post-session analysis; other comments.

Fig. 5
Session Report Model

Faculdade de Belas Artes da Universidade do Porto
Curso doutoral em Educação Artística

THE PROCESS OF SENSE MAKING IN MUSIC TEACHING AND LEARNING
The reconfiguration of the roles of the music teacher and the implication for his personal, professional and artistic identity

João Costa

SESSION INFORMATION			
NUMBER		STUDENTS IN THE SESSION	
DATE			
TIME			

REFLEXIVE JOURNAL Teacher's thoughts, session planning and goals, and general evaluation			
STRUCTURE		GOALS - EXPECTED OUTCOMES	
FINAL COMMENTS AT THE END OF THE SESSION		OBSERVATIONS	

FIELD NOTES					
Time	Activity	Field notes	Outcomes / musical products	Post-session analysis	Other comments
00:00:00	-	-	-	-	-
00:00:00	-	-	-	-	-
00:00:00	-	-	-	-	-
00:00:00	-	-	-	-	-
00:00:00	-	-	-	-	-
00:00:00	-	-	-	-	-

Post-session analysis (SA)

Post-session analyses were generated following the viewing of video recordings of the sessions. These analyses comprised a reflexive view of each session but, in contrast to the session reports that were created immediately after each session and described in detail the whole session, these subsequent observations were made several weeks, months, or years afterwards. While the intention underpinning the use of video recordings was to establish the means by which I could take a more distanced approach, the goal was also to highlight the most important aspects that could help, on the one hand, a better understanding of all that was implicated in the field project with students regarding their reactions and, on the other hand, to raise awareness of my role as a teacher. Contrary to what happened with other data collection methods, where analysis followed a predetermined structure, the intention with these post-session analyses was to create a counterpoint between the first report, made immediately after the sessions, being highly influenced by my active participation in the activities, and a more distanced view of the fieldwork dynamics.

Focus group interviews (FG)

At the end of each of the four phases of the project *focus group interviews* were carried out with the students in order to capture their perspectives. Trying not to condition the students' answers, whilst also promoting the possibility of talking about the themes they considered relevant, the interviews were semi-structured, introducing several themes and key points in the form of questions, trying to know how the students viewed and evaluated the processes and activities. Another intention was to promote their empowerment to participate even more actively, asking them to assume the responsibility of deciding the next steps of the project and, specifically, the musical activities to be developed in the sessions. Each one of the four FG had a duration of approximately one hour and the students had the opportunity to assume a critical perspective about what they were doing in the project, often in comparison to what they were doing in their 'regular' ensemble classes. One of the most important aspects of this format was the prospect of hearing all the students, revealing their differences and levels of interest and self-perception regarding the goals and outcomes of the project.

Although comments were made in the reflexive journal immediately after each focus group interview, they were also all video recorded and analysed later. According to Martignetti et al. (2013, 1), *focus group interviews* (FG) can encourage reflexive processes in music-making contexts but, despite this belief, it is not very frequent to hear the music students' voices about their experiences. Wibeck, Abrandt Dahlgren, and Öberg (2007, 250) defend that FG allows one to 'observe the co-construction of meaning in action' and offers the opportunity to see this group as representatives of a society 'in miniature'[36]. Making a comparison between this methodology and one-to-one interviews, Nyberg (2015, 112) states that in FG it is 'easier to describe [the participants'] thoughts and opinions, and to discover new ones, than when alone with an interviewer [and provides] more complex information concerning subjects and problems.' In this respect, it is important to be aware that 'the participants in a focus group are not independent of each other, and the data collected from one participant cannot be considered separately from the social context in which it was collected' (Hollander 2004, 631).

36 In this work the idea of 'representation of the society' will not be used to defend transferability of the outcomes of this project to other contexts that can be considered 'similar'.

The use of Focus Groups as a method has some problems and limitations. Being in a group, students may be influenced by their peers' opinions, in what can be called a 'social desirability bias', described as 'the tendency of research subjects to give socially desirable responses instead of choosing responses that are reflective of their true feelings' (Grimm 2010). The moderator should introduce the themes and encourage discussion, allowing and favouring that every participant takes part in a context where they can freely express their honest opinions. The focus of the discussion should be maintained around the themes that are considered relevant to the research, these being the ones that were initially introduced by the teacher or others that emerged from the discussions.

2.3.4. Approaches to Data Analysis

> Undertaking research in a real-world context, where participants interacted with each other and where to some extent knowledge and understandings were co-constructed in an interdependent manner, the coding and interpretation of the qualitative data was a challenge. Although information was gathered from diverse data sources, one possible methodological weakness of this research was the lack of more than one observer to code and analyse the data, for example a *peer debriefer* or an *external auditor* (Creswell 2003, 196) that could allow inter-rater reliability, i.e., a level of consistency between different observations. However, I argue that, given the systematic research approach followed in this thesis, my approach to data analysis was solid. This section reports the procedures that give consistency to the research and its outcomes.

It was a challenge having to analyse data resulting from more than 70 hours of recordings, the transcription of 4 focus group interviews, 47 session reports, extra sessions and 132 entries (almost 400 pages) of the reflexive journal. However, using different methods of collecting information, it was possible to have access to and document the researcher's, the teacher's and the students' view, among other voices integrated in the polyphonic approach to writing. Given the goals for the intervention with students, an insider perspective and the multiple lenses used in this research were seen as the inevitable methodological approach, accommodating the triangulation between different voices and perspectives, of different technics and methods (observation, interpretation and active participation), of different types (video recordings and focus group discussions) and in different times (before, during and after the sessions). This is in line with that to which McGillen and McMillan (2005, 8) refer, defending that the use of multiple sources and 'data triangulation through which repeated observations, multiple observers […] and multiple methods of data collection' strengthens the analysis. Also Miles, Huberman, and Saldaña (2014, 299), as a development of Denzin's work (2001), argue that different kinds of triangulation can be considered: 'by ***data source*** (which can include persons, times, places, etc.), by ***method*** (observation, interview document), by ***researcher*** (Investigator A, B, etc.), and by ***theory*** [and] ***data type*** (e.g., qualitative texts, audio/video recordings, quantitative data)' being necessary to combine 'sources that have different foci and different strengths, so that they can complement each other'.

Regarding the data analysis followed in this research, an exploratory stance was also adopted, starting from a somewhat undefined structure regarding the themes to analyse but allowing the construction of the instruments in parallel with the implementation of the field project. Only at the end of the field project was the observation grid of data completed

and, after that, all the sessions were viewed at least two more times (once immediately after the end of the field project and again, several years later, before starting the writing process). In the two years' duration of the project, a wide number of new themes or sub-themes were introduced (almost 50) but at the end of the project a process of analysis led to the creation of 'clusters' (Braun and Clarke 2006, 15; Miles, Huberman and Saldaña 2014, 279), condensing and grouping the existent data. This process was in line with what Braun and Clarke (2006, 20-21) state, that 'the need for recoding from the data set is to be expected as coding is an ongoing organic process'. At the end of each phase of the project the 'observational grid' always underwent some changes (mainly in the first year of the project) and, for that reason, the final process of clustering was finished only at the end of the field project and using all the data collected in the project.

After processing and coding data, the final version of the grid was organised into three main themes, those being subdivided into sub-themes.

Students

- willingness of the students to take risks and initiative
- students' reaction to the proposals (Resistance)
- students' level of musicianship or music understanding
- peer interaction dynamics
- problem-solving strategies / autonomy
- motivation / students' interests
- critical thinking
- leadership / conducting
- sense making / meaning

Teacher

- teacher's response to students' behaviour and feedback
- scaffolding strategies
- promotion of participation
- disciplined improvisation / rigid posture
- personal feelings

Activities/others

- type of activities / structure / goals
- classroom setting and students' behaviour
- improvisation / composition / sound exploration / derailment
- other aspects

Having defined the main data sources and the main themes to address, the next step of the process was **thematic analysis,** positioned within a qualitative methodology paradigm that values the knowledge emerging from interactions between individuals in a specific context (Nyberg 2015, 179). For that reason, in a context where it was not possible to quantify

most of the existent data, and notwithstanding techniques to enhance trustworthiness [see page 126], the results were always conditioned by the 'lenses' of the one who analysed. The subjectivity of the process increases in a *participatory action research* methodology and, even more so, when the analyst is clearly implicated so deeply in the research, assuming several roles, including being himself an 'object' of the research.

According to Braun and Clarke (2006, 13), there are different levels of thematic data analysis, starting with a semantic, explicit or interpretative level, focusing on the surface meanings of the data. However, the analysis should evolve to interpretation and the theorisation of the 'broader meanings and implications' of the patterns (Patton 1990). The first challenge was to complete a detailed analysis of all the data, starting by introducing the initial themes that underpinned the research, whilst also allowing the introduction of other emergent themes. This iterative approach therefore comprises a combination of a deductive or 'top down' approach with an inductive or 'bottom up' way of analysing data (Braun and Clarke 2006, 12), the latter commonly associated with a grounded theory approach.

Referring to the process of thematic analysis, Miles, Huberman, and Saldaña (2014, 277) state that 'people are meaning finders and meaning makers [and] can usually make sense of the most chaotic events' by organising and interpreting them. This is in line with Braun and Clarke (2006, 15) who state that 'thematic analysis involves the searching across a data set […] to find repeated patterns of meaning', clustering them together. In the same vein, Burnard (2002, 160) states that thematic analysis involves 'the segmentation of data, a search for patterns, and the development of descriptive categories pertaining to each segment of data for comparison with other similarly coded segments.' However, it is important that this process, that is constructed through the 'observations of reoccurring phenomena' needs always to be 'subjected to *skepticism* [and] to conceptual and empirical testing' before being accepted as relevant knowledge (Miles, Huberman and Saldaña 2014, 278). As it is important that the results of an analysis are clearly supported by the data, we must be aware of the existence of some inconsistencies in the process of crosschecking because, as Braun and Clarke (2006, 24-25) suggest, a pattern that is '100% complete and non-contradicted […] is open to suspicion'. In this research, in order to enhance trustworthiness, a process of triangulation between all the data sources was implemented, by reading or viewing all the data sources several times over a period of several years, in a process that also included crosschecking between all the sources, trying to interpret the inconsistencies that emerged during the process.

In summary, a data analysis process comprising six phases, as suggested by Braun and Clark (2006, 16-24), was followed: 1) familiarisation with the data (transcribing it and engaging in repeated readings); 2) generating initial codes; 3) searching for themes (sorting the different codes into potential themes but still open to future reconfiguration); 4) reviewing themes (refinement of the previous coding process); 5) defining and naming themes (identifying the 'essence' of the theme to avoid it being too much, too diverse or too complex); and 6) final analysis of the data. The final phase should provide 'a concise, coherent, logical, nonrepetitive, and interesting account of the story the data tell – within and across themes', providing clear evidence that illustrates why that theme is important to the research, being 'grounded in, but [going] beyond, the "surface" of the data' (2006, 23-24).

2.4. Intervention Methodology

> The ***intervention methodology*** was semi-structured, it being open, flexible and driven by the 'real time' interactions and events in the field. Based on empirical knowledge and the background literature referred to above (Elliott 1995; Rodari 2006), a given set of premises and possibilities was settled on applicable to a music teaching and learning context. My responses during the sessions served as a basis for a later observation of the sessions, watching and re-watching the videos and integrating the inputs resulting from the interactions in the redesigning of the research. This also allowed a revisiting of the notes made in the *reflexive journal* and *session reports* in a continuous cyclical process (reinitiated after every session and, in a more profound way, at the end of each phase). This is in line with the concepts of 'reflection-in-action' and 'reflection-on-action' (Schön 1983; 1987) as presented by several authors (Gaunt 2007; Hallam and Gaunt 2012; Walker 2000).

The *research methodology* reported in the previous section could be understood to encompass the *intervention methodology* and was furthermore shaped by interactions in the field. Despite a horizontality in the pedagogical relationship, premised on the principles of critical pedagogy regarding the practice of democracy and equality in the classroom, some decisions made during the field project and the 'solitary' writing process of the thesis were, in some ways, the representation of some hierarchical differentiation between me and my students. Although seeming contradictory, this is valued by Engeström (1987, xxv), who warns that 'learning and innovation that only operate with horizontal or "flat" notions of cognition miss a crucially important resource in failing to explore the particular complementary potentials and limitations of different types of hierarchically arranged mediational means.'

> When referring to the *Intervention*[37] *Methodology* in this project, this is underpinned by an explicit will to intervene in my teaching context by assuming a more active role as a teacher, as opposed to positivistic, naturalistic or interpretative research approaches. The polyphonic or multi-voiced approach followed in this research, that values and develops from a dialectical confrontation between different or even opposite perspectives, recognises that every setting is unique and that an exploratory and participative field project assumes risks regarding the uncertainty of the musical and non-musical outcomes. In this regard, there seems to exist a tension between 'method' and 'improvisation', being, in respect to research, apparently opposite concepts. However, and following Rancière's (1991, 124) idea whereby the method should be the student's method, perhaps, at least in this respect, I followed 'my method' or, even more apt, I combined 'my method' with 'the students' method'.

2.4.1. Goals of the Intervention

Since the beginning of the research, epistemological and research positioning and some methodological options were clear but, at the same time, and being consistent with the

37 In this thesis the terms 'intervention' and 'field project' are used interchangeably. However, perhaps conditioned by the Portuguese language, I see them as somewhat different concepts. When I write 'field project' my intention is to refer to all the activities and relational interactions and, when referring to 'intervention', the main focus is on my role as a teacher-as-researcher.

explorative stance, there was scope for changes in the direction of the research. In this vein, the field project with students was a 'blank book' waiting to be written collaboratively. The main musical approaches were identified by previous research work, and my role as teacher was assumed to be more that of an 'observer' with responsibility for introducing some activities that could challenge the students' view about ensemble instrumental music. The final goal was to ascertain whether these alternative approaches could lead to relevant and meaningful musical experiences and if *musical sense-making* [see page 68] could be developed in this context.

The intention of the field project with students was **to explore different models of pedagogical approaches and strategies that could change the paradigm of music teaching and learning contexts that teacher and students experienced in their instrumental ensemble classes**. Being based on the assumption that, when the goal is to transform a given educational reality, the teacher needs to assume the role of main change agent, the alternative pedagogical models were focused on three interlinked axes:

1) **The paradigm shift in the teacher's positioning in the pedagogical relationship**, abdicating the assumption of the central role in preference for a more egalitarian attitude, valuing the students' interests and an increased implication in their own processes of learning;

2) **The exploration of new formats of pedagogical relationship in the context of the classroom**, namely through the creation of contexts of self-learning and collaborative learning among peers and also the participation of the teacher as a co-creator;

3) **The alteration of the content of learning**, rejecting the mere repetition of works in favour of activities such as sound exploration, improvisation, composition, and other creative musical activities[38], arguably conducive to *musical sense making* and the development of individual musical voices.

Regarding the repositioning of my role as a teacher due to the exploratory nature of the project, new skills, knowledge and tasks were required that only became evident in the course of the process. The 'incarnation' of the researcher role transported me to a permanent critical inquiry, trying to distance myself from teaching practices 'crystallised' for more than two decades. I challenged myself to meet both the demands of the fieldwork at the personal, relational, pedagogical, technical and artistic level and those of scientific training as a researcher.

Despite the exploratory approach to the research methods, characterised by fluidity, the ***intervention methodology*** seemed clear in the initial phase in the project. However, transitioning to the real-world, finding 'hands-on learning' activities with which to engage students was a problem because of my limited experience in improvisation, composition and other creative musical activities. Trying to overcome this lack of knowledge and experience, I assumed the risk of engaging in some approaches suggested by Rodari in his '*Grammar of Fantasy*', testing strategies he used in 'creative writing', such as 'randomness', 'chain reaction', 'meaning attribution', 'the exploration of absurd', 'fantastic binomial', among others. In line with the principles of critical pedagogy, the intention was also to promote a pedagogical context open to transformation and where the students would have the

38 Some specific examples of these activities include: exploring non-conventional sonorities from the instruments; improvising over a harmonic progression; creating rhythmic patterns, melodies, harmonies and bass lines with pentatonic scales; and selecting and rearranging existing musical material to be played by an orchestra.

possibility of adopting the behaviour of non-passive acceptance, with an active, creative and critical intervention (Rodari 2006, 198), aligning with a 'collaborative and emergent nature of exploratory classroom discussion' and allowing 'new knowledge and insights [to] emerge from exploratory discussion among learners' (Sawyer 2004, 19).

Contrary to what happened before the beginning of the field project, when a solid and wide background literature was sought to give coherence and strength to the research design, the intervention with students would be an exploratory process and, for that reason, only semi-structured. Most of the decisions about the sessions were taken on a session-by-session basis or, often, spontaneously during a session. Although some decisions regarding the activities were taken by me, I always tried to take into account what I believed were the explicit or implicit opinions of the students and thus, to share with them the path to be followed in the project. However, in the first year the decision making was always an exercise of tension between the different alternatives, being extremely conditioned by the students' resistance and by my own insecurity, only transitioning to a more stable functioning during the second year. Arguably, the reasons for this stability were associated to the fact that students were willing to take responsibility for most of the final decisions after a process of collective discussion, this being perceived by me to be a sign that the setting was having the intended results regarding the students' active participation. For that reason, from that moment on relevant changes in the intervention methodology were not considered necessary.

2.4.2. Context of the research

The school

In Portugal there is a difference between *general music education*, taught in generic schools and at basic education levels (ages 6 to 12 or 15), and *specialised music education*[39] in music schools and conservatoires. The majority of the specialised music education schools are private but co-financed by the Portuguese Ministry of Education. The context for the action research reported in this thesis was a Portuguese music school where, according to government legislation, entry is by audition for primary to secondary levels students. Although students can start at six years old or even earlier, the majority of the candidates enter at the age of ten with a minimum level of musical skills and the large majority of them will not pursue a career in music. Being assumed to be a possible vocational path, most of the students from 10 to 15 years old attend a regime that connects the regular school with the music school, allowing students to be exempted from some school subjects.

The specific music school where the project was developed was a non-profitable association from a small community, founded in 1925 and dedicated to amateur music making (amateur orchestra and choir with participation in community religious and non-religious events). In 2000 a music school recognised by the Ministry of Education was created[40] and since then, the school has become a local and regional reference for music teaching

39 There is also ***vocational music education*** in professional schools. However, these are not included in the focus of this research.

40 Besides being, at the time of the field project, teacher and artistic director of this school (positions I left in 2019, three years after the end of the field project), I was also responsible for the process of recognition of the music school by the Ministry of Education and its first pedagogical director (school manager).

with an average number of 400 students per year in recent years. The main guidelines of the school's *Educational Project* valued music making in groups (with a main focus on orchestras and choirs), students' holistic training, and a connection with the local and regional community. Although it was assumed that it was not a major goal for the large percentage of the students of the school, over the course of the last 20 years many students went on to pursue a career in music, becoming music teachers, professional musicians or technicians in the music industry. It is also important to note that a small number of the students who have completed their musical training in the school (secondary level) maintain an association with the school's projects (mainly orchestras and choirs).

Despite perceived (by me) positive aspects of the school's *educational project*, other conditions in the school, by virtue of being in line with the practices of the *classical conservatoire culture*, clearly resonate with the basis of the 'research problem':

1) A widespread belief in the musical talent myth;

2) Some contradiction in the school's discourse and practices regarding competition;

3) Hierarchisation, by some teachers, of instrumental teaching, seeing the other subjects as subsidiary or as a complement to the instrument;

4) A focus on technical training through a narrow repertoire list and, even if the music pieces were being reviewed in recent years, with the introduction of non-classical musical languages, this was almost always for the very first years of learning, reverting later to the 'real music' that can evaluate properly the students' musical achievements; therefore, the teaching practices remained largely unchanged;

5) Teachers prioritised the apprenticeship model and almost never included the students in musical decision-making, having as a final goal the accurate technical performance of a piece of repertoire;

6) A lack of school autonomy regarding some administrative aspects under government regulation, forcing the same structure for all the students and grouping them not by their interests, skills or learning characteristics but almost always by their age level;

7) Although somewhat improved in the years just prior to this study, and with implications for all the previous aspects, the instrumental teachers' self-identity was primarily as a musician.

Despite this critical assessment of my teaching context, assuming some of the criticism myself as an instrumental teacher, I must recognise some evolution in the last decade, with some teachers already taking a more active stance by addressing some self-questioning. However, those teachers recognise the difficulties associated with the transition to an alternative to the classical tradition, being resistant to experimentation.

Research Participants

Recruitment procedures

With the intention of exploring approaches to music making that would be alternatives to the ones students engaged with in formal music education, and also trying to understand the processes leading to *musical sense-making*, it was necessary to have a group of students willing to participate in a one-year field project. After having decided the conditions necessary to be an active participant, the project was disseminated by presenting it to the whole school community in this way: *a one-year research project, the goal being to explore alternative approaches to music making in groups and to promote students' music creation and exploration through improvisation and composition activities.* The other eligibility conditions were: 1) instrumental students from Years 7-9 (from 11 to 15 years of age) and 2) with a minimum of two years of instrument learning. The first condition was due to empirical knowledge and research in the field indicating this to be the age level at which most of the students reveal their lack of relevance to or even frustration with music education. In the transition to secondary education, an age at which students are less influenced by their parents to practice and start to gain, gradually, a greater control over their individual study (Galvão 2006, 170), many students abandon formal music education, usually due to an increase in academic work and responsibilities in other subjects, conflicts in time scheduling or 'an interest in musical instruments and styles not featured in the school program' (Campbell, Connell and Beegle 2007, 4). The second condition was to not limit the musical development of the students due to technical instrumental difficulties that could not be solved in the sessions.

Informed by my own empirical knowledge and following some indications from authors in this field that value musical work in small groups (Benedict 2012, 157; Hargreaves, Marshall and North 2003, 152; Swanwick 1999, 47-48), it was decided that the number of students should be 'small enough to be managed as practical instrumental workshops, probably between eight and fifteen students' (Swanwick 1999, 95).

The students

To compensate for the likelihood of participant attrition (owing to the length and voluntary nature of the project) I decided to increase the intended initial number of participants from 15 to 18: 'the project began with 12 volunteer student participants. This number increased to 18 by the fourth session […] The participants were 12 girls and 6 boys, playing cello (6), violin (5), percussion (2), flute (2), oboe (1) and piano (1), and aged between 12 and 15 years' (Costa and Creech 2020, 152). The students that began the project 'had previously worked with the teacher in orchestra thus, the teacher was aware of the students' level of technical skills and personality. However, a hierarchical teacher-student dynamic had been established, with potential implications for the intended shift to a more collaborative approach' (Costa and Creech 2020, 151-152).

Despite being a voluntary project, all the students maintained their participation until the end of the first year (the initial expected duration). A decision was made to extend the project for one more year and because of schedule compatibility issues, one of the students decided to leave the project, however the remaining 17 continued their participation until the end of the second year.

An extremely important aspect regarding the group of students participating in the project was the decision, at the beginning of the second year, to appoint four students to coordinate the musical work made in small groups. This decision, that will be described in detail in the next chapter [see page 166], had a huge impact on every aspect of the project, and was considered one of the most important milestones of the entire research. These students, designated as ***coordinators***[41], were appointed by their peers and were already the ones that were assuming leadership roles in most of the work made in small groups. They were also the ones who showed the desire to take on more challenging musical activities.

The teacher/researcher

> Having a broad and long pedagogical experience, and notwithstanding my engagement in critical thinking and research about my own practices, I see myself as a traditional teacher, mainly in the area of instrumental (cello) teaching. My 'traditional' instrumental teacher identity is shaped to some extent by the context within which I teach, perceived by me as being extremely resistant to possible changes in teaching practices and therefore conditioning (not imposing on) my own freedom to test some alternative approaches. My pedagogical experience has been predominantly concerned with instrumental teaching, mainly one-to-one instruction, and ensemble classes, with students of all ages. I also have more than two decades of experience in school management as head teacher, artistic director and project manager. In these roles, I have engaged in national and international training, professional development, and research concerned with pedagogical, artistic and community matters.

Other participants

One of the intentions of the field project was to make the students engage with a group from the community. Given the school's experience in involving parents and families in music-making projects, the first suggestion I made was to invite a group of parents to participate, this suggestion having been accepted by the students. However, during the first year, the school had an Erasmus+ Project approved, raising the possibility of merging both projects (the field project and Erasmus+). This proposal was also welcomed enthusiastically by the students, mainly because it involved the school's orchestras playing music that would be composed by them.

The decisions taken during the implementation of the project led to the participation of three groups external to the field project: a group of 19 parents, a group of 16 students from the Erasmus+ project and all the students playing in the school's orchestras (around 150 students). All these participated in the performance of the piece made for the *flashmob* ('Evolution of Sound'). As they would not be in Portugal for the performance of the second piece composed within the scope of the project ('4R's'), the Erasmus+ students were not included in this second performance.

41 The roles these students assumed will be described in detail in the following chapter.

The sessions and other activities

Calendar and activities

The following table (Fig. 6) gives an overview of the main activities undertaken in the scope of the field project: regular sessions, focus group interviews, participation in a research meeting, presentation to parents, and concerts. The information includes the calendar of the regular sessions, the number of sessions for each of the four phases and the log of attendance of the students in each one of the activities, thus. allowing that the attendance level of each student during the project and also for each activity be determined, this being an important source of quantitative data.

The field project comprised 50 regular sessions, all of them video recorded. Three of those sessions were focus group interviews; the other focus group interview was undertaken in the last session of the second phase. Teacher and students were present in almost all the regular work sessions but in two of these, students worked autonomously in groups without the teacher being present. Additionally, some work was undertaken in supplementary sessions just for students who had been appointed as work coordinators. In one of these sessions for coordinators the teacher was present (the only one that was video recorded and reported as an extra session in the fourth phase) and at other times the coordinators worked autonomously (not reported in the table). Regarding the participation of external groups in the project, the main activities were divided between workshops, rehearsals and performance.

For the first musical product ('Evolution of Sound'), all the participants attended a general rehearsal and a dress rehearsal, and performed the piece in the final concert (entitled *The Earth Day Concert*)[42]. Before these activities, the preparation of the groups was different. The Erasmus+ students[43] participated in a one-session workshop, conducted by me, where they engaged in musical activities to develop some basic rhythmic skills and get acquainted with the conducting signs that would be used during the performance of the piece. The group of parents participated in a workshop (three sessions) about creative music making conducted by an invited musician. The school's orchestras rehearsed the piece within the scope of the orchestras' curricular work: those with students from Years 3 to 9 had, on average, five rehearsals almost exclusively dedicated to the rehearsal of this piece, and the orchestra with students from Years 10 to 12 and former students did only a sight-reading of the piece. Some of the project's students (usually the coordinators and two or three more) were also present and participating actively when the piece was being rehearsed by the school's orchestras.

The second composition made by the students within the scope of the project ('4 R's') was performed at the school's final concert, eight weeks after the performance of the first piece, but without the participation of the group of Erasmus+ students. Regarding the other groups, the preparation for the concert was somewhat similar to the first performance. The group of parents had three workshop sessions, but in this case the sessions were conducted by me. Regarding the work of the orchestras, the groups with younger students had about seven rehearsals (in the curricular classes) and the orchestra with older students and collaborators used only a part of their curricular time to sight-read the piece.

42 In this concert the number of people in the audience was about 500, with a similar number in the audience for the presentation of the second piece composed by the students.

43 All the activities undertaken by these students occurred in a four-day period. In addition to participating by playing percussion instruments made from recycled materials, the students were also invited to sing in the choir.

Field project attendance report
Year 1 and 2

Date	Session Number / Activity	Phase	Description	Approx. Duration	Student 1	Student 2	Student 3	Student 4	Student 5	Student 6	Student 7	Student 8	Student 9	Student 10	Student 11	Student 12	Student 13	Student 14	Student 15	Student 16	Student 17	Student 18	Attendance per session	Average attendance per activity
06/10/2014	s1		Regular Session	0:53	•	•		•	•	•	•	•		•	•			•		•	•		100%	
13/10/2014	s2		Regular Session	0:46	•	•	•	•	•	•	•	•		•	•	•		x		•	•		93%	
20/10/2014	s3		Regular Session	0:53	•	•	•	•	•	•	•	•		•	•	•		•	•	•	•	•	100%	
27/10/2014	s4		Regular Session	1:03	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	100%	
03/11/2014	s5	Phase 1	Regular Session	1:05	•	•	•	•	•	•	•	•	•	•	•	•	•	•	x	•	•	•	94%	
10/11/2014	s6		Regular Session	1:02	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	100%	
17/11/2014	s7		Regular Session	1:00	•	•	x	•	•	•	•	•	•	x	•	•	•	•	•	•	•	•	94%	
01/12/2014	s8		Regular Session	1:02	•	•	x	•	•	•	•	•	•	x	•	•	•	•	x	•	•	•	83%	
05/01/2015	s9		FGD	1:00	x	•	•	•	x	•	•	•	•	•	•	•	•	•	•	•	•	•	89%	
12/01/2015	s10		Regular Session	0:57	•	•	x	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	94%	
26/01/2015	s11		Regular Session	0:56	•	•	•	•	•	x	x	•	x	x	•	x	x	x	•	x	x	x	50%	
02/02/2015	s12		Regular Session	0:55	•	•	•	•	•	•	•	•	x	•	•	x	x	x	x	•	•	•	78%	
09/02/2015	s13		Regular Session	0:57	•	•	x	•	x	•	•	•	•	•	•	•	•	•	•	•	•	•	89%	
18/02/2015	s14		Regular Session	1:59	•	•	•	•	•	•	•	•	x	•	•	•	•	•	•	•	•	•	94%	
23/02/2015	s15		Regular Session	1:00	•	•	•	•	•	•	•	•	x	•	•	•	•	•	•	x	•	•	89%	
02/03/2015	s16		Regular Session	0:53	•	•	•	•	x	•	•	•	•	•	•	x	•	x	•	•	•	•	83%	
09/03/2015	s17	phase 2	Regular Session	0:59	•	•	•	•	•	•	•	•	x	•	•	•	•	•	•	•	•	•	94%	
16/03/2015	s18		Regular Session	1:04	•	•	•	•	•	x	•	•	x	•	•	•	•	•	•	•	•	•	89%	
21/03/2015	s19		Regular Session	2:31	•	•	•	•	•	•	•	•	x	•	•	•	•	•	•	•	•	•	94%	
24/03/2015	3eprae.1		Rehearsal	0:30	•	•	•	•	•	•	•	•	x	•	•	•	•	•	•	•	•	•	94%	
24/03/2015	3eprae.2		Creative Work (Frankenstein)	0:52	•	•	•	•	•	•	•	•	x	•	•	•	•	•	•	•	•	•	94%	
24/03/2015	3eprae.3		Presentation in the Conference	1:07	•	•	•	•	•	•	•	•	x	•	•	•	•	•	•	•	•	•	94%	
13/04/2015	Performance		Presentation to parents	0:52	•	•	•	•	•	•	•	•	•	x	•	•	•	•	•	•	x	•	89%	
13/04/2015	s20		FGD	1:03	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	100%	
20/04/2015	s21		Regular Session	0:53	•	•	x	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	94%	
27/04/2015	s22		Regular Session	1:00	x	•	•	x	x	•	x	x	•	•	•	•	•	x	•	•	•	•	67%	
18/05/2015	s23		Regular Session	0:59	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	x	94%	
25/05/2015	s24		Regular Session	1:02	x	•	x	x	x	•	x	•	•	•	•	x	•	x	x	•	•	•	56%	
01/06/2015	s25	Phase 3	Regular Session	1:00	•	•	•	•	•	•	x	•	•	•	•	•	•	x	•	x	•	x	78%	86%
08/06/2015	s26		Regular Session	0:45	•	•	•	•	•	•	•	•	x	x	•	x	•	•	•	•	•	x	78%	
09/07/2015	s27		Regular Session	4:50	•	•	•	•	•	•	x	•	x	•	•	•	•	•	x	•	•	•	83%	
10/07/2015	s28		Regular Session + FGD	2:28	•	•	•	•	•	•	x	x	x	•	•	•	•	•	•	•	•	•	83%	
07/10/2015	s29		Regular Session	1:02	•	•	•	•	x	•	•	•	_	•	•	•	•	x	•	•	•	•	88%	
14/10/2015	s30		Regular Session	0:56	x	•	•	x	•	•	•	•	_	•	•	•	•	•	•	•	•	•	88%	
28/10/2015	s31		Regular Session	1:05	•	•	x	•	•	•	•	•	_	•	•	x	•	•	x	•	•	x	76%	
04/11/2015	s32		Regular Session	1:05	•	•	x	•	•	•	•	•	_	•	•	x	•	•	x	•	•	•	82%	
11/11/2015	s33		Regular Session	1:11	•	•	•	•	x	•	•	•	_	•	•	•	•	•	•	•	•	•	94%	
18/11/2015	s34		Regular Session	0:55	•	x	•	•	x	•	x	•	_	•	•	•	•	•	•	•	•	x	76%	
25/11/2015	s35		Regular Session	1:07	x	•	x	x	•	•	•	x	_	•	•	x	•	x	x	•	•	•	59%	
02/12/2015	s36		Regular Session	1:03	•	•	•	x	•	x	x	•	_	x	•	x	•	•	•	•	•	•	71%	
16/12/2015	s37		Regular Session	0:56	•	•	x	•	•	•	•	•	_	•	•	•	•	x	x	•	•	•	82%	
08/01/2016	ex.s.		Extra session for coordinator students	3:36		•				•	•		_		•								100%	
13/01/2016	s38		Regular Session	0:58	•	•	x	•	•	•	•	x	_	•	•	•	•	x	•	•	•	•	82%	
20/01/2016	s39		Regular Session	1:07	•	•	x	•	•	•	•	•	_	•	•	•	•	•	•	•	•	•	94%	
27/01/2016	40	Phase 4	Regular Session	1:03	x	x	•	x	x	•	•	•	_	•	•	•	x	•	•	•	•	•	71%	
03/02/2016	41		Regular Session	0:53	x	•	•	x	•	x	x	•	_	•	•	•	x	•	x	•	•	x	59%	
10/02/2016	42		Regular Session	2:53	x	•	x	x	•	•	•	•	_	•	•	•	•	•	•	x	•	•	76%	
17/02/2016	43		Regular Session	0:56	•	•	x	•	•	•	x	•	_	•	•	•	x	•	•	•	•	•	82%	
24/02/2016	44		Regular Session	1:01	x	•	x	x	•	•	•	x	_	•	•	•	•	•	•	•	•	•	82%	
02/03/2016	45		Regular Session	0:55	•	•	x	x	x	•	•	x	_	•	•	•	x	x	•	•	•	•	65%	
16/03/2016	46		Regular Session	0:59	•	•	•	•	•	x	•	•	_	•	•	•	x	•	•	•	•	•	88%	
06/04/2016	47		Regular Session	1:03	•	•	•	•	•	•	•	•	_	•	•	•	•	•	•	•	•	•	100%	
13/04/2016	48		Regular Session	1:07	x	•	x	x	•	•	•	•	_	•	•	•	x	•	x	•	•	x	65%	
20/04/2016	49		Regular Session	0:52	•	•	•	•	•	•	•	•	_	•	•	•	•	•	•	•	•	•	100%	
01/05/2016	Concert		Performance of the piece "Evolution of Sound"	0:11	•	•	•	•	•	•	•	•	_	•	•	•	•	•	•	•	•	•	100%	
04/05/2016	50		FGD	1:11	•	•	•	•	•	•	x	•	_	•	•	•	•	•	•	•	•	x	88%	
30/06/2016	Concert		Performance of the piece "4 R's"	0:11	•	•	•	•	•	•	•	•	_	•	•	•	•	•	•	•	•	•	100%	
				66:32:00	82%	96%	71%	80%	82%	91%	81%	89%	55%	91%	100%	85%	87%	79%	80%	93%	96%	83%		
													85%											

x Student absent from the activity
• Student present for the activity
Student not required to participate
_ Student not participating in the 2nd year of the project

Fig. 6
Calendar and attendance log

Structure of the regular sessions

In order to align the field project time commitment with the students' formal ensemble class, students participated in weekly ensemble sessions that, for the most part, varied between 50 and 60 minutes in length. A few times a setting more similar to a workshop format was explored, where students engaged in longer sessions that ranged from two and a half hours to a whole day.

The planning of the sessions was semi-structured, having three main stages: 1) definition and communication of the goals for the session; 2) practical musical work; and 3) presentation of the work and feedback. Notwithstanding huge differences in the specific detail of the practical work during each session, the structure was more or less maintained throughout the project.

The transformation undertaken during the full time-span of the project was a result of, on the one hand, decisions taken by me and students after discussing different possibilities and, on the other hand, the response of students to some creative activities. The students' behaviour in the sessions varied from moments when they were resistant to collaboration and creative activities, moments of deep engagement and even flow in music making, to moments where I had to intervene and adopt a more rigid posture to control the sessions. It is not possible to define a clear 'model' of intervention, this being in line with what Sawyer referred to as an 'improvisational response' to the flow of the sessions, changing the pedagogical approach, the type of musical activities or the group work settings. After some time, my active participation began to fade, passing to the students most of the decisions regarding the musical work. With the appointment of work coordinators, who took over most of the leading, the structure of the sessions was maintained and my role as teacher transitioned to a more naturalistic observation, intervening only when I felt some support was needed, scaffolding the students' learning.

After finishing the musical score and during the time between the performance of the first and second pieces, having delivered the parts to the orchestral students and playing in one of the school's orchestras, the students were directly involved in the rehearsals as musicians. Beyond this, some of them (almost always the coordinators) were present in the rehearsals of the other orchestras, helping others regarding musical and/or technical aspects. Extremely important were also the talks between me and these students after the rehearsals, where they made critical suggestions regarding aspects that, according to them, could be improved, leading to adjustments in the score.

Field project report

The initial project design presented before the beginning of the field project was considered flexible and fluid, being reconfigured according to the events in the field. To describe what really happened, a more complex and nuanced research design (Fig. 7) was developed, in this case to describe the intervention in the field project. This schematic description gives a clearer framework for future analysis and discussion.

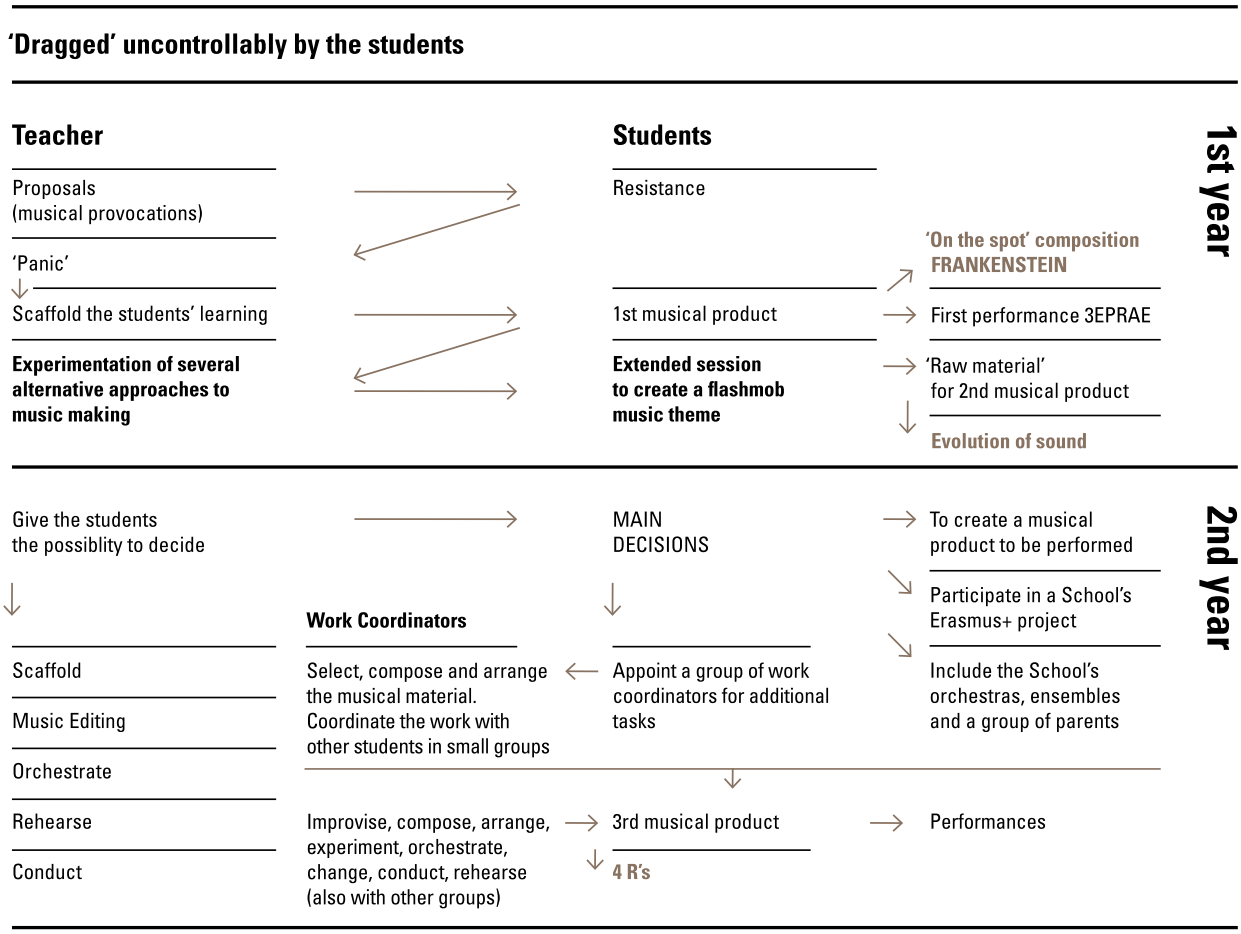


Fig. 7
Research Design 3

This scheme highlights all the main events, milestones and changes in the direction of the fieldwork. A more detailed description of the intervention in the field, incorporating all the elements of the process, will be presented in the following chapter.

2.5. Writing Methodology

Regarding the writing of the thesis, it was a chaotic process and, for that reason, it seems problematic to speak of a ***writing methodology***. Due to the lack of personal time to invest in the research after the end of the field project, much was written initially in scattered fragments. During the field project and parallel research work, in addition to themes defined *a priori*, new additional themes that were not included in that thematic structure emerged throughout the field project [see page 108]. Accordingly, the writing process followed a kind of 'motivic development' that was continuously integrating new events, dimensions, contradictions and personal thoughts. The final stage of the writing process was also complex due to the long time-span that had passed between the beginning of the research and the end of the structured writing

process, resulting in the need to rewrite and articulate everything that had previously been written. Despite some personal frustration at continuously delaying the beginning of the writing, this allowed me to enrich the research by engaging with more recent works and other artistic, teaching, training and project-managing experiences that added value to the reflexive process and to the research. It also allowed the rereading of some authors and works that had been read previous to the field project, presenting alternative perspectives by reading them from a different positionality. This long period of time also allowed me to have a more distanced view of the research, this being clear when viewing again, several years after, all the video recordings of the project's activities, broadening even more the polyphonic approach that was foreseen at the beginning of the writing of the thesis. Being an exploratory project, I acknowledge that, initially, I was not expecting the large volume of data I had amassed by the end of the field project. Consequently, another challenge was the selection of the most relevant findings that were most closely connected to the themes of the thesis.

A methodological difficulty in this research was related to the fact that 'music is a complex phenomenon, one involving a host of cultural, phenomenological, cognitive, cultural, and music-artistic factors' (Almén and Pearsall 2006, 2), thus being extremely difficult to write about. However, academic requirements value the use of written language to describe aspects related to artistic practice that are impossible to translate into words (Almén and Pearsall 2006). Almén and Pearsall (2006, 132) relate this to Barthes' 'third meaning' (the first two are 'denotation' and 'connotation'), 'the meaning that can be heard but not spoken'.

Regarding the goal of field work with students, it must be clear that its main focus was not the artistic product in itself, but **the process conducive to a creative approach to music making and to a transformation process that leads students to emancipation, active music making and *musical sense-making***. It is with specific regard to this last concept of sense making that I suggest that writing has limitations because, besides being extremely difficult to assess, sense making cannot be translated into words. The presentation of this *writing methodology* is where I engage with the difficulties and limitations of writing about a project that can only be fully understood by seeing and hearing or, at a deeper level, by participating actively.

Despite this reported difficulty, I must recognise that the effort required to write this thesis challenged me to think in different ways and forced me to structure my thinking. This is in line with what Cook said, that 'the dialogic relationship between what can be said and thought, and what cannot, offers opportunities for both domination *and* for empowerment' (Cook in Almén and Pearsall 2006, 117). I assumed the risk of trying to extend the possibilities of writing, departing from shaky ground, not only owing to my lack of experience, but also to the exploratory character of the research.

2.5.1. Polyphonic approach

As this project was implemented in the field of music, I applied concepts and techniques of musical composition to the writing of the thesis. The most important concept is *polyphony*, due to the existence of multiple 'voices' emerging in the overall research. In addition to the voices of the students, the project encompassed my voices as teacher and as researcher, to which I could also add the voice of a musician, school manager and learner. However,

it is impossible, most of the time, to distinguish between these voices because they are interdependent. Voices external to the active participants in the research include the authors cited in the background literature and from discussions with the advisers, teachers, colleagues and people present in the presentations of this project at conferences or research meetings. The results of these interactions were integrated into my reflective process.

> During the writing of the thesis, I made a distinction between some of the voices, separating them according to the perspective or to the methodological tools I have used. I believe that it makes sense to distinguish the writing of the teacher from the writing of the researcher, where possible taking an objective stance and using external elements of analysis. In an attempt to be clearer, mainly regarding from which voice each particular text is written, the 'polyphonic writing', highlighted also graphically, distinguishes between the more implicated role and a more distanced view. What is written by me as a teacher was highly conditioned by specific frames of reference and cannot be understood as universal truth. I reinforce this aspect because, as stated earlier, one of the most relevant and characteristic aspects of this research is the analysis of the changes in my role as a teacher during the implementation of the project and in the process of writing the thesis.
>
> There was also another voice, that I can only classify as 'collective', from a position that predisposed the teacher to be co-author, together with the students, of new forms of music making, assuming also an alternative relational setting. This voice emerged (unexpectedly) mostly during the second year of the field project, when the coordinators and I worked together very closely to compose and make arrangements from the material created in the sessions with the whole group. In the work activities with the coordinators, I felt that the proclaimed 'equal relationship' intended for the project was, indeed, a reality. In this case, I exposed my difficulties and fragilities and my lack of knowledge regarding some musical activities and, from this relational experience, sometimes I felt that I was really 'one of them', excited to collaborate in the discussions for the creation of an original musical work, this also being a first experience for me. This voice cannot be clearly identified because it is mixed with my other voices reported in the journal – and yet... it exists!

In the process of writing, other parallels that can be made with compositional technics include concepts such as motivic treatment, dynamic contrasts, counterpoint, tempo changes and modulations, where the different voices can merge, twist, enlace or just follow as a kind of parallel text, analogous to the process of writing a music score. This can be related to Skilbeck's 'fugal modality' where, described by O'Donnell (2015, 939), the author (a writer) makes an analogy between her writing style and a musical fugue, where a basic theme can produce 'potentially infinite variations […] through the interweaving of "voices" (instruments) using techniques of polyphony and counterpoint' (Skilbeck 2008, 147-148). In line also with what happens in the case of this thesis, this polyphonic approach 'brings together multiple voices in a choral effect', 'values multiple styles of knowledge both sensual and rational', and values 'interdisciplinarity and the contributions of different fields', within 'an "intentional act" which settles into its own rhythms, which produce thoughts, experiences and arrivals' (O'Donnell 2015, 942). Important in this writing methodology is that, instead of 'producing the simple direct argument of a line melody' (O'Donnell 2015, 950), it allows 'dissonances' that enrich the discussions by helping problematising and creating 'conflicts'. In this respect, similar to what happens with resistance regarding change processes, the dissonances in writing can be seen as one of the most important creative and driving forces of the research.

2.5.2. Reflexive approach to writing

> After the initial difficulties, discouragement, and even frustration with not being able to respond to my own expectations regarding the conclusion of the thesis, I finally accepted a kind of 'degree zero of writing', assuming, as Barthes says (1953, 20) that writing 'develops like a seed, not like a line, it manifests an essence and holds the threat of a secret, it is an anticommunication, it is intimidating'. As a way to 'feed' the process, I tried to promote shocks and discussions, not escaping the contradictions, but rather to use them to cause discomfort and create opportunities of interinfluence between poles that repelled each other, sometimes not controlling the path that was taken, this strategy being seen as the best suited to an artistic attitude that would eventually provoke 'meaning through a dialogic process, via the interaction of contrasting ideas' (Almén and Pearsall 2006, 3). This is also in line with what is defended by Rodari (2006, 29), stating that in order to create something there is a need for two polar opposites because the concepts do not exist without their opposite. This 'shock' between contradictory concepts allowed me to evolve in a way that in a purely deductive or inductive way I could never reach. At an early stage, I tried, unsuccessfully, to reduce the focus of research in order to avoid dealing with the contradictions described above. However, although having to manage a huge amount of information and be immersed in many different themes, I feel more comfortable taking a multiple voice, and trying to drive a combination of dialogical and dialectic processes, highlighting the relationship between different aspects of myself. Following this positioning, I accepted a kind of promiscuity that some academics might find methodologically 'impure', inconsistent or even ethically unacceptable by not assuring a 'research distance' (Nyberg 2015, 139).

In summary, the writing process is interpreted here as being similar to the writing of a music score, where all the voices were inserted, somewhat interrelated, but where the significance and meaning lies in intersubjective relations that produce a choral speech that is somewhere 'in between'. I can relate this to Rancière's thought: 'all words, written or spoken, are a translation that only takes on meaning in the counter-translation...' (1991, 64).

'Toute parole, dite ou écrite, est une traduction qui ne prend sens que dans la contre-traduction...'

> A point regarding the process of writing is the fact that my mother tongue is not the English language. The decision to write in English was pragmatic for two main reasons: a desire for 'displacement' from my professional and initial teacher training context and also due to the reduced amount of academic production regarding my research interests in Portuguese, rendering it necessary to complete a translation of the terms and concepts widely assumed and recognised in the English language.
>
> In the final stage of writing, the need to write in detail about a wide variety of themes led to a moment when it seemed an impossible and unending process. Despite that, I decided to continue to write without constraints but, in the next phase, I engaged in a 'sculpting' task or, using musical language, a kind of 'linear reduction' to focus only on the essential... however, that also was not an easy or peaceful process.
>
> Despite all these difficulties, as said above, the process of writing helped me to structure my thinking in such a way that would be impossible to achieve just by speaking or showing the video-recorded evidence. For that reason, independently of its limitations, it was worth it.

2.6. Summary of the methodology

In accordance with a critical and constructivist approach to research, the methodological path followed in this research was also exploratory, not being framed or limited by a strict preconceived research model or design. The methodological approach was being constructed alongside the implementation of the project and included evolving designs and varied research methods and approaches to data analysis, all these framed by a qualitative research paradigm.

It is acknowledged that the exploratory approach followed in this research, intentionally moving away from a step-by-step, predefined linear method, led to a chapter about Methodology that can be seen as unclear or even confusing. The intention earlier in this chapter was to describe 'the whole picture', i.e., the multiple methodological dimensions present at different moments in the research. The writing of the methodology for this research was started whilst still in the pre-project phase of the thesis, by stating the methodological stance and the initial research design, the final words in this summary written in order to 'check' if the methodological path followed in this research responds to the rigour required for such an academic work.

Considering that most of the important methodological dimensions have been addressed in this chapter, this section will summarise, by following what Letts et al. (2007) consider the most relevant guidelines in qualitative studies, all the key points that can strengthen the research and its outcomes.

The starting point for the research reported in this thesis was the belief, based on my professional experience and previous research, that the majority of students attending formal music training in my teaching context were not experiencing meaningful music making. Arguably, this was because students were engaged in the type of musical activities that did not promote a path to musical sense-making. Therefore, the main purpose of the study implemented in this research was **to engage in an exploratory and participatory action research project, in order to understand how the process of musical sense-making is constructed by students**. In parallel, another goal was **to determine in what ways the roles of the (traditional) teacher needed to be changed in order to respond to a pedagogical context that better promoted the students' autonomy and the development of their own musical voices**. Having initiated the field project with these two very clear lines of research, the research questions that emerged later, already during the writing of the thesis, were centred on the concept of experience, that can be also related to *phenomenology*: *What is the student and the teacher experience of encountering musical sense-making?* and *What are the implications in that process of the pedagogical relationship, musical activities and musical language?*

The overall research and, more specifically, the intervention in the field project, was framed and planned in accordance with the principles of *critical pedagogy* and *constructivism*, widely addressed in the literature review chapter. Transporting these principles to music education, although not limited by it, the *praxial* approach defended by Elliott (1995) served as a basis to much of the practical work with students, namely the focus on activities that require the creation of knowledge in cooperative settings.

Regarding the research design, given the exploratory nature of the research, the initial version, although maintaining the features of an action research paradigm, namely its cyclical character, suffered several changes during the project. A final version of the research design was made in order to highlight all the key points of the field project with

students, including changes to the design and milestones. In relation to the design of the research, it was clear that it was framed by a qualitative research paradigm, this being the most suitable form of getting a clear understanding of a given reality. However, this broad category can include different design types. In the case of this research, it was assumed at the start of the field project that a *participatory action research* would be the main approach, but the exploratory and fluid approach to research allowed incursions into *phenomenology* and *grounded theory*. The option for these approaches allowed a greater knowledge of all the participants' views and understanding in depth, creating the basis for a better argumentation regarding the achievement of goals envisaged at the beginning of the research.

Regarding the methods used to gather relevant information, I made use of ***participant observation*** ('to research a culture or situation from within' and 'doing what the people are doing' (Letts, et al. 2007, 5)), maintaining a detailed reflexive journal where I reported the interactions in the field. Whilst not structured in a way that can be considered interviews with key informants, my active participation as a member of the group did allow me to ask direct questions to the students about their feelings and thoughts, this insider perspective being considered extremely relevant to accessing some important data. A more structured method used to gain access to the students' feelings and thoughts was ***focus group interviews***, where they had the opportunity to expose their thoughts, giving their opinions about many of the themes that were initiated by me, but also other aspects that they considered relevant to their participation in the project. Another important method was the ***video recording*** of almost all the activities developed during the project. In this case, to the observations made as an active participant, I could also include a more external and objective (where possible) observation. This was reinforced by multiple viewings of the recordings and the distancing of several years between the first and last views. The duration of the project and the amount of time engaged in musical activities that were developed during this period allowed me, as participant and researcher, to have access to information that contributed to 'uncover[ing] the hidden meanings of the situation/context' (Letts, et al. 2007, 6) and to an in-depth knowledge of how students construct their own learnings. The information retrieved from all these methods benefitted from the participatory aspect of research.

The conditions required for students to participate in the project were clearly stated and in line with the goals of the research. Participation in the project was voluntary and the conditions were related to 1) age level (the age in which students undergo substantial psychological changes); 2) a minimum technical proficiency of the instrument (not to limit musical expression); and 3) an approximate number of 15 students participating in the project (to allow a balance between collaborative work and individual voice).

The data resulting from all the methods described above includes more than 400 pages of written data including a *reflexive journal*, *session analysis* and the four *focus group interviews* with students. All 47 sessions gave origin to *report forms*, with field notes and the results of post-session observations. All this data was coded in two phases: 1) in a first moment, concurrent with the implementation of the field project, using that initial level of analysis to plan the subsequent sessions or phases; and 2) after the end of the field project, in order to find evidence that could lead to the problematisation of the themes raised at the beginning of the research, or to make an approximation to the research questions.

The use of varied methods to gather data and the rigorous description of events was a way to reduce possible inconsistencies in the data analysis. According to Letts et al. (2007, 8-9), the process of data analysis should have analytical rigour, being described as the processes

used to code the information and to identify patterns that will allow the understanding of relationships retrieved from the data. As described above, the immediate coding of events as they occurred, although starting from a set of predefined categories, allowed the emergence of many new themes. The following process was to reduce the themes to a number that allowed a better reading of the reality but without excluding dimensions that were important to the research. The data and the evidence resulting from its analysis and interpretation allowed the context under study to be characterised, addressing directly the themes raised at the beginning of the research and responding, through an inductive process, to the research questions.

The last important issue raised by Letts et al. (2007, 9-10) addresses the question of overall rigour in qualitative studies. In comparison to quantitative approaches to research, where concepts like *reliability* and *validity* are valued, the authors state that the overarching concept in a qualitative approach is *trustworthiness*, its components being *credibility*, *transferability*, *dependability* and *confirmability*. Regarding *credibility*, some of the aspects that the authors value were followed in this research, including the prolonged period of the research and data collection and the diversification of the data sources, methods and points of view, allowing a triangulation of the results. In this respect, a limitation of the study was the fact of it not being possible to have participants checking the interpretation given to their inputs, and also the lack of additional researchers to share the data analysis, bringing new perspectives.

The outcomes of the research led to the conclusion that most of its intentions, namely the transition to a pedagogical context based on collaboration and activities based on exploration and creation, led to an increase in the students' autonomy and development of musical understanding. It can therefore be argued that, although the specific activities and relational dynamics are restricted to the participants in the field project, the way teachers and students worked collaboratively in order to change the pedagogical setting, including their roles and the relationship between them, can be transferred to other situations.

The summary of the Methodology approach followed in this research gives strength to the 'insider' dimension of the teacher-as-researcher. Only by participating actively in the discussions and processes of decision making could I have access to relevant information that, later, gave me the lens through which I could interpret some of the students' relational dynamics and also their reactions to specific musical activities. The following chapter is, appropriately, the objective description of the field project with students, organised by the themes that were decided after the process of clustering described above [see page 108]. However, it is important to recognise that, as Letts et al. (2007, 10) refer, **the neutrality of the data is important, but we cannot achieve a neutrality from the researcher's part.** In this long research, where data analysis was an ongoing process that assumed the goal of transforming the reality, my role as a teacher and as a researcher was never neutral. However, it must be stated that the last phase of data analysis was made several years after the end of the field project and, for that reason, a more distanced approach to data analysis, and a more objective description of the events, could have been achieved.

3. PART III
Outcomes and findings experiencing a *praxial* music making context

This exploratory research, carried out within a fluid, dynamic and often unpredictable real-life pedagogical context, revealed many complex issues, some of which were beyond the initial scope of the research. As noted in the methodology chapter, I found that excluding some dimensions, narrowing the focus too much, risked an interpretation that would fail to capture the rich and complex nature of the empirical field. However, the need to find a balance between 1) all the questions that framed the research approach as well as those later raised by this research, 2) a detailed and 'full picture' of the events of the fieldwork and 3) a document that favours clarity and comprehensibility, led to the formulation of the **research questions** [see page 25] addressing the process of musical sense-making acquisition and the roles of teachers and students in that transformative pedagogical relationship.

3.1. Basis for the field project with students

In this chapter the intention is to 'tell the story' of the field project, considered the central element of the research reported in this thesis. Having presented a diagnosis of the Portuguese music teaching system framed by my professional experience [see page 30], the contributions of relevant authors regarding the more pertinent themes addressed by the research [see page 29], and the methodological framing [see page 96], this section intends to describe the transition to the implementation of the exploratory field project in a *praxial* music-making context. What is reported here is an explanation of how the planning for the fieldwork emerged from my analysis of the context within which the research took place.

Viewing this field project as a set of shorter phases, in a cyclical or iterative process, the option was to make a more detailed analysis of the data according to those phases, mainly because in each one of them, although the general goals were maintained, the problems, the strategies and the observation lenses were being adapted to the conditions in the field and to emergent research frames. This was a result of an 'unstable balance' that, as referred to in the methodology chapter, was perceived as positive by accepting a tension between convergent and divergent movements regarding the goals of the field work, and which also promoted a permanent movement towards transformation guided by my self-reflexive process as teacher/researcher, but always including the voices of the students.

Although undertaken in a formal setting, the intention of the field project was to explore possibilities associated with non-formal and informal learning contexts, transitioning to less prescriptive pedagogies, leading to 'the inclusion of more open-ended and creative environments' (Schiavio and van der Schyff 2018, 11), in a clear enhancement of 'informal musical knowledge' that intended an approximation between the schoolwork and the life of students outside school (Elliott 1995, 64).

3.1.1. Starting point

After a somewhat extensive diagnosis of the system in which my teaching context was positioned, and by engaging with the themes more closely connected to the goals of this research, it was possible to establish the initial conditions that would frame the initial fieldwork with students. Being an exploratory project, a rigid plan was rejected in favour of a will to initiate a 'shared journey' with an unknown destination. However, a set of general values, principles and strategies was settled on, as well some concrete activities intended to disrupt the existent classroom practices and preconceived ideas about instrumental music making. The idea of disruption, alongside transformation (individual and systemic), derived from a personal evaluation of a specific teaching context and also from the belief that, as Robinson (2011, 201) states, 'education policies for the future must learn from the past but must not be dictated by it'.

Several initial conditions were clear: 1) the promotion of a non-hierarchical space (shared decision-making); 2) the focus on creative work (musical problem-solving activities); 3) the enhancement of musical memory and communication instead of notated music; 4) the promotion of collaboration and active discussion; 5) a connection to the students' 'real life' musical interests and 6) less dependence of technical skills to achieve musical rewards. This 'self-framing' maintained a coherence with what was asked of the students, being contrary to most of the practices experienced them in their regular orchestra classes (top-down management, passive behaviour by focusing on reading and development of technical skills, no peer interaction or musical communication, and a work-based concept of musical knowledge), pulling out any type of safety net (for both teacher and students). However, these ideas were abstract and there was a need to give them more structure and practical content to be applied in the pedagogical setting.

3.1.2. The possible path to meaningfulness and musical sense-making

What kind of teaching environment can lead to musical sense-making? According to my professional experience, it seems clear to me that activities where students are more active, involved ('learning by doing'), and assuming ownership of their learning process, are the best promoters of a better understanding of the musical language and a more fluent musical communication. According to this view, such activities will lead to optimal experiences that will have a positive contribution to student motivation and general well-being. Constructivist approaches to learning reinforce this statement, suggesting that activities where students just hear or read have a much lower significance for learning in comparison with activities where students are required to discuss, practice or find their own way to learn. In order to achieve the wider goals of a *praxial* music education, that include 'personal meaningfulness, interconnectedness, social capital, empathy, ethical maturation, self-growth, self-knowledge, and flow' (Elliott and Silverman 2015, 412), learning should provide '(1) multidimensional musical challenges and (2) the musicianship required to meet the challenges of a given musical practice' (Elliott 1995, 121). These aims are 'accessible, achievable, and applicable to students, providing that musical understanding is developed progressively and in balanced relation to authentic musical challenges' (Elliott and Silverman 2015, 412), bringing 'musical conversation from the background of our awareness to the foreground' (Swanwick 1999, 31).

One of the main ideas for this project, challenging the 'banking model' of education (Freire 1970) and the ideological apparatus of competition, rejecting its use as a strategy to

promote learning, was to base the intervention on cooperative and collaborative learning (Kohn 1992, 6) that could potentiate intersubjective meaning-making by privileging intergroup relationships working 'toward a common goal' (Prince 2004, 1). In this respect the possibility of Tuckman's model of team development (1965) is highlighted, created by analysing the forms of interaction between the elements of different groups, trying to reach generalisable dynamics in different dimensions. Tuckman and Jensen (1977, 43) proposed the following stages: '(1) testing and dependence, (2) intragroup conflict, (3) development of group cohesion, and (4) functional role relatedness' and, regarding the stages related to task activity, it was proposed: '(1) orientation to task, (2) emotional response to task demands, (3) open exchange of relevant interpretations, and (4) emergence of solutions'. Merging between both dimensions of group dynamics Tuckman proposed the following phases: *forming*, *storming*, *norming* and *performing*.

3.1.3. How to start?

> When I was thinking about the musical work to propose at the beginning of the field project, a great anxiety took over me when I asked myself: *How do I start?... And after that?* (RJ e2)

> The tension of assuming a kind of double personality, with one side being completely framed by what I consider inadequate teaching practices and the other 'philosophically immersed' in the principles of critical pedagogy, seemed impossible to solve. Trying to see this conversation between 'me' and 'myself' as positive, I resorted to critical pedagogues in the field of music education, searching guidelines regarding the class settings and activities that could help me to 'boost' this initial phase.

> However, there were different starting points, namely at the beginning of each phase. New questions and new problems were constantly arising, and new planning was required at the beginning of each cycle but, most of the time, addressing different aspects from different perspectives.

Replication of non-formal characteristics in a formal and traditional educational setting

One of the main self-imposed intentions of this project was **to explore some conditions associated to instrumental music-making in non-formal settings**, trying to address future opportunities to apply them, if considered positive and where possible, to my (formal) teaching context. To put it another way, the goal was to address a potential 'merging' of what is desirable with what is possible in the school system, thus, this being 'my personal problem' as a teacher, the decision was made to develop the project in my own teaching context, with a personal contribution to its transformation as a final goal.

The relationship between formal schooling and non-formal or informal education is, perhaps, the main path to explore in the future in music education and music teaching systems (Allsup 2003, 2004; Campbell 1995; Frith 1996; Hallam and Gaunt 2012; Herbert and Campbell 2000; McGillen and McMillan 2005; Salvador 2015; Swanwick 1999; Westerlund 2006). Wide research has raised the possibility of learning music inclusively within the formal teaching system, following teaching models and strategies used in

popular music, music theatre, iPad orchestras, garage bands, world music, church, community music or other types of musical practicums. An especially interesting prospect is the use of popular music settings as a model for developing music expertise (Allsup 2004; Green 2008; Westerlund 2006), where music teachers contribute to what was already, from the students' point of view, an authentic music practice. The opposite to this 'openness' to the students' contribution is to institutionalise that kind of music-making practice, modifying it and risking the possibility of transforming it into 'pseudo music' (Ross 1995, 195). This leads to the need to reconceptualise formal instrumental music education and its relation to music making in the community (Allsup 2003, 29; Swanwick 1999, 93), not only addressing aspects related to musical languages but, perhaps more importantly, to the relational dynamics and music-making models used, for example, in *Popular Music Pedagogy* (Jones 2008; Lebler 2008; Schiavio and Cummins 2015). Different approaches to music making include 'ways of thinking about it and responding to it' and, for that reason, it is not possible solely to insert 'a popular genre into the set of classroom practices that have been developed to deal with classical music' Sloboda (2005, 367).

The main characteristic of non-formal educational setting is the connection to the students' real life and interests, that in music means an approximation to the music that students listen to every day. However, as music teachers, we must not forget that one of the goals of music education is to widen the students' 'musical worlds' and promote an active and authentic conversation with many different musical languages that represent diverse geographies, cultures and ways of thinking and acting, expanding music education beyond the *classical conservatoire culture*. One of the risks of bringing models that work well in non-formal contexts into formal school contexts is to lose the relevance those experiences have for the practitioners. In this respect, Bruner and Allsup (2004, 208), quoted by Schmidt (2005, 3), say that when music is 'educationalized', 'we place limits on what is musically possible'.

Acknowledging all the risks, the challenge in this project was to advance the possibilities of integrating some aspects that could: 1) complement the type of musical training given by a formal education, 2) make use of non-formal approaches in formal education, and 3) as a process of personal and social transformation, involve educative, political and cultural dimensions in the acts of learning and making music.

Alternative possibilities for the music-making settings

When I was trying to find some guidance to start the field project, some authors from different spheres allowed me to expand some possibilities regarding my role as a music teacher. I will present some of the contributions that, in an initial phase of planning, had a significant role in the framing of the intervention. The exception to this was Keith Sawyer whose influence appeared later in the project, when I was addressing the 'problem' of the students' resistance and trying to find strategies to deal with that resistance.

David Elliott was the author that had the greatest impact on the creation of a basis for the field project with students, the most relevant aspect being the coherent articulation between 'theory' and 'practice', merging them into a 'praxis' or *praxial* approach. The author highlighted the multidimensional character of musical experiences that should lead to, besides equally important non-musical goals, musical understanding and fluency in the musical discourse.

Hallam and Gaunt (2012), referring to the process that could lead students to become professional musicians[44], suggested that when students engage in active learning, their levels of motivation rise and this contributes to their self-confidence. Students should also focus on activities that value the collaborative dimension of music making, for example 'a circle of trusted teachers, mentors and friends' (5) or by getting involved in groups from the community. These activities should value creative achievement and development, allow risk-taking, exploration and extension of their current levels of knowledge.

Hallam and Creech (2010) mention that secondary school students are in the process of establishing distinctive musical identities, suggesting that music education needs to offer opportunities where they can explore those identities, engaging in 'musical activities with which they can identify (usually popular music) […] personalise their learning, developing their own specific skills and creative styles [and] develop musical understanding of, and experiment with, a wide range of different types of music' (330-331). With reference to the 'Teaching and Learning in 2020 Review' (2004), the authors refer to a pedagogy of personalised learning, highlighting aspects such as: the use of technology, flexibility, the valorisation of music making in formal and non-formal spaces, the reduced number of students in classes, the focus on academic and non-academic skills, and adequate assessment leading to positive self-image and self-assessment (342).

Swanwick (1999, 77) argues that students' access to a wide range of musical practices is a necessary condition to 'develop the full potential of their musical understanding' that can develop students' musical thinking skills and allow them to make musical judgements. For this this to happen, technical work cannot be the main focus of teaching, as it is necessary to give 'some space for expressive and structural musical decisions' or 'musical judgements'. Accordingly, students are seen as 'insiders' in a 'conversation' that 'is what education is ultimately about', enhancing the students' autonomy and self-assessment skills. Swanwick' values collaborative/social interactions where the intention is to promote quality musical experiences for its practitioners leading to the development of musical fluency and authenticity (1999, 93).

Rodari was important in the design of the musical activities to be proposed in the field project, valuing an active role for teacher and students in creative settings, taking risks and addressing 'mistakes' as *a possibility* instead of *a problem*. In this project I have extended to music-making settings some activities that Rodari proposed for creative writing, including: 'randomness', 'chain reaction', 'meaning attribution', 'the exploration of absurd' and 'fantastic binomial'. However, Rodari (2006, 29) warns that this kind of creative approach can only be developed in a school environment that is not overly critical or repressive, being important to go 'off the trails.'

Keith Sawyer had a central importance by helping me to cope with difficulties, frustration and even panic when I was feeling incapable of responding to the students' lack of initiative and risk taking, seeing myself at a kind of 'dead end'. Sawyer (2006, 46) affirms that 'unpredictability is naturally stressful for many teachers' who want to give up control in favour of the students, breaking out 'of structured routines and lead open discussion'. Sawyer's work allowed me to accept that what was happening in the field project should be considered normal and even expected, relieving me of some of the 'stress' and extreme anxiety I was feeling due to a lack of control of the work with students. Some authors

44 I do not to maintain that all music students should pursue a professional career. However, understanding the reasons why students have made that option is important as it is evidence that those students have found sense in their musical learning.

quoted by Sawyer (2004) suggest that musical work where the participation of the students is valued should be only partially structured by the teacher, a 'facilitator', preventing that students 'easily become anxious as they become overwhelmed by the challenges of the task' (Azmitia 1996, 139 quoted by Sawyer 2004, 17). As happened in the first sessions of this project, the unprepared shift from the students' traditional ensemble classes to total freedom can lead them to react negatively to most of the proposals, creating in the students some frustration and defence mechanisms. I also experienced frustration in my role of teacher, leading me to reframe my reflexive process in order to envisage alternative ways to scaffold and engage students in creative musical activities. The goal was the promotion of a more 'friendly' and less stressful context, trying to increase, in smaller steps and without predefined goals, the level of musical challenge.

3.1.4. My view as a participating teacher

At the start of the field project the first intention was to achieve a more horizontal relational setting, promoting the students' active musical voices in the development of activities based on creation and active music making. In this 'idealised', or perhaps 'utopian' pedagogical setting, the students would be eager to seize the opportunity to create and link their musical training with their real musical interests, and my role would be 'just' to support them in achieving musical rewards. However, in the first sessions of the project, all the assumptions were proved to be wrong, leading, early on, to anxiety and almost 'panic', thinking: *I have eight more months of this project… What am I going to do with them?* (SR e9). I managed to cope with the initial frustration by assuming a kind of mental reprogramming and a restructuring of the project. This involved starting completely from scratch, without any preconceived ideas and dealing better with the outcomes of the sessions, whatever they were.

3.2. The field project – approaches to description and analysis

Despite some predetermined goals regarding the students' evolution, an open, flexible and exploratory approach framed the project, whereby there were no clear and fixed proposed outcomes regarding the way the work was going to be implemented and conducted. The first objective of this chapter is to present the different phases of the project, referring to the initial goals stated at the beginning of each stage, the main activities undertaken by the students and teacher, and the most important milestones. The second objective is to analyse the data according to the themes considered relevant within the scope of the research, namely the process of acquiring musical sense-making acquisition and the changing of the teacher's role in a new pedagogical relationship.

One undefined aspect at the beginning of the project was how long each phase would last, this being decided only during the implementation of the field project according to the occurrence of milestones of different types. One of the main consequences of this explorative approach was that, still in an early stage of the project's implementation, the outcomes of the fieldwork led to the decision to increase the duration of the project to two school years. During this period, some clear milestones occurred that contributed to the division of the project into four phases:

First phase | 8 regular sessions (3 months) | Milestones: a high level of resistance on the students' part and the need to rethink the teacher's intervention.

Second phase | 9 regular sessions, 1 extended session and 4 extra activities (4 months) | Milestones: participation in EPRAE[45] and first musical product.

Third phase | 6 regular sessions + 2 extended sessions (3 months) | Milestones: end of the school year and increased autonomy.

Fourth phase | 22 regular sessions and 1 extra session (9 months) | Milestones: end of the project, creation of two musical products and participation in community and school projects in two final concerts.

In order to create a framework from which this information is intelligible, it is important to clarify the general goals of the field project and overall research. In summary, through participatory, exploratory, collaborative and transformative action research, teacher and students would engage in a varied set of musical activities and relational dynamics that could promote a transition from the *classical conservatoire culture* to a *praxial* paradigm based on improvisational and creative activities. Active music making in flexible group work settings, based on musical problem-solving activities where discussion, negotiation and perspective taking should be nurtured, and where the students' 'real life' musical interests were taken into account, was one of the premises of the fieldwork. It was also premised upon decreased dependency on technical skills to achieve musical rewards, the rejection of notation, and the widening of the students' musical horizons. In this more democratic and horizontal relational setting, where the teacher moved away from having total control of the sessions, the initiative was transferred to students, favouring the development of their own musical voices and, arguably, developing their musical understanding and sense making. The implementation of the field project with these transversal goals would contribute to a better understanding of the transformation processes that students, the teacher and the pedagogical relationship experienced.

The 'lenses' used in the process of data analysis combined the framework provided by the themes raised at the start of the research with the more specific themes related to each phase. Taking into account that each phase had direct implications in the planning of the subsequent phase, the presentation of the findings will be organised in accordance with those phases. The data analysis of the first phase was clearly exploratory and, for that reason, the themes are different from the three subsequent phases.

This chapter includes the results emerging from different levels of data analysis; 1) the comments, viewings and reflexive process documented in the journal; 2) the process of the clustering and coding of the events according to themes; and 3) the selection of the most relevant evidence to support the arguments in response to the questions raised by the research. The documentation of the research process will serve as a basis for deeper discussions in the next chapter of this thesis.

Finally, it should be acknowledged that, often, it was very difficult, or even impossible, to create boundaries between different perspectives and also to define clearly from which of my different lenses the data was retrieved. For that reason, possible repetitions may occur due to the coding of the same data in different categories. Nevertheless, in my view, that

45 The *Encounter on Practices of Research in Arts Education* (EPRAE) is an annual research encounter organised by the University of Porto's Faculty of Fine Arts.

does not necessarily remove coherence or consistency from the interpretation, but rather points to the intersection of ideas.

3.2.1. Phase 1

Preliminary note: the most relevant findings of the first phase of the project were related to 'resistance to change' and the 'need of the teacher to adopt supporting scaffolding' in the sessions. These findings were published in the chapter 'Teaching and learning in unfamiliar territory' (Costa and Creech 2020) included in the book *Expanding the Space for Improvisation Pedagogy in Music: A Transdisciplinary Approach*. For that reason, some parts of that chapter will be transcribed. However, because the process of data analysis continued until the end of the project, returning several times to this first phase, the initial process of analysis will be complemented with additional information regarding other themes of relevance to the following phases.

Intended goals for Phase 1

In the *reflexive journal* (RJ) maintained during the field project, despite many doubts and much insecurity regarding how to start working with the students, the main goals were in line with what had been suggested by most of the relevant authors referred to in the background literature. The overarching project, a *participatory action research* case study, was guided by principles of critical pedagogy by assuming an exploratory approach, trying to promote a transition from the *classical conservatoire culture* to a *praxial* paradigm for music teaching focused around improvisational and creative activities including *sound exploration*, *improvisation* and *composition*. These were the **broader goals of the project** with the intention that, at the conclusion of the fieldwork, the students could *'deal with the sound' in a more conscious way […] playing and also reacting musically in an active listening posture* (RJ e1). These musical skills should allow the transference to the students of *the initiative* in the development of the activities (RJ e1), many of these intentions being related to the concepts of *musical fluency*, *musical understanding* and *musical sense-making*. However, it was also intended that the project should *promote improvements regarding musical and technical aspects* (RJ e1) and that it would prompt me to question my role, as a teacher, in the learning process. Therefore, one of the main areas of focus was also to analyse my responses and transformation process *when being immersed in a different teaching paradigm [and] being exposed to activities that I do not master or control, [experimenting and reflecting] and, during the process, to undergo a transformation process of myself and my practice* (RJ e1). Regarding the practical work, I decided not to make any use of rigid pedagogical or musical models of intervention because, in that case, I would be *[refusing] the constructivist approach and [accepting] that those examples can be adapted to my context* (RJ e1).

Regarding the first sessions with the students, the initial goal was to disrupt their traditional view of music learning and music making in a formal music school, *showing how music making can be very different from what they [were] used to in instrumental and ensemble, orchestra or choir classes* (RJ e4). One possibility was to be involved, as teacher, *in a dynamic and co-learning stance, being transformed continuously by those experiences* (RJ e1) by becoming a member of the group. In the first sessions I planned to introduce

some activities that would *deconstruct the students' view […] trying to get them exploring, experimenting and risking different musical and instrumental approaches* (RJ e2). Always trying to maintain a *focus on the practice and creation (improvisation, experimentation and composition), as opposed to imitation, reading and interpretation* (RJ e2), the goal was that the first two sessions would be more 'teacher-centred' before passing the initiative to the students by the third session. Many of the planned activities for the first sessions intended to engage students and teacher in a process of trial and error, experimenting with all kinds of sounds and activities.

Phase 1 overview

The following figure (Fig. 8) is a summary of Phase 1 of the field project. What follows is a more detailed description of the key points that are highlighted here.

GOALS	ACTIVITIES	MILESTONES	OUTCOMES
To disrupt the students' view of ensemble music learning and music making in a formal music context	. Musical activities based on sound exploration, improvisation and creativity, appealing to the students' musical skills and memory	. High level of resistance on the students' part	. Awareness of the problems in the initial phase and decision to rethink the teacher's response to the students' resistance
. First approach to a praxial paradigm	. Students and teacher engaging in exploration in a process of trial and error	. Conflict between the teacher's initial intervention (overly structured) and the students' response	. Higher awareness of the impact of students' difficulties (theoretical knowledge, inner hearing, active listening, technical problems, memory and musical skills) in the musical work
. Exploratory approach to the teacher's roles when immersing in a different teaching paradigm and being exposed to 'unfamiliar' pedagogical practices	. Examples: creation of rhythmic patterns, melodies, harmonies and bass lines with pentatonic scales or random notes, combination of different melodic and harmonic elements, body percussion, and other non-conventional instruments or sonorities from their instruments, irregular bars, rhythmic and melodic canons and serialism	. Recognition of initial wrong assumptions regarding the response of the students	. A broader knowledge of 'unfamiliar' approaches to music making
	. Main work settings: 1) the teacher making suggestions to the group 2) students engaging in small group work (usually from 4 to 6 students) 3) performance to peers, showing the results of their autonomous work 4) whole group improvisation and composition.	. Transition to a scaffolding pedagogical approach to support students dealing with resistance and musical, theoretical and technical difficulties, and to promote the students' initiative, autonomy and risk-taking	. A positive evolution felt in the last sessions regarding the class environment
			. Higher awareness of group work dynamics in this context
			. Rearrangement of the project's timeline and methodology of intervention for the following phase

Fig. 8
Phase 1 overview

The initial sessions were implemented as described here:

> *During the first two sessions the teacher adopted practices that were intended to serve as a bridge between the already established hierarchical and directive pedagogy towards a more collaborative and creative approach. This involved leading musical activities that risked a derailment of the students' prior conceptions about music making. The musical activities focused around experimentation and improvisation, and included creation of rhythmic patterns, melodies, harmonies and bass lines with pentatonic scales or random notes, the combination of different melodic and harmonic elements, body percussion, exploring other non-conventional instruments or sonorities from their instruments, irregular bars, rhythmic and melodic canons and serialism.*
>
> (Costa and Creech 2020, 152)

The sessions were planned to instil some discomfort in the students, trying to provoke their active reaction but, perhaps because they were mainly teacher-led, the students were not responding to the initiatives and challenges. The initial intention was to transfer the control of the work to the students from the third session onwards. However, I soon realised that, during this first phase, and *although some good things happened […] most of the work was done by me and not by the students* (RJ e7), contrary to the aim: *to have all students participating, giving suggestions and creating together with others* (RJ e7). Some sessions ended with a good musical experience but only *as a result of a still traditional approach to music teaching: 'I was the traditional teacher telling the students what to do'* (RJ e7).

In the fourth session I felt that I was really trying to control the students' learning (without success) to achieve specific outcomes more rapidly, contrary to what I was defending 'in theory'. In some situations, I adopted *a more directive approach, in a more traditional and authoritarian posture* (SR s4), later acknowledging that this was *a step back in the project* and reaching *the conclusion that [I] had to change some of the proposed strategies* (SR s4). I realised that my expectations were inadequate and that I needed to *have more relaxed planning, not to be so anxious about the students' immediate results*, making it necessary to *rearrange the project's timeline and methodology of intervention* (RJ e9). This was the first change of direction in the project.

After the initial four sessions, clearly frustrated with what had been achieved until then, questioning my own skills regarding the capacity to pursue the goals of the project, I decided to make a profound assessment of the situation. Making a critical judgement at that moment, despite some positive outcomes, the conclusions revealed other aspects that were not positive:

> *1) the students are not reacting positively to the requests of the teacher to participate more and take the initiatives – they are extremely resistant and unwilling to take risks and be exposed in front of their colleagues – we have almost never had a situation*

> *where they have improvised freely and without self-constraints; 2) in some of the proposed activities they are not achieving the goals due to difficulties regarding musicianship or musical understanding (theoretical knowledge, inner hearing, active listening, technical problems, memory and musical skills, among others); 3) they are not capable of good organisation when they work in groups (usually just one or two of them give suggestions and the others are passive, sometimes negatively affecting the work of the group), and 4) I, as a teacher, was not yet able, in any situation, to pass the leading of the work to the students (whenever I tried I was unsuccessful and had to use a more directive approach… like a traditional music teacher)* (RJ e10).

The growing awareness of this situation led me to recognise that I should be *less conditioned by the need for musical products*, although acknowledging that these were a part of the process, and more with *a relevant impact on the students' engagement and motivation* (RJ e10). I also recognised that **I started the field project wrongly assuming that the students' process of transition to a *praxial* approach would be accepted willingly**:

> *I'm not able to do all the activities I had planned […] My intention was to have finished the 'demonstration' part today and after the next session have the students improvising and composing in a free and relaxed manner… but I already know that it will be more difficult than I was expecting.* (RJ e5)

and also:

> *I am not achieving my goals regarding the number of activities I had planned for the first two sessions* (RJ e6).

These statements reveal that I was acting like a traditional teacher, trying to control what was happening in the classroom by planning and structuring several dimensions, namely the number of activities and the creation of a musical product. The impact of this awareness was immense and, from that moment on, I realised that it should be *the students' response that should define the time frame of the project and not the project plan made previously* and that I should be *less prescriptive about deadlines and products to be achieved* (RJ e10). Furthermore, I recognised that my *anxiety was also being passed to the students* (RJ e11) and that they were *still not prepared to start in a more autonomous way [it being] preferable to maintain a cautious approach […] giving more time to the students to 'unlearn' their instrumental and music teaching habits and not to force something that evokes extreme resistance*. (SR s5)

With this in mind, I changed my responses to the students' work, scaffolding their work in the sessions when resistance was shown. The session structure was maintained (small group work - whole group work - presentation) and some of the strategies included more structured tasks such as: *Experiment, Decide, Rehearse and Perform* (RJ e11), this being an adaptation of what was defended by Hallam and Gaunt (2012, 119) regarding the stages of creativity: *Preparation – Incubation - Illumination – Verification*.

The focus transitioned to the theme of *resistance* and the possible ways to overcome[46] that resistance. I felt that a more interventive *participation in the session [was] needed,* but always with the intention *to reduce my intervention in the classes, transferring responsibility to the students whenever possible* (RJ e11). This is related to what Smit, van Eerde, and Bakker (2013, 819), quoting several authors, refer: the 'handover principle', 'fading' and 'transfer of responsibility' where students are 'granted the freedom and responsibility to find their own collective way to the solution' (Sawyer 2006, 46).

46 The term 'overcome' was later questioned, when addressing the theme of 'resistance to change'

Having decided that a status report was needed, important for reflecting together with the students upon had happened thus far, I decided to end the first phase of the project by the eighth session. In the last sessions I tried to maintain a more flexible approach regarding the students' response to the proposed activities, whilst also experimenting with a wide range of musical proposals, relational contexts and classroom settings. According to my post-fieldwork reflections on these last sessions of phase 1, and despite the 'chaos' in some of them, my evaluation was that I seemed *much calmer, naturally accepting these dynamics in the classroom* (SA s8).

Data analysis

The initial assumption that 'if students had basic musical and technical skills […] and if they were given total freedom to experiment and play, they would engage enthusiastically with exploring, improvising and composing in a creative way' (Costa and Creech 2020, 159) proved to be wrong, as *resistance to change* became the main aspect to address during the first phase of the project, with relevant implications for the following phases. At the end of this first phase, three key findings emerged from the data analysis: *a) the students' resistance and insecurity to relinquish their passive approach to learning in the classroom; b) teacher and students experienced challenges in transitioning to a praxial approach involving principles of critical pedagogy, and c) the transition required scaffolding and a 'disciplined improvisation' pedagogical approach.* (Costa and Creech 2020, 154)

Along with these findings, another two very relevant aspects will be included in this section due to their great impact on the following stages of the project and also on the discussions for future music-making settings: d) collaborative and cooperative work between students and the emergence of different roles and e) sense making and meaningful musical experiences.

a) Students' resistance and insecurity to relinquish their passive approach to learning in the classroom [47]

From the beginning of the project the students revealed resistance in response to the invitation to participate in sound exploration and improvisation, being seemingly afraid to demonstrate initiative and take risks in front of the teacher and their colleagues. Rather than being seen as an opportunity for autonomy and self-expression as had been expected by the teacher, the freedom to experiment and create provoked anxiety. According to the teacher,

The resistance manifests in three main dimensions: 1) taking the initiative and responding to the teacher's challenges; 2) being overly cautious in the improvisations they do and not taking risks with what they improvise and 3) depend on the teacher's guidance to create and develop the musical material. (RJ w7[48]).

Student resistance had a profound impact on the development of the sessions. Analysis of the videos revealed that during the first session *all the students resisted to create the*

47 Excerpt from 'Teaching and learning in unfamiliar territory' (Costa and Creech 2020)

48 In this chapter the data retrieved from the reflexive journal referred to week of the field project. Due to an irregularity of the sessions in the following phases, the reference to the entrances in the reflexive journal was changed later.

melody (V s1) and *no one wanted to make suggestions, and several refused to do it* (V s1) assuming that they *didn't know how to improvise* (V s1) and, several times, *they gave up* (V s1). In the subsequent sessions there were numerous examples of similar observations about the students' resistance to exercise individual initiative or risk improvisation or simple exploration of sonorities in their instruments. For example, in several situations, when *the teacher asked a student to create the melody the students resisted* (V s2), staying *quiet when asked to make a proposal* (V s2), exhibiting *a great deal of difficulty to take the initiative* (V s7) and *almost always refused to be volunteers, being reluctant to show the peers their improvisations, showing fear of failing and being insecure about their decisions* (V s1). Entries in the reflexive journal elucidate these observations, where it was noted that the students *maintained the resistance to the proposals that exposed them, not being comfortable to take risks and* [*in their view*] *fail* (RJ w2). *Discomfort and vulnerability to show their difficulties* was evident (RJ w1), *particularly when asked individually to contribute with improvisations* (RJ w1). It was also noted that, during the first sessions, *almost never was there a situation where they have improvised freely and without self-constraints* (RJ w4), a perspective that was reinforced by Gabriel (FG) who, referring to the students' confidence to improvise and take a risk, asserted that *it's a lost cause!*

Video 1.
https://tinyurl.com/2cepevak

b) Challenges in transitioning to a praxial approach involving principles of critical pedagogy[49]

Most of the manifestations of resistance took place in the first sessions. After that period a small number of students became more pro-active. The teacher, being aware of some students' negative feelings about being visible and in the spotlight, reduced the direct invitations to participate and tried to reframe situations that could create anxiety and discomfort. From this moment on the students who performed in front of the others volunteered themselves and not by request from the teacher. This was articulated in one of the reflections in the *Reflexive Journal*:

Another aspect I need to address in the future is the difference between the students' attitude in the classes in several activities. Some of them … have already a participative role in the sessions and they tend to lead most of the group work … but how to 'call' the others to participate without being too incisive and expose them in a way that can be uncomfortable and undesirable for them? Should I just leave them and not promote their participation? (RJ w8)

Responding to this critical reflection, the teacher-as-researcher began to exercise increased leadership in the sessions, promoting an openness to the new ways of working together. For example, during the autonomous peer group work, when students seemed to be at a loss as to how to proceed, the teacher intervened trying to ignite and provoke the restart of their creative work. Although the students' resistance continued until the end of this phase of the project, some of them started to demonstrate more confidence and willingness to take risks, being particularly evident in the work in smaller groups. However, the work continued to be driven by the initiative of one or two students, creating some difficulties in the collaborative and creative work, where students who had adopted leadership roles stated that the activities were complicated and *gives a lot of work*! (V s8).

[…] When exploring soundscapes, being encouraged to use their instruments in alternative ways, experimenting and trying to create something new, students maintained

49 Excerpt from 'Teaching and learning in unfamiliar territory' (Costa and Creech 2020)

Video 2.
https://tinyurl.com/mr3fj2av





Video 3.
https://tinyurl.com/2p8pkwdk

their traditional (classical) approach to playing and found playing without notation to be problematic. When asked to improvise, most of them replicated basic rhythmic or melodic patterns and major chords. This was evidenced in situations where *the melodies created by the students were very basic, almost exclusively made by the notes of the chords and with always the same rhythm* (V s8) being *the rhythm of the melody the same of the bass line, a very 'safe' and repeated rhythm* (V s1). This adherence to well-known patterns was predominant even in situations where students seemed more confident: *although Juliana was more confident in her improvisation, she always played the scale ascending and then descending, not taking any risk … the same was made by Maria* (V s2). Even in the last sessions they were still very cautious when improvising, for example, *being conditioned by the given harmony, just using the notes from the chords for their composition, not risking, for example, the use of passing notes or dissonances* (RJ w7).

It was expected at the outset that initially students would demonstrate some dependence on the teacher's guidance to create and develop the musical material, because *their learning habits in the music school were deeply rooted and they were accustomed to being told what to do* (RJ w5). In the Focus Group with students, they articulated the ongoing tensions they had experienced in responding to the invitations to offer suggestions and act as autonomous learners. When asked about their main difficulties in the project Catarina answered: *Ideas!* Dina agreed, saying that *one of the difficulties I'm experiencing is to have initiative … I'm afraid … I can fail …*, and Adriana responded: *It's the moment to have an idea!* She asserted that she was *not afraid to fail in music theory classes*, which she found easier than improvisation because, comparing to this instrumental creative context, the theory teacher identifies the key, the bar, the main notes and the rhythm. Gabriel too claimed that he was afraid to fail but admitted that *it's easier if someone fails first*. Isabel revealed insecurity by saying that the others always seemed to have better suggestions and Bruno stated that in instrument class he seldom *does something right at the first attempt*. He added that he was accustomed to hearing the teacher saying repeatedly that he was wrong, agreeing with what Rute said in the first session: *they were used to hearing the teacher saying that what they were doing was wrong* (V s1).

When asked by the teacher about the reasons why they were afraid to fail, since they were not being evaluated and since the activities were structured in such a way that for the most part it was not possible to be wrong, Gabriel said that they didn't understand the concept of *not being wrong*. The other students agreed, being reinforced by Catarina, saying that they were *always being evaluated in everything.*

The role of the teacher in promoting confidence to engage with improvisation and composition was also discussed. Most of the students' comments referred to the need for the teacher to be the person who 'unblocks' the beginning of the composition, giving clear orientations or even concrete examples. Adriana stated that owing to being *afraid to make mistakes, the teacher could take the initiative* and Catarina said that the teacher should *give the example, so the students can have an idea of the style and the structure of the melody.* Regarding the confidence to improvise or compose she asserted: *I don't know what to do… I really don't*, but Gabriel added that *if someone takes the initiative I am capable of doing it*, arguing that it should be the teacher to give the first step in improvisation.

Notwithstanding this resistance, or perhaps because of the necessity to work through the resistance to learning, some findings emerged that supported the view that resistance could also be transformative. First, some students showed a significant evolution in their practices, and gave some indications of more confidence to experiment and improvise. The teacher's interpretation showed that, by the fifth week, already *some students were*

less resistant to the new ideas (RJ w5) and, *after some time, some of them seemed more focused in the work* (V s5) and *more confidence was visible among some students to create music* (RJ w6). Although resistance was maintained, the teacher assumed that *the attitude was changing* (RJ w7). Secondly, a distanced reflection-on-action revealed that there were moments when the students experimented without constraints. Analysis of the video-recorded sessions showed instances where, unnoticed by the teacher, students were experimenting and improvising without self-censorship. For example, when *Mário continued to play, experimenting, when the teacher was talking* (V s3), when *before the beginning of the session the students were experimenting alone* (V s4) and when *Tomás experimented with a bass line (while the others were talking to the teacher)* (V s7). Other examples include *students exploring and experimenting but only when all of them were also playing and not being heard* (RJ w3) and when *some students were experimenting and testing alone while the teacher was talking* (RJ w7). These observations can indicate that, regarding experimentation and risk-taking, *the problem seemed to be not in the students but in the way the teacher was exposing them in the class, in a traditional way of 'showing' the others* (RJ w7). Third, students were resistant only when asked to sing, play or improvise. In less musical solicitations to participate the students did not show any resistance, f or instance, when *the teacher suggested some exercises, asking the students to say some random notes, they didn't show resistance* (V s5).

Video 4.
https://tinyurl.com/2p8wyp3

Video 5.
https://tinyurl.com/2p8nmavs

c) The transition required scaffolding and a disciplined improvisation pedagogical approach[50]

At the outset of the project the teacher had envisaged his role in the first sessions as being to give examples of some activities or exercises to illustrate how students could explore and use the musical material in improvisations and compositions, the intention being the transfer of responsibility and initiative to the students. However, noting the students' lack of engaged response, he adopted a more interventionist approach, with the aim of scaffolding the new way of learning. During the sessions, the teacher prepared and implemented *some guided activities intended to structure the students' creation and to serve as an example for future sessions,* but *the students showed some resistance to make proposals and take the lead* (RJ w1). In conducting the study, the distinction between a directive and a scaffolded approach became unclear and it was recognized that at times the teacher assumed a hierarchical orientation, being the *traditional teacher telling the students what to do* (RJ w3). Some strategies included *helping the students start to create, giving some suggestions* (V s2), propose *a step back* (V s3) trying to facilitate the creative work through *a very 'framed' guidance from the teacher's part* (RJ w7).

[…] The group work was scaffolded by the teacher, who helped students to *structure their playing* (V s6), for example by engaging them in discussions about musical sections and elements and modelled the knowledge that *they have to plan better their time when working alone: experiment, decide and then rehearse* (V s7). In some situations, the teacher took part in *the process, guiding them so they could know how to do it in the next experiences* (RJ w2), for example by helping them how to structure the creation of a bass line with percussion and harmony. It was noted that some students started to reflect, evidently trying to understand what the problems were and how to solve them, revealing basic problem-solving strategies, although sometimes the teacher felt that *the students were regressing* (V s4). Approximately from the fifth session onwards, in an effort to achieve more

50 Excerpt from 'Teaching and learning in unfamiliar territory' (Costa and Creech 2020)



Video 6
https://tinyurl.com/mrxt5h37

participation, in *seeing the difficulties and the lack of autonomous work, [the teacher] tried to facilitate the students in working, giving examples of what they could do* (V s7). At times, the teacher was deliberately more structured in his approach, making requests that were intended to increase student confidence to experiment and improvise. Although much of what was done by the teacher was exploratory, reacting and 'improvising' according to the development of the activities and the students' behaviour, it was always borne in mind that the *intention was to reduce the directive teacher intervention in the classes, transferring the responsibility to the students* (RJ w5).

d) Collaborative and cooperative work between students and teacher and the emergence of different roles

Combining social constructivism with the belief that music making is, fundamentally, a social activity, one of the most important goals to achieve in this project was a collaborative dynamic in the group work. Notwithstanding the resistant stance of the students, some interesting group dynamics emerged during this phase. In this respect, two situations must be differentiated: 1) when the teacher[51] was involved in the group work (assuming, most of the time, leadership of the work) and 2) when the students worked autonomously.

When working directly with the students, the teacher's intervention was already configured as a different approach to a 'traditional' ensemble class. For example, situations where the teacher intended: to promote the students' initiative, autonomy and risk taking[1] [52], to highlight and value the students' achievements[2]; to unblock and scaffold the creative work[3]; to develop the students' proposals to reach a common musical product[4]; to help the students regarding musical, theoretical and technical difficulties[5]; to improve the group work dynamics, changing between different work formats[6]; to control the students' behaviour in the class[7]; and to give feedback regarding their work[8].



Video 7
https://tinyurl.com/53t3y4r9

Regarding the intended autonomous group work among peers, often the teacher was requested by the students to lead the work, and when the groups were working, most of the students were resistant and passive[9]. With respect to the students' behaviour during group work, the fourth session was a turning point, leading the teacher to re-evaluate all of the project's implementation. In this session (V s4), *every time the teacher [stopped] some students [made] noise or [spoke]*, and, most of the time, *the noise made by the students [was] immense*, leading the teacher to say that he was *'almost giving up!'*, seeming *really desperate* and, sometimes, losing *his temper*. From the fifth session onwards, the teacher tried to assume a more relaxed and flexible approach, allowing more *time and space* for the students to work autonomously and without fixed goals. Even with this new approach, resistant behaviours were prevalent[10] and the group work was not achieving the goal of engaging all the students in creative music making, necessitating the intervention of the teacher to *unblock the work* (V s8). Despite these difficulties, in some cases the students showed signs of positive progress[11], engaging in discussions in order to solve specific musical problems but deciding *most of what they would play by talking to each other* (SA s8), without experimenting with their instruments.

51 The initial methodological design intended to distinguish between more implicated data, and a more objective approach. As this section of the data analysis has the intention of assuming that objectivity, I will refer to 'the teacher' in the third person (only in the 'Data Analysis' sections).

52 In this section some endnotes will be added to reinforce some statements and evidence.

Regarding the class setting, one of the intentions was to experiment with a wide number of different working formats. In the initial sessions, the class setting mostly started by having the students *in a semi-circle in one part of the session [and then] dividing them into three groups and putting them to work autonomously without any indication of who should be the leader of the group* (RJ e4). Other settings included situations where some groups worked *alone and the other work[ed] with the teacher* (V s2), whereby the teacher always alternated between allowing the students complete autonomy regarding the group work and intervening to help the students to unblock the creation or to address the way they could work collaboratively. In most of the sessions, after the presentation of the work made by the small groups, the teacher tried *to combine the parts into one piece of music* (SR s2), giving the students a different perspective of the creative work that could be developed in an ensemble class. Gradually, the teacher led the sessions in order to maintain a compromise between *a free and relaxed environment in the classes and a setting that [could] allow the development of the work with [the students]* (SR s2).

Finally, and although it was not planned, several **individual behaviours emerged** during this phase. Although still resistant - mainly in situations where they were being highlighted or 'put on the spot' in front of their colleagues - **some students showed a more active role in the autonomous group work**, revealing the first signs of a critical approach and leading the group work several times. This difference between individual behaviours[12] occurred from the outset of the project and continued to evolve until the last session of the first phase. In some situations, some students made critical comments about the musical work of their colleagues, made *more proposals* and played for the others to *listen and give suggestions* (V s8). It is interesting to note that the type of participation[13] in the FG interview mirrored student participation behaviours that had been observed in the music sessions.

e) Sense making and meaningful musical experiences

Although assumed to be too soon to deepen understanding of sense making and meaningful musical experiences, the data highlights a few occasions when **the students showed musical awareness** (musical understanding?) of some sort, and also moments when they seemed to be actively engaged in making music and not simply replicating or imitating musical repertoire. Some improvisations already revealed products with *a rich melody regarding the sense of phrasing also [showing] a sense of harmony* (V s1). In the last sessions of this phase, students *had understood and 'embodied' the harmonic progression, an example of some kind of 'sense making', the melody was well fitted to the given harmony, with a good sense of phrasing* (RJ e15), and *the violins' melody [was] interesting and well made, [with a] sense of phrasing and musically coherent* (V s8). In some musical activities, mainly the ones guided by the teacher, musical decisions were taken 'in action', *by 'negotiation'… without speaking…* (V s3), revealing some 'plasticity' of the students when they were being led by the teacher.

Video 8
https://tinyurl.com/b4rd7d6e

Video 9.
https://tinyurl.com/422rwtjx

Video 10.
https://tinyurl.com/mr4bxtmf

Regarding the **meaningfulness of musical experiences**, the teacher recorded that, in one of the sessions, *perhaps for the first time […] the students seem[ed] to experience pleasure when they [were playing] the melody*, being *engaged and happy to [be playing]* (V s3), highlighting a *moment of the performance when the students' interest and focus was visible* (RJ e5) and another situation when *the students seemed motivated when they were playing* (SR s5). In one activity, the teacher decided *to change [the] planning of the session because [he] felt that the students were not showing an interest in the activity* (RJ e13), making a shift *to a pop music approach* (RJ e14). In this activity, *the session ended very well because the final product was excellent and most of them were really happy and thrilled with the result* (SR s7).



Video 11.
https://tinyurl.com/4ekxzze4

The students' opinions regarding their participation in the project, gathered from the first focus group interview, revealed that the main aspects to highlight with regard to their motivation were that they felt that the project was fun and recognised it was a potentially valuable way of learning: *it's a good experience for the future and they think it's a fun and different way of learning music (it's not theory but practice), they feel good to be in the project.* An interesting comment made by the students was that *the uncertainty of the process is a good thing* (RJ e20).



Video 12.
https://tinyurl.com/ynrrmrvw

3.2.2. Phase 2

Intended goals for Phase 2

After the individual and collective reflective process about the aspects that needed to be altered in the field work, in the second phase the general goals of the project were maintained. However, the goals for the sessions were far less conditioned and structured, not assuming any kind of expectations or fixed aims other than to strengthen the collaborative and creative work, and ensuring the positive relational environment that was starting to emerge during the final sessions of the first phase. From this moment on, *a session plan [was seen as] a way to start 'provoking' the students' work […] giving them time and space to develop their learning and find a way to explore their inner creativity* (RJ e20).

Regarding the groups' setting, students should *experiment several ways of working [looking for] the best proposals for each situation* (RJ e18) and, for that reason, different group settings, of different sizes and instruments, were 'tested'. The question of group leadership was also addressed: *should each group have a designated leader? Who decides who is the leader? What are the roles of the leader? Should he or she assume the role of a traditional teacher?* (RJ e18). Despite this, there was no situation in which a leader was appointed but, as will be discussed later, instead one naturally emerged during group work.

One goal determined by a decision made by the students in the FG interview undertaken at the end of the first phase was the creation of a musical product, as this was seen as a way to challenge the students' creativity and a real musical problem-solving activity. Besides sound exploration and improvisation, the students would be compelled to think about how to structure the material generated in those creative activities in order to create a musical product. In this case, they would have access to their previous improvisations and compositions (transcribed by me) so they could select, transform and arrange the material to be included in the final musical product, this also being in line with the type of *praxial* activities defended by Elliott.

Regarding my role as teacher, this phase started with a greater awareness of the problems and difficulties faced by students and teacher when engaging in unfamiliar music making and learning and teaching practices. Having recognised that the intended goals for the first phase had not been achieved, I assumed that the reason was, *perhaps, due to my inexperience and approach in the intervention* and a *result of my insecurity, traditional training and teaching practice* (RJ e18), leading to erroneous assumptions and to the following of inadequate strategies. At the beginning of the second phase I was more *aware of some of the changes [to be] implement[ed]* (RJ e18), engaging in a new pedagogical and relational approach, accepting a broader lack of control, but also questioning what would be *the boundaries of my role in the sessions*: *'Where do I trace a line between what is scaffolding and traditional teaching?'* (RJ e18). I saw myself intervening in several ways: *guide, question and problematise, lead, motivate, empower, be open to self-learning from the experience with students, involve myself in artistic problem-solving activities, create the appropriate conditions for the students, set boundaries to participation and scaffold* (RJ e18). These different roles were interchangeable in 'disciplined improvisation', with some planning of the *specific goals of the sessions but not too structured and predetermined* (RJ e18), this being *completely different from my regular teaching where I know exactly what to achieve as a musical product and the best way […] to achieve that goal* (RJ e18). In short, *the sessions should be more practical, perhaps without too much initial explaining, and the indications given by the teacher should be more 'surgical' and respond to specific problems of the students, in a more scaffolding posture* (RJ e18). Regarding the response to the students who were more resistant to participating and taking risks, and although questioning if I should force them to participate more actively, I decided that, in this phase, the most important objective was *to create a good dynamic between the group, assuming that some of them participate and lead more and the others just react* (RJ e20).

Phase 2 overview

GOALS	ACTIVITIES	MILESTONES	OUTCOMES
. the goals for the sessions were less conditioned and structured, not assuming any kind of expectations or specific musical outcomes	. explorative activities based on concrete musical problem-solving (proposed by the teacher) with the intention to develop the students' level of musical understanding	. participation in EPRAE (research encounter) and first musical product	. positive group work dynamics and problem-solving strategies, but based on the initiative of a small group of students
. engaging in creative and collaborative group work in different settings that could be suitable to the students' individual characteristics and personal interests	. maintain the balance between small group and whole group work, promoting, whenever possible, the students' autonomy in the decision-making process without the teacher's intervention	. presentation to parents	. increased willingness of the students to take risks and initiative
. exploration of different roles to be assumed by the teacher in a scaffolding pedagogical approach	Rodari's suggestions of creating 'clashes' between concepts and ideas and ways to 'explore the absurd'	. examples of good work dynamics and music making with autonomy on the part of the students	. awareness of the impact of low levels of musicianship regarding basic musical concepts or musical skills
. exploration of several different group settings and approaches to music making	. examples: compose a melody; learning by memory; select and arrange pre-existent musical material; compose something using to two different images as a starting point; create several different soundscapes, using harmony, melodies and ostinatos	. emergence of leadership roles and balance between more and less participative students	. Motivation and increased confidence due to external recognition
. participation in a research encounter with two main goals: 1) present the students' improvisational and compositional practice in the project and 2) a performance of the musical product composed by the students		. first reference to the teacher as 'one of the group'	. reinforcement of improvisational and scaffolding strategies on the part of the teacher (constructive feedback, class management; promoting participation, creation and critical thinking)

Fig. 9
Phase 2 overview

The first activities were intended to take the form of students creating in groups without any kind of interference on my part and to *see what [was] going to happen [and] work from that*. In this regard, I asked myself: *'Will I be capable of doing this? Not interfering?'* (RJ e21). Trying to increase the students' autonomy, I was more directive in the initial information about the tasks and activities to be developed by the groups and, during the initial sessions, the results regarding group work were positive. However, the positive results were *due to the initiative and work of one student* who was *assuming the role of a traditional teacher* (RJ e25).

Video 13.
https://tinyurl.com/22nkpwpn

Early in this phase, the students were invited to participate in EPRAE [see page 133], where they were challenged to talk and discuss their experience of improvisational and compositional practice. They were also challenged to perform a demonstration to participants of the event, improvising, composing and performing a musical product 'on the spot'. This activity framed the work until the end of the second phase of the project.

With the goal (decided by the students) being to compose a musical product, in every session the students created new musical material (exploring, improvising and composing). In one of the workshop sessions (longer session) all the material the students had composed until then was presented on video, the goal being to select material to incorporate into the final musical product. Although the musical material was created by the students, due to lack of time, most of the final adjustments and transcription were made by me so the students could read it and play. Despite this, I maintained my belief that the absence of notated music *should only be used at the end of the [creative] process* (RJ e29).

In the final sessions, there were many times when the students revealed relevant progress regarding their capability to work in groups, their musical understanding skills and also the musical products created, the main milestone of this phase being the presentation in the research encounter. The last activity in this phase was the presentation of the students' work to their parents.

Data analysis

The first phase had been exploratory in relation to the process of data analysis and the definition of the most relevant findings coded by themes. From this second phase onwards, the findings will be presented in three main categories: a) students, b) teacher and c) activities. Each of these categories will be divided into sub-themes according to their relevance in each phase.

a) students

The first theme to address, having been considered the most important in the previous phase, was related to the willingness of the students to take risks and the initiative and their reaction to the proposals. In this phase, the evidence distinguishes between the students who were already extremely participative, the ones who were participating but not risking too much, and others who were still extremely resistant to a more active participation[14].

Regarding the use of notation in the final process of composing and performing, the teacher noted that *learning the music without notated music makes all the difference because students seem more active, responding better to tuning and rhythm* (V s11), emphasizing the importance of not being so conditioned by reading[15], asking students to focus on what they were listening to, and leading to the **preliminary conclusion that reading reduces authentic engagement with music production**.

In respect of the students' level of musicianship or music understanding, being a theme that can include a wide range of musical dimensions, most of the examples in this respect still refer to difficulties of the students[16]. Despite these difficulties, there was also evidence of a positive evolution[17], namely in the way students actively responded to the challenges arising from musical creation.

Regarding the group work dynamics and problem-solving strategies, mainly in relation to the autonomous work between peers, there were some less-positive situations[18], mainly concerned with some students' behaviour. However, the evolution in this respect was evident in comparison with the previous phase, with evidence of **a higher awareness of the creative process and the way the group should work in order to achieve the musical goals**. One interesting event to refer to is the occasion when the students worked without

the teacher being present in the classroom. Viewing this session, it was possible to see *how they [could organise themselves] without the teacher intervention and guidance* (SR s15), being evident the dynamics created between the students who wanted to work and the others, who were always trying to disturb the work. According to the teacher's comments after viewing the session, *the work was somewhat chaotic (perhaps as expected!) but they reached [the goal that was asked]* (RJ e33).

During the sessions **students generally proved to be motivated**. However, the students' testimonies during the presentation in the *Research Encounter* (V 3eprae) were even more enthusiastic regarding their participation in the project[19], evidence, for the teacher, of the fact that *the students had a great time* (SR 3eprae). By contrast, in some activities, some students seemed not to be engaged in the work, revealing a lack of interest. Individually, Marco was the student who often seemed to be demotivated, for example, *playing something that [was] not related to the group composition* (V s14).

In this phase, some students' critical thinking started to manifest itself[20], mainly regarding the evaluation of the musical material created by them. In some cases, they started to form and defend their own opinions, even if those were contrary to the teacher's suggestions[21].

Another relevant development in this phase was the emergence of leadership roles in group work. Enabling more adequate challenges for some students and creating less pressure for others to participate more actively allowed **better group work dynamics and positive outcomes**. The students who emerged as leaders[22] were those who in the first phase had overcome more easily the resistant behaviours, gradually assuming most of the initiative-taking in the groups, often following strategies that were *similar to what happens in the traditional approach* (SR s11). One of the students that revealed high levels of *musicing* and leadership was Isabel: *she was very clear about what she wanted and she gave very clear instructions to her colleagues about what they should do (regarding melodies and formal structure). She was even capable of conducting, playing and giving indications simultaneously.* (RJ e25)



Video 14.
https://tinyurl.com/35948sfj

As in the first phase, at this point of the project's implementation there was not much evidence of musical sense-making regarding the students' musical practice and/or speech. Indeed, most of the evidence suggested that there were still **difficulties in dealing meaningfully with the musical language**[23] although, in some situations, indications of a positive evolution started to appear[24].

In the FG interview (FG 2) students identified some differences regarding the previous phase[25], revealing that they felt progress at an individual and collective level, stating that they were *more imaginative, more secure* and *more confident* to experiment, *being less afraid of making mistakes*. Some students started to assume critical stances, for example, regarding group work, Isabel criticised the fact that, most of the time, the work depended on the initiative of one person[26]. Dina highlighted one of the positive aspects of group work was that they *relied upon more to each other,* and Catarina valued maintaining the same students in the groups because: '*we know each other better and we know what each of us does*.' Less positively, Catarina also observed: '***as we already know what each one does... we do not even bother to find out more about each other. So, if we change the groups from time to time it might be a bigger challenge***'.

Regarding individual progress, Dina revealed that they *have another perception of what [they] have to do with the instrument, and [they] can now create and [learn by themselves] ... not having been taught: 'We are in a school and teachers teach... and we learn what they teach us, we do not learn alone.* ***The fact that we learned this on our own is different and I***

think it motivates us more'. This idea was reinforced by Catarina who said that in regular school, *teachers write on the board and talk and [students] must learn everything* while in the field project *they teach [them]selves and [they] learn [different] things.* Valuing group work with peers, Dina said: '***it is easier for us to be taught by someone who is in our position than by someone with more experience, who has more wisdom...***'

Video 15.
https://tinyurl.com/ycy32z4v

Regarding the existence of a musical product and performance moments, Catarina highlighted the fact that it was *the first time* they composed a song, stating that: '*it is always of great satisfaction when we have reached the end and we have managed to do something that was successful... and we have been able to present a product... It is always good because we know that the objective was achieved.*' Dina said that what was important was *the fact that [they] have managed to present it and people have liked it,* stating also that *it was fun and [they] learned a lot.* Catarina also highlighted the importance of **recognition from other people** and, referring specifically to the performative experience in the research conference: '*It's important to say that* ***not only the great composers can compose. It's important for people to realise that we too can compose****, even though they are not such complex works.*' Rute said that she '*liked the experience […] because it was nice to hear from other people* [other than their parents] *who valued [their] work*'. Bárbara also said that she liked the experience because they were asked questions and had the opportunity to answer, and ***the audience was interested in what [they] had to say***.

Video 16.
https://tinyurl.com/58w9hbw4

When asked about suggestions for the groups' setting for the next phase, some students responded that they could be organised randomly but others said that some groups would not work, *for example, a whole group with violins.* The students' opinions were clearly divided in this respect, and Isabel, remembering the lack of initiative of some students, suggested that the most resistant students do not contribute in the group work because there is always someone else who ends up taking the initiative. According to Isabel, to overcome this passivity, **it could be positive for those less participative students to be grouped together, forcing them to take the initiative**.

Regarding the role the teacher should adopt, some of the students' suggestions were: *listen to our music; create with us; play with us, or also to help with ideas […] the teacher could give his opinion too because* ***the project is also for the teacher****.* Arguing against this idea, Catarina said that they have *already evolved a lot [and they] do not need anyone's help anymore.* Dina defended that the role of the teacher, being more acquainted with music styles, should be only to help the students and not to play with them because otherwise, they could go *back to the addiction.* Gabriel stated that they still did not have the capacity to create musical pieces from musical fragments, suggesting that the development of the musical material could be one of the roles of the teacher in the work with students. To finalise, it was acknowledged by different students that when they were working in the group, they did not remember what they had created previously and, for that reason, one of the roles of the teacher should be to write the music[27].

A final word given to the students was to ask them to make a global evaluation of the project. Rute stated: '*We must continue ... we are on the right track*'. Gabriel's view about the work in the project in this phase was: '*we come here, play something, create something and think: Ah! It's cool!...* It's fun! We're here and have fun ... ***In the end it's serious***.

Video 17.
https://tinyurl.com/bd4tzr28

b) teacher

Based on the belief that the traditional approach to music teaching is inadequate for students in Portuguese music schools, the reconfiguration of the teacher's roles in the pedagogical relationship and the understanding of the consequent process of transformation were important goals of the research. However, this recognition alone does not facilitate a transformation process, as was seen in the first phase. There was a great amount of evidence of the flexible approach of the teacher to respond to the interactions and outcomes of the work in the project[28], although it is acknowledged that there is a difficulty in distinguishing the type of intervention of the teacher according to the categories referred above. The role of the teacher and his different behaviours[29] were referred to by the students, also affirming that, in some sessions, *the only things the teacher [did was to] remember the pulse* (V 3eprae.2).

Some of the teacher's personal thoughts and feelings regarding the implementation of the project reveal that it was *strange to be in a class without doing anything (except observing… assuming a kind of naturalistic observation method…)* (V s13) and *to deal with a classroom where the noise is 'impossible' [it being] difficult not to shout and tell them to be quiet* (V 3eprae.3). The teacher also became *a bit stressed by the fact that [it was necessary] to have a musical product for a performance* (RJ e38), assuming the use of notated music to be a *'personal defeat'* (*RJ e39*), because when students were reading the teacher felt that the session *was not at all creative… it was just like another orchestra rehearsal* (RJ e40).

Regarding new roles when working with students, in particular the task of making arrangements, the teacher affirmed his insecurity concerning ing his skills[30]. In respect of the progression in musical work, the teacher revealed that *in some of the initial sessions he was very unhappy because he felt he was not achieving his goals* (V 3eprae.3). However, in the second phase, a big evolution was noted, achieving results that would have been *unthinkable a few weeks [before]*, the students having accepted *the challenge to improvise and compose new music* (RJ e45) in a setting that seemed *completely natural for [the students, not seeming] uncomfortable with this setting and tasks... even among the ones who resisted more* (V s14). Regarding the presentation of the project in the research encounter (EPRAE), the teacher revealed some anxiety and insecurity, namely due to the contradiction with regard to the use of notated music and also the fact that it was the teacher, and not the students, who was responsible for conducting the musical product (RJ e42).

c) activities

Maintaining the exploratory stance, the main activities intended to develop the students' level of musical understanding and technical skills: *[mixing] the different composed parts* (V s10), *focusing on rehearsing [to] enhance the performative skills* (RJ e39), developing harmonic awareness, and the students' memory (V s19), and widening the students' knowledge of their instruments by asking them *to* find weird sounds (V s17) and seek other *different sounds (percussion, screams, noise…)* (V 3eprae.2).

Video 18.
https://tinyurl.com/yafmw9jk

Some other activities had the goal of contributing *to the structuring of the students' work: 1. create ideas, 2. experiment, 3. decide and structure, 4. Rehearse* (V s14). In some cases, arrangements were made so that the instruments *could have more than one opportunity to play [being the idea] to experiment with different possibilities and leave some decisions to discuss with the students* (RJ e39]. Another goal was for the students to rehearse a composed piece of music and, perhaps contradictory to the project's initial intention, some

activities ran as 'traditional rehearsals', not only by being conducted by the teacher, but also by the use of notated music. According to the teacher, *the decision to use sheet music [was taken] because he want[ed] the students to feel more secure to make music* (V s18). Although the performance of a musical product was always present in the mind of the students, the teacher reinforced the idea that the goal was to present evidence that the students were already *capable of working in a different way* (V s19) and *that there [were] no limits to what they [could] do* (V s13).

The activities proposed to the students[31] were varied and intended to cover a wide range of musical and group work dimensions. Regarding the group work settings, it was a phase with a double goal: to stabilise the good work dynamics achieved thus far, whilst at the same time, experimenting with other possibilities to promote and increase individual participation. In respect of the first goal, most of the time it followed the regular structure of small group work in the first part of the session, performances from each group to present their work, and whole group work at the end. Normally it was the teacher who created the groups and, mostly, the intention was to guarantee *a balance [of] students who usually are more participative with others that resist creating […] not to create any kind of embarrassment or negative exposure of some students* (V s10). From session to session, the decision to maintain the groups or change the formation depended on aspects such as: the type of musical activities requested, the time allowed for small group work or the number of students present in each session[32].

Some students in the FG revealed that maintaining the group with the same students was positive because *the groups already [knew what to] expect* (FG 2). Students also revealed an increased critical awareness when discussing how to create music and, without any intervention on the part of the teacher, deciding the best way to work within their group.

Main Outcomes and Milestones

In this second phase, some specific events were classified as milestones[33]. Perhaps the two most defining moments in this phase were the 13th session and the presentation in the *Research Encounter*. Regarding the first one of these, in the Reflexive Journal (RJ e29) my analysis as a teacher was:

> *I think that it can be considered the best session until now for the following reasons:* 1) *The students had a specific musical task ('calm and smooth' music) and they were capable of respecting that cue;* 2) *They were capable of a very strong group work dynamic and with very good results. This was clearly seen in the videos;* 3) *Although much of the work was due to the initiative of a small number of students in each group, it was clear that some students progressed immensely in this session (perhaps because they were away from the teacher's eyes?). The cases that were more relevant were Rute, Juliana and Sílvia. Even Marco, although almost always quiet, was more proactive in his experimentation… perhaps because he was not on the drums?* 4) *The time they had to create something was extremely short (only 20 minutes) but, unlike the other sessions, they were extremely focused on the tasks, starting immediately to explore and improvise; 5) My role as a teacher, trying to work musically from the students' results at the end of their autonomous work, was also very positive and I felt really good and importantly, the students* seemed extremely happy with the final result.



Video 19.
https://tinyurl.com/3eb8cdu2

Following the participation in the Research Encounter's presentation, my comment was:

> *I feel that this day was a turning point… a milestone for the project, for the students and for myself. The impact was much bigger than I anticipated. […] The presentation of the students was also 'proof' that it's possible to have confidence in them to be capable of improvising and composing, although, I must admit, there were many times in the beginning when I doubted such a positive outcome. The highlight of the day was the 'Frankenstein' piece… more than the work itself (which was extremely interesting given the different musical approaches of the groups) was the fact that none of the students were resistant to the composition of the piece… comparing to their attitude at the beginning of the project, this is, perhaps, the main aspect to consider in today's work.*
>
> *Another important thing was the fact the I felt that the students were really happy, pleased and proud of their achievement in the session. Is this not one of the goals of education? Any kind of education? So, in that sense, the goals were also achieved.* (RJ e44)

In accordance with research concerned with the importance of parental involvement (Creech and Hallam 2011), the support of the parents was central to the students' musical achievements. In this project the parental support was in evidence from the outset by allowing the participation of their sons and daughters and culminating with the participation of many of them in the final concerts (in the fourth phase). At the end of this phase the parents had the opportunity to attend a demonstration of the work developed in the project, discussing the activities and goals directly with the teacher and students.

Final comment on the second phase

Besides my own reflective process, in the final stage of this phase I had access to the students' testimonies, not only from the final focus group interview but also from their 'enthusiastic' sharing in the research encounter. Extremely important for me in this period, having felt a kind of validation, was the engagement in critical discussions with more objective perspectives, not only from the students' parents, but also by PhD colleagues and teachers, and other participants of the research encounter. The triangulation of data taken from various sources reinforces my conclusion that **this second phase was a turning point in the project, where the values that underpinned the project started to be visible and tangible**.

3.2.3. Phase 3

Intended goals for Phase 3

With the positive outcomes at the end of Phase 2 in mind, my intention in Phase 3 was to maintain a consistent evolution in the students' work and predisposition to engage in creative activities. Although acknowledging that *it's very difficult to go to a session without knowing anything about what's going to happen* (RJ e51), a flexible planning of the sessions was made in order to be able to react in real time to the students' responses and

not to create any kind of pressure regarding the musical products. In this respect, it was important to promote the development of their own musical discourse and a more active role in the sessions and I therefore resolved that *most of the decisions should be taken by the students, my role being to keep the proposals in line with the goals of the project* (RJ e48). This decision to transfer responsibilities to the students, that had already occurred to some degree in the previous phase, raised in me a higher awareness of what could *be considered 'transformative' regarding the regular and traditional practices of a music teacher and a music class* (RJ e48). This awareness led me to maintain a permanent questioning about my role in the sessions, trying to find *ways to cultivate the necessary environment* and *promote the participation* (RJ e48). One of the main difficulties envisaged for this period was to guarantee a balance in the group work, giving adequate challenges to all by personalising the approach and seeking *an increase in the students' levels of participation, decision-making and inclusion of their musical interests in the work* (RJ e50).

Phase 3 overview

GOALS	ACTIVITIES	MILESTONES	OUTCOMES
. to maintain a consistent evolution in the students' active role as contributors to the musical work	. focus on the creative process and engagement in different and more challenging musical activities (composition, arrangements and conducting)	. workshop format - possibilities in the formal music teaching system	. more diverse student behaviours in aspects such as autonomy, risk taking, problem-solving skills and critical reasoning
. development of the students' autonomy and transference of most of the decisions from the teacher to the students	. transition from activities with very specific goals (musical, group work, performance, etc.) to activities where the goal is broader, trying to include the multiple dimensions involved in music making in groups	. differentiation of roles in the students' autonomous group work and reinforcement of the role of the leader of the group	. resistance in two key moments: the initial phase of the creative work and the performance to colleagues
. to engage in higher levels of musical understanding, including musical skills and activities valued by the praxial approach	. exploration of different group work settings (varying according to the activities and conditions) with different roles assumed by students	. increased autonomy and self-confidence regarding group work dynamics and problem-solving strategies - a gradual normalisation in the way the students work in groups	. good relationship and balance between the more and less participative students
. to experiment several options regarding work settings (structure of the groups and evaluation of the workshop format in comparison to regular sessions)	. the activities varying in format (group work), time (from a few minutes to several sessions) and goals (musical or others)	. a more stable group work setting: 1) explain the goals of the session; 2) give the students some time (5 to 10 minutes) to improvise and create individually; 3) work in small groups departing from the individual creations; 4) performance of the groups; 5) students will teach each other what they have created in the groups; 6) work in whole group; 7) performance of the whole group; 8) feedback and discussion	. awareness that the focus on the process (not on the final product) can be as musically rewarding, increasing the regularity of the musical rewards
. to 'practice' the improvisational role of the teacher and to explore new roles in order to guarantee a balance in the group work and engage students in higher-order musical problem-solving activities, giving adequate challenges to all by personalising the approach	. existence of Plan B activities if facing students' resistance		. awareness that there is no ideal number of students in each group
			. relationship between the students' motivation and proposals that implied a musical product
			. teacher's approach: constructive feedback, gradual fading, scaffolding, promoting participation, unblocking creative work
			. teacher as co-learner, assuming an equal role in the collaborative work

Fig. 10
Phase 3 overview

At the end of the second phase the students felt that they had achieved positive results regarding their musical skills. This was clear in Catarina's comment at the end of the second phase: *'We do not need anyone's help anymore!'* Starting from this point, in this third phase three main ideas were pursued: 1) engagement in different and more challenging musical activities, 2) making a differentiation between individual roles of the students in the sessions, and 3) to reach more effective group work settings.

Notwithstanding a difficult start (in the initial sessions some students returned to resistant behaviours), overall, the intended goals were achieved. The decision not to plan any performative event was later evaluated as positive because students felt no pressure, being liberated to focus solely on creative music making, reaching musical rewards with some frequency. An important event was the 'testing' of the **workshop format** (in comparison to the regular sessions) where the students had the opportunity to work for about eight hours across two consecutive days outside the school, in a more relaxed environment.

At the conclusion of the phase a *Focus Group Interview* with students was conducted to access their critical judgment about this period. Commenting on the students' participation, I *was surprised […] at some of the students' level of critical reasoning, addressing some of the questions I had already written in [the] reflexive journal* (RJ e66).

Data analysis

The grid used for data analysis was the same as for Phase 2 but, as the data analysis methodology was not rigid, in this phase a section related to *musical products* will be included. Although not planned as one of the goals for this phase, the result of the practices were musical products and I therefore assumed *the musical product [to be]one of the indicators of the quality of work produced by the students* (RJ e66). I will not address the musical quality of the products but other dimensions that could be related to the evolution of the students regarding musical understanding and sense making.

a) students

In respect of the students, the structure of data analysis is similar to that of the previous phase, maintaining the same categories. In this phase it was seen that the students' behaviours in group work were much more diverse, ranging from negative to highly positive in aspects like autonomy, risk-taking, problem-solving skills and critical reasoning.

Regarding the students' willingness to take risks and initiative and reaction to the proposals, most of the behaviours were maintained in comparison to the previous phases, alternating from extreme resistance, to voluntary and engaged creation and participation. At times, even the most participative and self-confident students showed resistant behaviour, mainly when they faced difficulties in achieving immediate results. Most of the students still referred to problems with *giving ideas*, but Isabel stated that these difficulties were only *'For some people!'* Referring to the reasons why this still happened, Rute assumed that she did *not have enough imagination to create anything!* She asserted that *[she does not] know how to start* and only when working collaboratively could she give suggestions that were a departure from *the ideas of others*, leading Bruno and Catarina to say that *she needs something to start* and *after that she is unstoppable!* Despite this, **progress was extremely positive regarding the willingness to respond to the teacher's requests for**

participation, leading him to affirm that he did not have *difficulties in putting the majority of them improvising and composing and [that] those who don't want to take initiative usually respond well when they work in groups with their colleagues* (RJ e53). Although on a smaller scale than before, **descriptions of constant resistant behaviours** were reported in the post-fieldwork viewings of the sessions, where it was seen that, several times, none of the students *want[ed] to make suggestions* [and were] *resist[ing] a lot* (V s22) and *continue[d] to be afraid to experiment and take risks* (V s23). Mostly, the **resistance happened at two key times**: in the initial phase of the creative work, and when the time came for the students to show the result of their group, by playing what they had created to their colleagues. Regarding the 'kick-start' moment, most of the students took *too long to start working [and] some of them play[ed] elements from previous compositions* (V s21). Some assumed, from the start, that they were *no good at it* (V s26) and did not even try when asked to create on their own or to participate in group creative work. At the moment when students were supposed to show their work, many of them resisted or said that they had nothing prepared to play to their colleagues[34].

On the other hand, it was clear that **more students were taking the initiative**, even the ones who resisted or even refused to do it before[35], although this mostly happened only after some insistence[36] from the teacher. It was also clear that some **students seemed to be comfortable and willing to make suggestions**, these being those who showed a more active participation in the previous phases. Extremely relevant was the fact that **the ones who seemed more comfortable with the creative process often waited for the less participative to make the first step into creation**, always encouraging them to take the initiative. Only after some time, and if their colleagues continued to refuse, did they take over the creative process. This concern and mutual help between the students[37] increased during this period, being a response to a non-competitive environment. One of the most positive outcomes of this phase was that, in the final sessions, the group dynamic was effective[38] in the collaborative work towards creative music making.

In the focus group interview (FG 3), the students revealed that they felt **a positive evolution regarding their attitude, resisting less to the teacher's requests**[39]. Adriana's opinion was that they were *much better* because, contrary to the initial phase of the project, when the teacher needed to unblock and take the initiative, *there [were] at least two or three people [participating]*. Bruno remembered the times (in the previous phases) when he was *sitting and waiting for them both (pointing to Isabel and Catarina)* to take the initiative, and Catarina and Rute remembered that, sometimes, they suggested a note or the indication of *pizzicato* just *to say [they] had done something.*

Parallel to the discussion of *resistance vs participation* is the way in which students participate. Some students were extremely resistant when asked to participate by improvising, composing or just playing their instrument. However, the same students participated very actively in other ways. In this respect the way Rute decided to participate was very clear[40]. She was usually very active and even enthusiastic in the creative discussions but, most of the time, she refused to play her own suggestions, transferring that responsibility to others[41]. Also, Mário, when asked to improvise or create something, almost always resisted and refused but, when the teacher was talking or when the others were doing something else, *90% of the time Mário [was] improvising* (V s27).

Still regarding the theme of resistance, the teacher, trying to address the reasons for this difficulty, asked himself if this was related to the students' *musical difficulties or with personalities* (V s24). This led him to assume that he had to *find the balance between the need to have them participating and also their right not to be exposed* (V s24), conditioning

his intervention with regard to promoting that all students participate in the activities.

The theme of musicianship or music understanding in this phase was not seen as very relevant with regard to the students' difficulties in theoretical knowledge. Perhaps this was due to the fact that, with the sessions being led more by the students than by the teacher, the level of musical knowledge was more in line with the students' level of musical literacy and technical skills, leading them to feel more competent regarding their creative skills[42]. However, Marco stated that *the students lack some musical knowledge [in order] to be able to create more elaborate compositions* (RJ e67). Regarding musical (theoretical) knowledge, some of the students' difficulties included aspects related to the concepts of harmony, melody[43] and bass line, irregular bars, *ostinato*, modes, and chords. In respect of some students' difficulties regarding musical skills, we can include aspects like tuning, musical memory and, often, maintaining the beat. Asked by the teacher if some technical difficulties were limiting the students' musical creations Rute said 'No!' because, if they could not do something, they would *repeat [until it had been learned]* and Catarina said that if things were too difficult, they could 'go around' and 'facilitate it'[44] to allow everyone to participate. Isabel affirmed that sometimes they composed *not knowing if it [was] difficult to play* and Adriana gave the example of one composition that only later they found out was *tremendously complicated.*

The group work dynamics and problem-solving strategies were dimensions where the evolution was more evident. With a reduced level of teacher intervention, the collaborative work was enriched, resulting in the experimentation of many different group dynamics and also revealing different roles adopted by the students, that changed according to the groups' formation. The groups found a very positive and autonomous work dynamic[45], and almost all of the students were contributors to the musical work. Evidence suggests that students were more prepared to adapt themselves to new situations in group work, for example being capable of making a good transition from autonomous small group work to the whole group without the teacher's intervention (V s27)[46] and leading him to assume that they *achieved a good balance between individual and group work* (RJ e61). The students' opinions (FG 3) were also in line with this, comparing it with the work usually made in the orchestra classes and also with the previous phases of the field project[47].

Students also revealed themselves to be more prepared to solve 'musical problems', being much more autonomous in this matter[48]. This led to a more conscious and reflective creative process, clearly seen in situations when they were capable of creating musical products *with some structure and musical sense* (V s27) or *[making] a better connection between the parts that were created by the students* (V s24).

One of the roles that emerged in the second phase was that of the leader of the group, being accepted by the less participative students[49]. The distinction of roles emerged naturally in the work among students and were maintained in all the sessions, with several examples where the most proactive students showed their leadership skills[50], leaving the teacher divided between ensuring a democratic setting, having all the students participating and sharing decisions, and the intention not to intervene in the students' autonomous work.

Associated with the theme of leadership is conducting, one of the *praxial* activities proposed by Elliott. In certain situations, the groups were capable of performing when conducted by some colleagues but *only Isabel seemed completely at ease and confident in this role* (RJ e65). Regarding the students who still resisted participation in a more active way, there were several examples when they agreed and led the work and conducted their colleagues[51]. Regarding the students' views on the challenges related to conducting (FG

3) Adriana said that it was *fun [to have] the notion of being at the head of an orchestra or a group of people playing* but, at the same time, difficult because they were not *accustomed to being on that side.* Catarina stated that *it [was] cool ... to conduct the others!* however, by contrast, Marco said that he *felt a bit stressed ... not due to conducting [but] in the part where the teacher told [him] to make suggestions [of things] for others to do [and] he did not [know] what to do.* Regarding this experience, Isabel said that it was *very difficult to get everyone coordinated at the same time,* and Rute, although she had assumed it to be a complicated task, stated: *'it's nice because it's us who decide how it's going to be ... what others do ... the way* they do it ... but *it's bad because we don't know how to do it well'.* Catarina agreed with the high level of difficulty but stated that *she liked it a lot [and] it was a good experience*. She also said: '***from that side we get to hear everything, [as opposed to] when we're playing, almost always only listening to ourselves*** *... We can hear everything from that perspective ... and even if it goes wrong, we learn from it...'*

Video 20.
https://tinyurl.com/yjwyj83c

The evolution in respect of the class environment and students' behaviour was also positive. Despite the natural agitation and excitement of having several groups working in the same space, there were several calm and relaxed moments[52]. However, some students' behaviour caused difficulties in the working environment, *destabilis[ing] the group* (RJ e52), and at times leading to some students complaining about their colleagues' behaviour[53].

The students' autonomy was also linked to a sustained development of their critical thinking skills regarding the musical aspects, that we can also relate to musical sense-making. Despite the recognised difficulties in accessing evidence, it was revealed that some students had difficulties in this matter[54], but there were aspects that could indicate **a positive evolution in the students' autonomous and meaningful use of musical language**[55]. Examples of musical decision-making include: refusing the musical proposals made by the teacher (V s22), referring to a 'melody with sense' (V s22), the criticism of other groups' or students' work (V s24), suggesting *how the parts can be distributed* (V s27), or by identifying *some mistakes and discuss[ing] how to solve the problems* (V s28). In the last session of this phase, the work produced by the students revealed an *awareness of the musical speech and also a more critical attitude regarding the final result and the quality of the performance* (RJ e66).

The students seemed to be **motivated and engaged**, showing that they were *very happy with the result of their work* (V s25) and, as at the end of the second phase, motivated to engage in future challenges within the scope of the project.

b) teacher

Some of the most important aspects to evaluate were whether the teacher's action underwent a transformation that could potentiate the students' evolution in respect of musical understanding and, if so, to identify the main aspects of that transformation. The data analysis intends to assess if the strategies that included an improvisational response on the teacher's part that were put into practice in the second phase were maintained, or if they had evolved into different dimensions or levels.

In this phase the role of the teacher was not much different from before, maintaining the goal of balancing between a passive posture in the sessions, transferring the initiative and the leading of the sessions to the students, and being alert to respond to the students' difficulties or just to make them focus on the proposed goals. What was seen during this phase was **a gradual fading of the teacher's intervention**, but still maintaining the

scaffolding approach, adapting the type and level of intervention each time according to what he felt to be necessary. This support was revealed in different interrelated aspects such as: *group work dynamics and class management, challenging the students, value their opinions and promote their participation, musical work, constructive feedback and motivation.* Although the clear fading of the teacher from the sessions favoured a naturalistic observation by the researcher, with opportunities *to 'observe' much of the students' behaviour* (RJ e65), it was not always easy to have the teacher 'abandoning' a more directive and interventive approach (RJ e65).

Being released from the need to create a musical product or to make a performative event, one main focus was the way students could work collaboratively and reach a good group work dynamic. Resorting to the experience from the previous phases, several explorations were made[56] although the teacher exposed his doubts and insecurities regarding the way in which to work in the project, observing: *'Sometimes I feel the urge to go to the students and ask them to really work… But I will resist doing it'* (SR s27). Despite this, he took over the leading of work in situations where *perhaps he could let the students have that responsibility* (SR s27).

Also central was the teacher's intention to promote the participation of the students, by challenging them and valuing their opinions[57], but being wary not to provoke anxiety in the students by being too insistent[58]. Addressing this, the teacher asked himself: *'What are the boundaries between the promotion of participation (giving them an active voice and the possibility to be recognised as creators and contributors by their peers) and respecting that they deserve not to be exposed publicly? At what point should I stop asking them?'* (RJ e63). Despite being aware of this difficulty, the teacher was unable to reach a clear conclusion, and continued to take over the sessions several times, mainly when he felt that he needed *to unblock some situations* (SR s27) or *not to expose students* (RJ e67) in front of their colleagues when they were showing difficulties. This was related to flexible planning of the sessions, with the existence of a *plan B* in case the students resisted taking the lead of the session… if not, the teacher *just followed the flow* (RJ e65).

Related to the autonomous work in the groups was class management. Many times, during the sessions *the students [were] very excited and noisy* (V s21), leading to the teacher having *difficulties to deal with it* (RJ e52). At the beginning of this phase the teacher had difficulty in controlling the sessions[59] and there were times when he needed to take over the session *in a role that [was] not comfortable for him* (V s25) because this represented a resumption of the role of the traditional teacher and could hamper a positive working environment. Despite these occurrences, regarding the teacher's response to the students' behaviour, the data indicated that **he was more able to deal with less controlled behaviour in the sessions**, accepting as more natural having students *playing and speaking very loudly* (V s22), relinquishing a rigid stance, loosening restrictions to the way students expressed themselves in the sessions. The different approaches to involving students in group work included having them *moving around the room* (V s28), this being recognised by the teacher as behaviour that would be *very difficult to accept in other situations in [his] regular practice* (V s28).

Regarding musical work, and as requested several times by students, the teacher tried to adopt a scaffolding posture, only intervening to unblock the students' work, to guide them regarding the goals of the activities, or to solve some specific musical problems[60]. Another aspect related to musical work was constructive feedback, to encourage the students' persistence until they could reach a better solution by themselves (with minimum support from the teacher). Despite an increase in most of the students' confidence with regard to

their musical skills, there were moments of some frustration and doubt. Therefore, the constructive feedback had the intention to guide the students and motivate them to create music together[61]. Related to motivation, sometimes the teacher decided to take over the session in order to make the students' evolution more apparent (SR s23), this also being important in respect of the acceptance of the challenge to compose pieces of music for a school project, giving the students' work more *visibility*, this being *a factor for motivation and internal and external validation* (RJ e56).

There is another important dimension to address: the teacher as a musician and as a co-learner. This is significant because, since the beginning of the project, the teacher assumed that he was trying to engage in subjects that were also unfamiliar to him. In this phase there were several times when **the teacher himself participated as a musician and as a co-learner**[62], placing himself at the same level as the students regarding some aspects of musical knowledge and practice, trying to challenge himself in unknown musical areas. Adopting an equal role (where possible) in the work with the students was seen when he played with them or accepted his lack of knowledge regarding several dimensions[63]. One testimony of the teacher revealed that: '*I really enjoyed some of the music that the students created and, at some point, I took my cello and played with them, being musically engaged and feeling like one of their colleagues. I've felt this a lot of times when conducting the orchestras or when playing in the cello classes with my students but, in this project, it was the first time I felt it in such an intense way*' (RJ e65).



Video 21.
https://tinyurl.com/yardfcxk

Other aspects to report are related to the teacher's critical stance regarding his own practice, acknowledging that some of the decisions he took did not achieve the desired outcome[64]. The teacher revealed that, even after conducting *more than 20 sessions [he] still didn't [understand] what work[ed] better with [the students]* (RJ e56). He felt he needed to get more involved than he would like (RJ e54), trying to keep the students engaged and motivated.

c) activities

The focus in this phase was on the creative process and group dynamics in the sessions, the main goal being the transference of most of the decisions from the teacher to the students. Accordingly, the goals for each session were being decided almost weekly, responding to the students' reaction to the proposals, also maintaining the exploratory approach regarding the group dynamics, despite its gradual systematisation. The activities varied in format (group work), duration (from a few minutes to several sessions) and goals (musical or others). There was a gradual transition from activities that had very specific goals (musical, group work, performance, etc.) to a set of activities where the goal was broader[65], trying to include the multiple dimensions involved with music making in groups.

In respect of group work settings, there was a gradual normalisation in the way students worked in groups. Several times the teacher introduced some changes to this 'model' to provoke different work dynamics and the participation of some students who were almost 'invisible' when working with more active students. The most important decision regarding the groups' formation continued to be if these groups should be created according to the students' personalities or other criteria (initiative taking, musical skills and/or instruments)[66], or if the groups should be chosen randomly[67], this approach leading to a more undetermined path regarding the group work dynamics and the musical outcomes of those groups.

The question of the number of students in each group was also always present but there was no agreement about the ideal number. During this phase, the number ranged from three to thirteen students. In one situation, the teacher, referring to an activity where each group was formed of about seven students, reached the conclusion that *perhaps the groups worked better with fewer students* (V s28) and *the number of students working autonomously should not be greater than five* (SR s28). However, he refers to *several cases in which the students worked in groups with a higher number of participants [and] the work dynamic was positive* and, for that reason, ***there is no ideal number of students [because] this varies according to the type of work and also the personalities and musical knowledge of the members of those groups*** (RJ e66). The students' opinions (FG 3) also diverged in this respect, defending, on the one hand, the existence of some time for individual and small group creation and, on the other hand, a focus solely on collaborative work in bigger groups. Regarding the individual work at the beginning of the sessions, in Maria's opinion, *it's good to work individually so that when [the students go back] to the groups it's possible to give ideas* but Isabel, criticising some of her colleagues' attitude, stated that the first time the teacher asked the students *to create individually for a few minutes*, they presented it *in front of everyone and then [they] went to the groups*. According to her analysis, *this turned out very well* but, the second time the teacher *asked them to present [the individual creative work] only in the group*, most of the students said that they had nothing to present to their colleagues. The ones who defended the focus on creative work in a bigger group said that *sometimes they [did not] have ideas* (Sílvia) and the others could help to overcome that difficulty. Rute, affirming that she was not capable of creating alone, defended that creative work should always be done in groups because they *[could] help each other* and suggested that all the work should be done *in a single group [including all the students in the session]*, resulting in *a better product*. Bruno said that the ideal number of students per group was about ten but, for many of the others, **the ideal number depends of different aspects like a correct balance regarding the instruments**.

Video 22.
https://tinyurl.com/yjvaf5rn

As seen above, one innovation in this phase was the fact that students were asked *to create individually* (V s24). The idea was to have all the students, even those who are usually less proactive, creating their own musical material, presenting it to their colleagues and using it as a basis for further musical development in collaborative work. In this respect, the teacher had doubts as to whether or not the students should perform the products they had created individually to their colleagues, recognising the *positive and negative aspects of each possibility*[68]. For these reasons, sometimes the students were asked to perform in front of their colleagues and in other sessions, the individual presentation was not requested, in which case, *most of the work [was] done by a reduced number of students* (SR s24) and *almost half of them didn't do anything* (RJ e58). Although it was seen that the individual performance led to an increase in resistance and, very possibly, anxiety for some students, the positive result was that the groups started with existent musical material to develop. Isabel, while criticising *the ones that didn't produce anything* (RJ e58), stressed the importance of having the students *individually creat[ing] some material to be used afterwards in the group work* (V s24). Maria also felt as positively about *that little time creating alone* (FG 3), that meant **everyone could contribute to the groups' musical work**.

Video 23.
https://tinyurl.com/yckt4ch6

Another aspect regarding the groups' formation has to do with the duration: sometimes the groups were formed for one session only but in other cases, that period was extended for several weeks[69]. With regard to the different formats of cooperative work, some of the students made interesting reflections but, several times, they disagreed in respect of these different work approaches[70]. In the last session of this phase (in workshop format) the teacher proposed to test *a work plan decided after several months of experimentation* (SR

s28). The outcome of that test was seen as positive but it was clear that *the conditions to implement it [would] be very different* (SR s28) in the future in the formal teaching system.

Finally, addressing the context in which projects are developed and presented, from empirical knowledge and previous research work, **a diversity of educational setting is favourable for the students' involvement and motivation** (Costa 2010). As happened in the second phase, where students had the opportunity to present and perform their work in a theatre in the scope to an 'unfamiliar' audience, resulting in a very meaningful and intense experience, the last two sessions of this phase took place in a space outside school and without some of the limitations of the formal contexts[71]. Also important was the fact that *the session was in school holidays, it started in the morning and not at the end of the afternoon after a period of seven or eight hours of school classes* (RJ e66), increasing focus and allowing the development of creative work. The positive outcomes of this format were highlighted by the students, saying that *it worked much better in these two days than in the other sessions* (FG 3) because in the regular sessions, as Catarina said, '*it's a very complicated day for us. We are tired and we are not so creative anymore*' (FG 3). The students were extremely effusive in showing their preference for this workshop format in comparison with the work setting of the regular sessions[72].

d) Musical products

Regarding the musical products created by the students, the teacher discussed with them the following questions: *1) the theme to be developed; 2) the musical product; 3) the type of presentation; and 4) the work in groups and the group formation* (RJ e51).

The students' achievements or difficulties regarding some aspects of musical understanding[73] were referred to several times during the field project. Students were aware of their musical achievements, acknowledging that most of the time they created just fragments to be rearranged by the teacher. However, Adriana stated that even if it were *easy melodies or songs, that would not be interesting written in a music score, they were not boring because they were composed by them* (FG 3). Most of the challenges that had a bigger impact on the students' motivation were related to concrete proposals that implied a musical product. One of those proposals was the challenge to participate in a school Erasmus+ project. In the last two (extended) sessions, the proposed activity was to create musical material that could be used for the creation of a *flashmob* theme. Before presenting this proposal to the students, the teacher's opinion was that it would *motivate the students to do the work, create some expectations regarding the type of product (flashmob) and propose the possibility of them incorporating their creations in the school's orchestras programme,* promoting *self-esteem and responsibility* (RJ e66).

Main Outcomes and Milestones

The outcomes and/or milestones reported here do not seem as evident as in previous phases but they did have a relevant impact on the project. Regarding the students, sometimes they were seen ***working as if this was completely natural for them*** (V s28), the reinforcement of different roles also being evident in the groups' dynamics, mainly in the development of **leadership roles and skills** adopted by the most participative students. It was also noted that some **more resistant students underwent a positive evolution regarding their participation and even assumed the leadership in some situations**, and

that some, either because they reduced their resistant behaviour or because they evolved musically, were more capable of solving 'musical problems'. Generalised collaborative work was evident and, often, **a real concern with the difficulties showed by some colleagues**, be they in technical, musical or conducting skills, led to shared support in collaborative efforts to overcome those difficulties.

As far as the teacher was concerned, a **more relaxed demeanour regarding some students' behaviour** in the sessions was evident and also **a development in the improvisational response** required to deal with the students' needs, requests and difficulties. According to the post-fieldwork viewings of the sessions, it was seen that the teacher was also able, most of the time, **to promote the students' autonomy** by not intervening, even when he felt the urge to take over the sessions. Despite this, the teacher maintained the opinion that some kind of intervention was necessary. Another relevant fact to highlight was that the teacher, several times during this period, engaged in the work as a **co-learner and co-creator**[74], not assuming the role of the traditional teacher but being **an equal participant in the group**.

One of the most important milestones of this phase was the adoption of **a possible session structure** viewed as promoter of active participation, a 'conversation' and a critical posture on the part of the students. Although recognised as impossible to implement in just one hour (the duration of the regular sessions), the proposal was as follows (RJ e65): *1) Explain the goals of the session; 2) Give the students some time (five to ten minutes) to improvise and create individually; 3) Work in small groups departing from the individual creations; 4) Groups' performance ; 5) Students to teach each other what they have created in the groups; 6) Whole group work; 7) Performance of the whole group; 8) Feedback and discussion.*

It is important to note that the most relevant outcomes, in different dimensions, happened during the longer sessions (final two sessions of this phase). According to Adriana, sometimes in regular sessions the work was *wasted* because they did not have enough time to finish the compositions, it being difficult to create musical products *with a beginning, middle and end, like those of the orchestra* (FG 3). Despite some inconsistency regarding the outcomes of the project in the initial sessions of this phase[75], the teacher noted that *in every dimension […] at least to some degree, the work exceeded [his] expectations* (RJ e65). The exploration of other different pedagogical contexts in these sessions (mainly the engagement of some students in conducting activities) also had a positive impact on the students' motivation and musical work.

Regarding the future, when asked by the teacher what the students still needed to achieve in the project, Marco suggested that they *need to have **a lot more musical knowledge** to be able to create more elaborate things [because] most of the time what [they did was] very basic.* Isabel stated that they *also lack the capacity to mix the pieces [musical fragments]* and, for that reason, they need *the teacher's help to tell [them] what to do next*. Catarina acknowledged that they needed to be more consistent, stating that '*a session can go very well, and we leave here happy, […] full of ideas and it went really well and we were all great... and we leave [other sessions] completely frustrated because nothing came out... nothing worked... we leave annoyed because what we wanted to do did not work... and we had no more ideas. That's why it lacks consistency...'.*

Regarding the following phase of the project, the students decided to participate in an Erasmus+ project, composing different pieces of music to be interpreted by the school's orchestras.

Despite the teacher's good expectations for the next phase, he was aware that the outcomes depended on the participation of the majority of students in the following year. If, for some

reason, most of the students were not willing to continue, the teacher would be 'forced' to accept other 'new' students in the project and start all over again from scratch. Regarding this, the teacher said*: 'that is not a good thought to have at this moment'* (RJ e66).

3.2.4. Phase 4

Intended goals for Phase 4

After engaging in the activities for a year, some of the initial themes of the research were becoming clearer although it still seemed difficult to envisage clear conclusions. The field project was initiated starting from a naïve assumption regarding the students' willingness to create and assume a more autonomous role in music making. I only realised after one year working with students that I was in fact starting from the point that *I had imagined would be the first session in the beginning of the project* (RJ e73). For that reason, the first year of the field project was seen as a kind of preliminary phase to the real intentions I had envisioned for the development of the research.

Based on one year's experience and following the outcomes of discussions with the students, flexible planning for the second year of the project settled some musical and non-musical goals but always bearing in mind the option to change direction according to the outcomes in the field. The main decision with relevant implications for the planning was to accept the challenge to participate in the school's Erasmus+ project, composing two musical pieces that would be performed by the school's orchestras in the project's final concert. In addition to this, the students accepted my suggestion to undertake a collaboration with one or more groups from the school's community. The collaboration with other groups intended to go beyond the musical goals, attributing other meanings to the work produced by the students and raise their sense of responsibility and self-esteem by making visible their creative work, presenting them as creators and not 'only' performers.

Another important focus in this period should be the students' individual characteristics: some of them still resisted making forays into creative activities while other students were really interested and eager to engage in more challenging musical proposals. This led to the intention of finding ways to accommodate these individual differences, by giving all of them challenges according to their levels of interest and musical and personal characteristics. The attribution of additional tasks and roles to some students led to the decision of **appointing a group of coordinators**, undertaking the responsibility to lead the group work, but also for engaging more deeply in composition, musical arrangements and conducting. As it would be almost impossible to engage all the students in activities that would require additional time and work, this decision allowed the engagement of those who were open to invest more time outside the regular sessions in all of the most important *praxial* activities proposed by Elliott.

Having approached a wide range of possibilities regarding the group work setting, by the end of the third phase a more stable proposal was reached. After designation of the group work coordinators, the goal was to test, in-context, if that layout was favourable to the development of creative work and address possibilities of its implementation in formal music education contexts.

With regard to my role as teacher, although being confident about the students' progress in several dimensions, it was still unfamiliar territory because some of the new activities proposed for this phase would require different skills from them and from me. Undertaking the challenge to create concrete musical products for a project, this implied that, if the students were not capable of delivering this task, I would have to be responsible for the composition of those products… and this was not a good prospect! Not for me, nor for the project.

In summary, the goals for this phase included the intention *to engage students in music creation but with more elaborate musical material and with more ambitious goals regarding the work in the classroom [and the students'] relationship with other groups* (RJ e71) from the community. More specifically, the intention was: *1) to promote more experimentation and discovery; 2) challenge the students to adopt a more proactive role in the sessions; 3) to take into account the students' musical interests and try to include them in the work developed in the sessions (connection to their real musical life); 4) to develop musical and technical skills; 5) to approach different kinds of music to broaden their horizons and their musical 'catalogue'; and 6) to value collaboration and to take into consideration the viewpoints of all the students* (RJ e71).

Beyond specific goals related to authentic music making activities in the fieldwork, it was necessary to make a clear connection with the themes raised by the title and subtitle of the thesis. The wider goals of the field project aimed: 1) *to assess if students can move from a repetitive and uncritical practice of patterns and technical exercises to an autonomous creation and the 'construction of meaning'*; 2) *to determine what should be the teacher's level of intervention and if changes in his practice would have implications for his personal, professional and artistic identity; 3) to determine the need for additional training (for the teacher) to meet the challenges that occur during the implementation of the project* (RJ e69).

Phase 4 overview

GOALS	ACTIVITIES	MILESTONES	OUTCOMES
. To engage in music creation with more ambitious goals regarding group work, students' autonomy and musical skills and products	. Three main types of activities: 1) sound exploration, improvisation and generation of musical material; 2) composition and arrangements of musical pieces; 3) rehearsing evolving versions of the musical pieces	. Initial planning: decision to participate in community and school projects composing musical pieces	. The goals intended for the field project were achieved
. collaboration with groups from the community	. the work was developed in six main group settings: 1) individual work of the coordinators, 2) collaborative work between coordinators; 3) small group work led by the coordinators (during regular sessions); 4) whole group work (with shared leadership and/or with the collaboration of the teacher); 5) rehearsals with the school's orchestras; and 6) rehearsals of the final versions with all the groups participating in the project	. appointment of students as work coordinators ('the key moment of the project') and emergence of different styles of leadership	. students described positive and meaningful musical experiences and evolution in aspects related to critical thinking, problem-solving skills, autonomy, and music understanding
. composition of pieces of music to be interpreted by the school's orchestras and other groups		. more stable group work settings but allowing flexibility according to the musical challenges	. teacher: 1) transference of responsibilities and fading of the teacher's intervention from the group work; 2) emergence of alternative relational dynamics in the process of making music (namely between teachers and coordinators); 3) development of the teacher's improvisational response according to specific situations in the fieldwork; 4) emergence of the teacher-as-musician and teacher-as-co-creator
. to find new possibilities for music making in groups in the context of a formal music school, addressing questions associated to curriculum, classroom activities, collaborative and cooperative dynamics and the teachers' role, among others		. evidence of musical sense-making, flow and motivation in the students	
		. fading of the teacher from those sessions that had the goal to create and arrange the musical material and the emergence of the role of the teacher as co-creator	
		. performance moments: 1) the final concert of an Erasmus+ project (flash-mob piece) and 2) the school's final concert	. more flexible group work settings and positive impact in appointing a group of coordinators, evolving to natural and fluid creative work in groups
		. end of the field project	

Fig. 11
Phase 4 overview

In some ways, Phase 4 was seen by me as a second beginning. The first year was considered as a kind of *prelude* to the 'real' intentions of the field project, reinforcing the idea that a transition to transformative learning requires long-term investment. This second year started with a clear awareness of its initial conditions, not only regarding the group but also regarding the activities with which to engage and (some of) the difficulties to be expected. This was facilitated hugely by the fact that 17 from the initial 18 students continued in the project, discarding the need to open the participation to other students and deal, again, with a process of adaptation to this alternative way to make music in groups. As happened previously, and although the work began having the final presentation as a goal, the duration of this phase was not predetermined. However, given the consistency of the work, without relevant events that could justify it, the decision was to consider all this second year of the field project as just one continuous phase (coinciding with one school year).

Following some thoughts of the participants, the format of the sessions should have been changed to a workshop format, increasing the duration of each session. However, besides the difficulties associated with the students' overloaded schedule and lack of time

to dedicate to the project, *the goal [was] to simulate a curricular ensemble class in a music school* (RJ e87) and, for that reason, the initial format (one-hour weekly session) was maintained.

The fieldwork led to the division of this fourth phase into **three main periods**.

In the first period (four sessions) the work was still based on sound exploration, improvisation and generation of musical material, resuming *the work of [the previous] year* (RJ e72). The students' resistance being one of the main conclusions from the previous phases, starting this way would allow a comparison of their current response with that of the previous year in this respect, trying *to understand if the students still maintain [the resistant behaviour] or in what way they have changed to a more participative stance* (SR s29).

In the second period, four students began to assume the role of coordinators, leading most of the group work, this already being a non-declared practice. The role of these students was to maintain the coherence of the musical work in the small groups, but also to engage more deeply in composition, arrangements and conducting. **The decision to appoint coordinators was the main milestone of this phase**, and was taken for three main reasons: 1) some students were extremely resistant and passive regarding musical creation and others were eager to assume more challenging tasks; 2) the kind of activities needed to achieve the goals of the project required the allocation of time to work outside the regular sessions and some students were not available or interested in assuming that responsibility and increase in time investment; and 3) there were some *praxial* activities that were difficult to develop in big groups. Despite this decision, the intention was to maintain the focus on the progress of all the students and, as will be seen, there were clear indications of a generalised evolution.

Regarding the process of appointing the coordinators, although it was suggested that they should be elected by secret vote, one of the students proposed the names and all the others agreed. Most of the activities which were developed exclusively by the coordinators happened outside the regular sessions of the project, where, varying between individual and collaborative work between the coordinators in extra sessions, and with different types of scaffolding from my part, they engaged in higher level musical challenges.

In the third period, the main activities were the rehearsals of evolving versions of the musical pieces, that took place in the following order: the students participating in the field project, then the schools' orchestras and, finally, the groups invited to participate. Regarding the work produced during the rehearsals, I reinforced to the students that the pieces should not be considered *a crystallised piece of music* (V s42), being dynamic and with the possibility to be changed according to the students' evaluation of the result of the rehearsals.

In some aspects, the work in this phase could be considered somewhat contradictory to what the project defends: 1) the existence of coordinators (creating a hierarchy?); 2) the use of notated music, instead of an almost exclusive focus on improvisation and sound exploration, and 3) the allocation of a considerable amount of time in rehearsals instead of creative work.

In response to these possible contradictions, this differentiation of roles was already an established practice in the group work. The 'formalization' of different functions in some aspects of group work occurred only when clearly trusting relationships had been established, being decided through a consensual process that led to the identification of

these leaders and the way they assumed that role was a clear example of mutual respect. It is argued that leadership *per se* does not necessarily equate with hierarchical and non-democratic pedagogy, these being dependent on how the leaders interact with the others.

Although contrary to the initial intentions, it was recognised that using notated music has positive outcomes when the goal is the performance of a musical product, mainly because it frees up more time for other creative activities. This aspect is also related to rehearsals that, in some traditional approaches, can be seen as repetitive and non-creative. Due to the different approaches to reading (for example, allowing decision-making when choosing the parts to be played), in most cases the students seemed more active in making music, experiencing creativity in different ways by using the rehearsals to explore different musical possibilities. What needs to be said regarding the choices made during the field project is that the decisions were taken consciously, always trying to create a balance with other relevant goals regarding the students' motivation and sense making. All activities were coherent with the constructivist and critical pedagogy goals of engaging students in real life and authentic musical problem-solving in a context that approximating them to their social reality.

Data analysis

The students and teacher continued to undergo a positive evolution in many of the dimensions addressed previously. As some evidence is similar to that of the third phase, here the analysis will focus on the new elements, in particular the existence of group coordinators and all the aspects related to this option (new group work setting, leadership roles, and teacher-students relationship). Other innovations included engagement in higher-level musical activities and the interaction between the students and other groups. In this case the different leadership styles of each one of the coordinators will be also addressed.

Methodologically speaking, the same grid of the previous phase served as a base for analysis but the level of depth in the analysis varied according to the relevance of the themes and categories. However, the division between these themes and categories, that seemed obvious at the beginning of the project, is somewhat artificial because all of them are interdependent.

a) students

In this phase I needed to deal with the fact that the students were involved in roles and activities that required different postures, skills and group dynamics. The main novelty to consider in this phase was related to the leadership roles, acknowledging that from the moment four students were chosen as group coordinators, the pedagogical dynamics were altered.

Resistance and autonomy

There were still a few examples, mainly in the first sessions, when **resistance was still manifested**[76]. Contrary to the first phase, when resistance was structural, in this phase it was episodic but continued even until the last sessions of the project when, sometimes,

students *were having a lot of difficulties in responding to [the teacher's] requests* (RJ e115). Suggesting possible explanations for this behaviour, the teacher stated that *the main problem was that students [were] losing their confidence to improvise and compose* and *they [didn't] feel they [were] evolving in the work* (SA s35) although, according to the teacher, their *creations [were] getting very good results* (SA s35). The level of resistance had decreased considerably and sometimes it seemed that the resistant behaviour was not due to any real difficulties because *after the initial resistance, the group work [seemed] to flow naturally* (SA s34). Although there is the possibility that the reduced amount of evidence in this area could be due to the students' positive evolution, another possible reason was the fact that the teacher was less implicated in the work and less directive regarding the requests for the students to participate[77]. The students didn't always feel progress in this respect. When accessing (through video projection) some of the compositions they had made in the past, they appeared to have forgotten their initial difficulties[78].

Most of the reports, even among the less participative students, indicated **a positive development in the level of participation**[79] in all types of musical creation, despite the increased level of complexity of the proposals. In general, the teacher's evaluation was that there was a positive evolution in the students' autonomy and proactivity and a reduction of resistant behaviours, the project having *reached a 'cruise speed'* (RJ e98). The students made a highly positive evaluation regarding their progress in respect of active participation in the process of music making[80], saying *that they feel much more comfortable in this kind of creative work… and that there is no comparison to what happened a few months earlier* (SA s48). Addressing the reasons why resistance was still present, Sílvia said that when they worked in smaller groups it was *easier to give ideas because [they felt] more comfortable*, describing as a positive experience one situation when she worked in a duet, as confirmed by Adriana that Sílvia *feels much more at ease in smaller groups.* Reinforcing this, Sílvia said that when working in ***a bigger group, there are always those who have ideas faster,* making it impossible for her to be active**. Isabel said that, *besides the four coordinators, most of [the students were] afraid to give suggestions* (V ex.s.), this resistance and passiveness being *a bit frustrating* because those students assumed: *'That person does it … let's relax!'*. Catarina agreed but she also pointed out that some students were now more active, giving Íris as a positive example, '*constantly evolving [sometimes] giving more suggestions than me*'. Rute assumed that in the beginning she was insecure, but by the end she was able to *risk more* and that they *already [knew] what to say to others and how to cooperate with each other.* Comparing with the previous year, Débora stated that at the beginning of the project *it was the teacher that did almost everything*, and Rute observed that, in the second year, they *already had a certain freedom and willingness to do new things [and were not] always waiting for the teacher to take the first step* (FG 4). Isabel stated that **the resistant attitude had decreased considerably in lower-level musical challenges like *mak[ing] a melody***, but in activities that went beyond that, like composing *a whole piece*, resistance was still evident in some students. Catarina felt that their capacity to improvise *has greatly improved* and they could *improvise much faster,* being also capable of creating *more complex melodies* (Isabel) that *came out more naturally [without having] to think so much* (Adriana) and knowing what *fits well with what* (Catarina). For example, regarding one of their last improvisations, Catarina said that *everyone already knew how to listen and introduce something that fitted well,* stressing that *[the previous] year [they] could not do that* (FG 4).

This reduction in resistance and a more proactive participation is closely related to the students' autonomy, *one of the main goals of this project* (SA s34). There was relevant evidence confirming an increase of autonomy, the most striking fact being the teacher

taking a passive role in the sessions, with the 'traditional role' of the teacher, mostly, assumed by the coordinators[81]. In respect of student autonomy, the teacher *was attentive and available to involve [himself] more in the students' work, giving concrete indications and suggestions but [felt] it almost unnecessary [because at least some of the students were] already showing a higher level of musical understanding and much better at solving some 'musical problems'* (RJ e99). An important milestone regarding autonomy was a session when *the teacher was not present [and] the students were responsible for everything, [having] the possibility to conduct and take decisions in real time* (SA s45). This opportunity was seen by the teacher as *the perfect time to see if the students [were] really prepared to work without the teacher's presence in the room* (RJ e108) and, specifically, to address if they were prepared *1) to develop and rehearse the musical material and […] 2) if they [had] the minimum conditions, regarding their behaviour in the classroom, for work* (RJ e108).

In respect of musicianship and music understanding, some difficulties were still in evidence[82], but of note is the development of the students' level of musical understanding. For example,[83] we can describe situations where *they [were] improvising a lot of the time during the creative work* (SR s33) with a *more and more natural […] work environment and dynamic [and] with higher levels and degrees of complexity* (SA s39). An example of improved musical understanding and problem-solving skills was the need to reduce the duration of the piece the students had composed, requiring from them *a critical view about the material, selecting what they think works better* (RJ e105).

Some instances of work that required higher levels of musical understanding and problem-solving skills were described by the students themselves. Regarding the initial challenge, composing the '4 R's' (*reduce, reuse, recycle, replace*) as the basis, the students thought it was interesting but very difficult, discussing which one of the 'R's' was more complex to develop in the compositions. All of them said that this was *the hard part* of the work, mainly because it had to be done in groups, it being easier *to do it alone* […] *with [the teacher's] help* because in groups *no one would come to an agreement* (Catarina). One the most relevant examples of the evolution in their musical understanding skills was described by Catarina: *'We had to think: "This has to be okay with this ...", "This has to tie in well with this because if it does not go well, we have to make a very complicated transition ... then the tonality has to be more or less the same ... direct tones ... or else it will not be okay ..." Sometimes I would choose one and then I would see another and say: "It looks good too ..." but it was completely different'.*



Video 24.
https://tinyurl.com/6yfr3x4v

Peer interaction and group work strategies

Regarding group work strategies, the data reveals that *students-teacher* and *students-students* relational dynamics were being constantly reconfigured during the field project. Of particular note in this phase was the relationship between the coordinators when they worked solely between themselves, not only when creating collaboratively, but also when they transferred the work made in their groups in the regular sessions, discussing and negotiating the creation of the final musical pieces. The teacher observed the way *the groups worked cooperatively*, stressing that, *although aware that most of the initiatives [were] still taken by one or two students, the most striking revelation [was] the way the students respect[ed the coordinators] and their work* (RJ e100). With a reduced the level of teacher intervention, the peer interaction dynamics were extremely relevant in this phase. In this case a separation of different categories being needed: the 1) group dynamics and the 2) leadership roles assumed by some students.

The group work dynamics evolved quite naturally and fluently, mainly because of the considerable reduction in resistant behaviours, but also due to the progress made with musical and problem-solving skills and to a higher-level critical thinking in several domains. Some positive dynamics[84] included critical discussions, problem-solving strategies and mutual help among students but, although clear progress was evident, in some situations less-than-positive behaviour regarding group work[85] continued to occur. Despite this alternation between more and less positive behaviours, in general the group dynamics were *very relaxed* (V s42) in *good and natural group and collaborative work* (SR e108). The students' views reveal that they were aware of an evolution in respect of their autonomy, comparing what had been accomplished in this phase with the first year, when only once (in the Research Encounter) were they capable of working without having someone guiding them and telling them what to do.

Despite the emergence of leadership roles (from the second phase on), it was always assumed that there was no differentiation of roles in the group work, although Isabel had defended that *there is always a leader*[86] and that, even if that path was not followed, *there is always someone who takes the initiative in the group* (FG 4).The decision to appoint group coordinators was the acknowledgment of a non-declared practice [see page 166] and, following this new direction, the fourth phase of the project led to the reinforcement of leadership roles. More than leading the group work, the intention was to make those students responsible for maintaining the coherence of the musical compositions, for example, the transition between different parts *to maintain the chain of ideas* (Isabel).

The impact of the designation of coordinators led to the reinforcement of leadership 'personalities', representing a clear example of a real 'educational setting' where all styles of personality coexist. The way these four led the group work was significantly different, as had been observed in previous situations, becoming more obvious after assuming the new role as coordinators.

Adriana

Adriana was the coordinator that showed a more reserved profile. She was extremely competent in her music making, although not taking too many risks, making good critical analysis, correcting what was wrong[87], and being *very clear in what she wants musically* (V s44). However, if she was a very good example of musical understanding skills, in terms of group leadership she showed some difficulties[88]. For example, when explaining what she wanted, *she talk[ed for] a lot of time* […] *lack[ing] some energy [and not intervening]* (SR s42) in some of the discussions within her group when her intervention could have had a positive impact.

Dina

Dina was the opposite of Adriana: much more energetic but she lacked some awareness regarding some aspects of musical understanding. Also, she took more risks in her explorations and improvisations but often the results were less organised and lacking some musical sense. Even before her appointment as coordinator, she often took the initiative to lead the group work, showing that she was capable of working collaboratively with others[89]. Regarding her style of leadership, and also compared to Adriana, *she assume[d] a 'less professional' posture and some students [did not] cooperate* (V s46).

Isabel

Even before the appointment of the coordinators, Isabel always exerted strong and effective leadership[90], but was also very critical of some of her colleagues, not only regarding their behaviour, but also their passiveness when it came to initiative taking[91]. Isabel was the only coordinator who always did additional work at home, bringing and presenting clear ideas of what 'her' group should do in the sessions, reflective of much evidence of Isabel's effective leadership[92]. All **the work coordinated by Isabel had extremely positive musical outcomes but it is a matter of debate whether it was really a shared process or if Isabel had assumed the role of the 'traditional teacher'**. Although it was clear that she always tried to promote the active participation of her colleagues, sometimes she seemed to be a *one woman show* but, and according to the teacher's view, given the difference of opinion regarding the level of musical challenges that the others wanted to take on, did she have an alternative?

Catarina

Although with relevant evidence of her role as an effective leader[93], Catarina's leadership style was very different from Isabel's, deepening her leaderships skills by focusing continuously on the promotion of her colleagues' active participation[94]. A very significative comment from Catarina regarding the collaborative group work, that highlights her leadership style, was: ***'if you think about it, that part [structure of the piece] was the only one where there was a distinction [between coordinators and the other students] ... after, in the group work, when we developed the themes, it was in normal conditions ... without leaders'*** (FG 4).

Contrary to Isabel, who was always extremely secure of what she was doing, Catarina appeared to be more insecure, *getting very nervous* (V s42) when the results were taking some time to be achieved, revealing difficulties in dealing with the pressure of being a leader. Another difference was regarding communication with the members of the group: she was much more inclusive in her group work, asking constantly for their opinions about the work being made. This contrast between leadership styles was addressed several times by the teacher:

Isabel was completely in control of everything, to the most minute detail… she had a perfect idea of what she wanted to achieve musically and 'traced a straight line' to achieve it. It is interesting to see that she takes just a few seconds to begin to work with her group… regardless of the number of students present. She taught her colleagues all the parts she wanted them to play (even playing their instruments) and she was responsible for all the decisions […]
By contrast, Catarina is almost the complete opposite. She is extremely competent in her leadership and, even with a more difficult group of students to lead, she was capable of maintaining a good work environment, always trying to deal with her colleagues' difficulties and behaviour. Although apparently knowing the material to develop, Catarina started the session by asking her colleagues to give suggestions. Less confident than Isabel, she was also able to teach some students their parts, correcting them or even taking musical decisions on the spot to solve some problems (for example, when realising that Maria was having difficulties playing a given part, she suggested switching parts with Dina) (RJ e101).

Isabel seems a 'one woman show', taking most of the decisions (it was clear that she prepared the session and she knew perfectly what she wanted to achieve), telling the others what to do and how to do it, teaching them how to play. She also conducted the performance. Regarding

Catarina, it was a completely different style: it appeared that she had no previous idea about what to do because the first phrase to her colleagues was: 'So… ideas!'. She conducted the session very well, always trying to ask her colleagues' opinions and suggestions but also organising the group work, helping the students who were having difficulties to play their part and also conducting the music. When she was having doubts, she asked for the teacher's help and opinion (Isabel has never done that…) (SA s40).

Summarising the perceived contrasts between coordinators' intervention in that role, it was clear that, despite those contrasts and following different paths and strategies, all of them reached positive outcomes. As the teacher commented: '*They are completely different in lots of aspects but each one of them is very competent in the work they are doing… if we could combine the confidence of Isabel, the musical knowledge and skills of Catarina, with the rationality of Adriana and the "outside the box" creativity of Dina, the result would be a much better teacher than I am.*' (RJ e101).

It is important to stress that all the other students worked alternately with each of the coordinators and, although responding differently to the various styles, they all collaborated actively in the group work. As reported by the teacher, *the most striking revelation [was] the way the students [respected the coordinators] and their work* (RJ e100) and *their leadership* (RJ e109). The relationship and collaborative work between coordinators was also always respectful, co-leading without any conflicts, their musical decisions being always negotiated and not imposed[95].

Critical thinking / problem-solving strategies / autonomy

When referring to the students' initiative and risk-taking, some barriers to their participation were, at least to some extent, overcome. However, this was not a guarantee that their autonomy developed with regard to their musical and creative skills and, in some situations, *in the creative process, the students usually accept[ed] the first suggestions without experimenting any further possibilities or suggesting changes* (RJ e83). Despite this, there is wide evidence of progress in this field for the majority of the students, more evident with the coordinators, **showing a positive evolution regarding their autonomy, critical thinking and problem-solving strategies**. These aspects, always closely interconnected, manifested in two main areas: musical work (linked to composition, arrangements, conducting, among others) and non-musical problems (mainly related to group work strategies and leadership).

Regarding musical work, evidence shows that the students detected errors, advanced with different possibilities and then revised and amended the musical material, responding to specific musical problems[96]. In aspects not directly related to musical issues, there was also much evidence of the coordinators' critical thinking skills. Regarding cooperative work, Isabel said that in the last year what had *improved [was] the interaction between all of [them]* and Catarina said that they *already [knew] how to handle each [other] and their qualities, their strengths and weaknesses* and how to achieve a given goal. Thinking about the best way to transfer what they had created amongst the coordinators, Catarina stated that *sometimes it is difficult to get the other students collaborating in the creation.* Regarding this, the teacher told her that getting their colleagues participating actively was one of their main tasks, being reinforced by Dina, stating that *the teacher has done the same with them* (V ex.s.).

In relation to the work with external groups, Catarina stated that some specific parts were *too difficult for one of the orchestras* (V ex.s.) but, compared with one of the pieces they were playing, the first reaction to the 'Evolution of Sound' (one of the pieces they composed) was much more positive. Responding to the reactions of the school orchestras' students, Sílvia said that they found that piece *more interesting* and Isabel stated that the younger students received the pieces very well because they were *more complex than some of the things [they] played [and] more appealing to them.* Conversely, the response from the older students was less positive because they were used *to play[ing] more complex things* that required more study and technical skills, leading Catarina to remember that, in the beginning, they *made 'that face', a face of boredom* and *'superiority'.*

Regarding alternative possibilities for formal music education, in Isabel's opinion, students of all ages should engage in composition, as this would have a positive impact on their compositions when then get older, creating *more interesting things because [they would] have a lot more musical [skills]*, it being considered *very interesting […] to create instead of always looking at a score*. Isabel stated that what they had done in this project was possible because of the reduced number of students, as opposed to what happens in orchestras where '*they are too many*', defending that the experience in the project *was more interesting* due to the feeling of having created something as composers (*'We did it!').* Asked by the teacher if this kind of work could be implemented in the regular orchestra classes, the opinions were divided. Some of the students stated that **this could be done only with the children's orchestras because their behaviour and attitude is more open to this kind of approach**. However, one of the difficulties pointed out by Catarina was the fact that the musical level of younger music students *is much lower than [theirs]*, having students who *can only play open strings* and, therefore, it is necessary to have *someone older or with more experience.*

When asked by the teacher for ideas and strategies for working with the orchestras, several suggestions were advanced. Bárbara suggested that the teacher could *do the same things [they] did* in the project; however, to do this in a whole orchestra would implicate *five teachers*. Isabel thought that the only possibility is to engage students in improvisation but warned that, *there's going to be a lot of resistance at the beginning because nobody is used to it* and Catarina remembered that *it was the same with [them].* Isabel said that, in this case, the teacher could not give those students *the autonomy that he has given [to them]* because, in the field project, ***[they] spent a whole year without having any autonomy***. Catarina stated again that in the project's fieldwork, the teacher *had to be everywhere at the same time* and Bárbara said that any work of this kind *without the teacher, [would be] impossible*. Asked by the teacher for concrete measures to implement in the following year with the orchestras' work, Rute suggested promptly: *'Smaller orchestras!'*. Catarina remembered the field project, where they could be spread around the room in smaller groups, being a setting impossible to replicate with the school's orchestras unless the number was extremely reduced. Marco suggested that it would be very important to ask students if they were really interested in engaging in this kind of musical work because, otherwise, *there might be people who were going to be there, doing this work against their will*. Responding to the teacher, who said that he could not make that kind of selection in a formal system, Marco replied that *'It's not selecting ... It's asking people ... like [they] did at the beginning'*, volunteering themselves to participate in the field project. A different suggestion was made by Isabel, saying that *the first thing the teacher should do was guide ...* ***As he did at first [with them]*** **and, gradually,** ***start giving a certain freedom, but not all at the same time… a 'controlled freedom'.***

Video 25.
https://tinyurl.com/6avt4k76

One final question made to the students was regarding the possibility of continuing with the creative work in the future without the teacher's guidance. Several promptly replied *'No!'* and Bárbara said that *'the teacher is a "rock"! All groups have a rock ... a person who supports'* and **it was only because the teacher was present that the students felt *the obligation to 'show something'***. Some of them replied that they felt *more capable* (Jorge) *but with the teacher!* (Bárbara) *because when [they were] block[ed], sometimes [they] need[ed] the teacher to help [them to] get on track* (Sílvia) and *to guide them* (Mário).

Regarding the best format for the creative sessions, it was clear for everyone that the time they had in the regular sessions was extremely short, defending the *workshop* format. Catarina associated some of their difficulties to the *little time they [had] to create [because] most of the time* ***the good ideas only appear[ed] at the end of the session*** (RJ e87), *when [it was] time to perform the composition* (SA s35).

The teacher was *somewhat surprised with […] the level of critical thinking of the students, not only regarding their experience in the project but also regarding their opinions about possible adaptations of this kind of approach to music making for the orchestras of the school* (RJ e117). The students felt that this experience would be a good example to pass to the other students of the school, leading them to think: *'If they were able, I am also capable...'*. They also said that this kind of music is more interesting for them because they know they can change what is written (Bárbara) and because it was made by their colleagues (Catarina). For this reason, if they get something wrong, the problem is not so great ... they have to improve but they do not have so much pressure (Bárbara).

Motivation

The teacher's intention was to keep the students motivated by: 1) giving them positive feedback and valuing what they had achieved in the project, 2) suggesting specific musical activities and experiences taking into account the students' interests, and 3) valuing and giving visibility and credit to their creative work. During this phase, most of the evidence showed that **the students felt motivated by their participation in the project**[97], sometimes perceiving the intent of the proposals or anticipated the final outcome of their work[98].

Speaking about specific examples of activities that can be promoters of motivation, Rute stated that, contrary to orchestra classes, where all the cellos play the same thing, in the project they *managed to get enough [different] voices for everybody,* leading Catarina to say that ***in the orchestra there is no such democracy ... in the orchestra there is tyranny***. It was seen also as positive the fact that the musical products could be changed *if [they did not] like something* (Sílvia). Among other examples of aspects and activities that were promoters of motivation, perhaps the most important was the final composition and all the activities associated with preparing for the final performance. Even before the 'testing' of the first version of the piece, *when they were more aware of how it could sound when played by the orchestras in the concert, [they appeared to be] extremely happy and thrilled […] associated to the possibility of presenting their work to the school's community* (RJ e96), highlighting musical and non-musical reasons for their motivation. Catarina said that she *liked the proposal of [bringing together] all the orchestras and ensembles*, giving them *more motivation*, assuming that it could be *vanity* but, according to Isabel, it was more *to show [their] work* because *they [were] playing something made by [them]*.

The students also appeared to be motivated due to their musical achievements[99], with an interesting, yet symbolic, aspect being their satisfaction when they saw their music written in a score and being handed out during the orchestras' rehearsals. In the preparation process for the final concerts, although they were *not as participative as in the work with the students,* they were happy *for having their parents play their music* (RJ e120).

In the process of experimenting the first versions of musical pieces, Catarina commented: ***'I liked the difference when we played "The Evolution of Sound". Here we said: - "How beautiful! How great!"... When we heard it with the whole orchestra: "WOW!!!"'*** Addressing the impact of hearing the composition played by the orchestras, Catarina described the first time Dina heard the orchestral version of the piece, stating that she was *astonished* and at the end of the rehearsal, very excited, she commented: *'What's this ???!!!'* During the work with the groups participating in the concert it was *obvious that they felt responsible and proud of what they were seeing, adopting a kind of tutorship regarding their own colleagues* (RJ e107).

After the concert, Catarina said that *in concerts and rehearsals, whenever [she heard the pieces, she] was super proud.* She also said that Mário, referring to the concert, commented: ***'Oh, it gave me shivers!'***. W*hile in the orchestra [they] have played songs that had been composed many years ago* (Mário), that music was theirs… *it's the feeling of creating something... even if it's a bassline ... a one bar bassline…* (Catarina) and thinking: - *'I did that!'* (Isabel). Referring to specific sections of the music, Rute remembered *one of the parts that [she] liked the most, [a] part where just the cellos [were] playing*, leading Catarina to say: "*'Oh, how beautiful!'*. Rute reinforced this by saying that, although seemingly *a very simple thing*, they thought: *'We were the ones who did it and it looks great!'* and stated that this feeling *gives [them] some pride [and] confidence in [themselves and in their] capacity!* Bárbara also referred to the applause, after the final climax of the music (*when [they] did the 'explosion'),* being reinforced by Isabel who stated that *it was spectacular when [they] finished and one person said: 'Bravo!'*

The audience response and later comments also contributed to their positive self-image and motivation. Although some colleagues gave a less positive critical feedback, saying that they *liked it but said it was very repetitive* and *the percussion was too loud*, most of the comments were *very positive*. Students said that some of their friends, teachers and family were incredulous when they found out that the piece was composed by them and, *at the concert [when they] got up, people's faces were: 'Oh ... My God!!! ... what little ones!'* (Catarina).

The teacher, after the focus group, said that he *felt that the students were very happy for having undertaken this experience*, this feeling being evidenced by *their attitude and creative work, but also when they expressed their enthusiasm for some moments and comments from other people regarding their work* (RJ e117). Beyond musical work, **being in a group was also a great source of motivation for the students**, uniting musical and non-musical dimensions to achieve *a really good work environment* (SA s45).

Marco

There was evidence that *a few students [were] getting bored of the routine (mainly Marco and Bruno)*, leading the teacher to affirm that he needed *to rethink the way sessions [were] being conducted* (SR s34). One of the students (Marco) revealed, mainly in the final part of the project, signs of discouragement in his participation[100]. His behaviour was associated

with personal characteristics (shy, serious and circumspect), however, in the second year, his passiveness increased and with it an apparent lack of motivation to engage in the work[101]. This was of major concern to the teacher[102], who intervened in several situations to promote Marco's participation[103].

In the Focus Group at the end of the project, Marco, for the first time, said that *most of the time [he] did not like playing the drum part with them [and] maybe [he] would rather play Marimba*. Asked by the teacher if he had ever told his colleagues how he felt, he replied: '*No*'. His colleagues confirmed that Marco was not clear regarding his lack of motivation and only Isabel said that she knew *more or less* what he felt and Catarina said that his feelings were *normal [because he was] doing the same thing from start to finish* and he was only playing the beat *just because [the others] wanted it* because, as Rute said, *Marco [was] essential* in their compositions.

Reflecting on this new information regarding Marco's feelings, the teacher remembered that *since the beginning, he was always quiet and, although participative in the music making, he was not usually proactive [but] perhaps if he had told [the teacher] what he shared [in the FG] his participation in the project would have been much more interesting for him* (RJ e117).

b) teacher

The teacher started this new phase assuming that, due to the decisions about the specific project goals decided with the students, he would *need to find again what [his] new roles should be* (RJ e84) because what was going to happen would be, once again, *a real unknown field [for him]* (RJ e81). The teacher felt that *transferring some responsibilities and tasks for the coordinators [brought] a feeling of emptiness and disorientation regarding what [he] should do* but, at the same time, he *was more prepared to deal with it than [he] was a few months [before]* (RJ e84).

Throughout the project, the roles of the teacher were constantly evolving and being adapted to the conditions in the field, alternating between active intervention or just observation. The fading of the teacher's intervention in the musical work was not a 'passive' stance, an 'active observation' being maintained that allowed the teacher to be more attentive to the students' reactions. This also allowed him to respond promptly and more adequately to the students' difficulties or needs, scaffolding their learning strategies and helping them to reflect about the best way to deal with some musical problems, by promoting their critical thinking skills, but also by giving positive feedback to motivate them[104]. One reflection regarding this was: '*I feel that what students need from me in each session is always very different… I still don't know what's the best way to work with them… […] I'm still looking for the best way to test myself and what should be the results of my approach: sometimes I can completely fade and other times without my intervention they cannot work*' (RJ e99).

Aware that the students' behaviours were cyclical, the teacher decided, at times, to assume a more directive role. However, this intention was borderline with a more traditional teaching, leading to some instances when *the teacher [did] all the work* (V s29). Despite this, most of the cases reveal examples of the teacher's 'positive' scaffolding[105] with the goal being to promote the students' autonomy, trying to **help them to overcome their difficulties by guiding their creative process, musical problem-solving or just unblocking the work**. In one situation, the students' difficulties led to *'frustration' at not being able to compose [and] not having ideas* (RJ e87), this frustration being amplified in

the coordinator who, perhaps due to the higher level of perceived responsibility, *was almost starting to cry.* Trying to unblock the situation the teacher decided *to take the initiative to participate and play with the group, even taking [his] cello and join in the creation* (RJ e87).

Another role was to give constructive feedback regarding the musical work[106], always trying to motivate students by reminding them of what they had already achieved. There was clearly **a positive progress regarding the students' participation and development of critical skills,** but it is important to consider whether the reduced amount of evidence was due to the students' real evolution, or just because, as the teacher was more distant from the creative work (passing that responsibility to the coordinators), the number of appeals to students to participate decreased. In situations when the teacher took some control of the work, his intervention regarding requests for participation included the inclusion of less participative students[107], the development of musical critical thinking and musical problem-solving skills[108], and group work dynamics. An important aspect raised was if the teacher should be assertive and force students to participate more proactively in the creative activities. The teacher felt that *if [he forced] them to do something they [were] not comfortable with,* he risked *losing them* (RJ e72) and, for that reason, he decided not to be overly forceful in the requests for participation.

In this phase the roles assumed by the teacher were related to three different points: 1) before the definition of the coordinators, 2) after the coordinators assumed the work and the leading of most sessions, and 3) after the composition of the musical pieces, when they were rehearsed by the school's orchestras. However, these roles were not fixed, interchanging, sometimes even in the same session, between the roles of scaffolder, co-learner, co-creator, traditional teacher or just observer, *walk[ing] around the groups* (V s48).

A fading of the teacher's active intervention

The concept of *fading* and *transfer* was widely addressed in the literature section and defends that the teacher 'has the responsibility to provide space for "free cognition", respond in real time to student contributions, and maximise social interaction' (McGillen and McMillan 2005 in Costa and Creech 2020). The transference of most of the responsibilities to the students was achieved only after the decision to appoint coordinators to assume additional roles. Despite that, a lot of times, and for different reasons, the teacher led the sessions[109], but being aware that he needed *to create some limits to [him]self not to transform this project into a regular ensemble class* (RJ e86). A few times, after viewing some recorded sessions, the teacher recognised *that perhaps [he] could have been slightly less interventive than he was, giving more space to the students to make suggestions* (SA s41), or that he *was too present [not letting] the coordinator do her work* (SA s41). Almost always after having a more directive approach, the teacher recognised the need to reduce his *level of intervention and [give the students] the responsibility for the decisions* (RJ e112) finding *their own way to work autonomously* (RJ e74). Despite these instances of a more traditional approach, the teacher considered that there was **a real movement of fading**[110] in his intervention.

The teacher recognised that, in the final phase of the work with the orchestras he should have given the students *the possibility to conduct the orchestra.* According to the teacher: '*… for that to happen, the material should have been composed and distributed for the rest of the students earlier… or not! Who knows if the students could have achieved better results than me?*' (RJ e120).

The relationship between the teacher and the coordinators and new emerging dynamics in music making

The decision to accept the challenge of writing musical pieces to be performed, aligned with the goal to increase the level of the students' musical skills, led to a more demanding framework regarding the quality of those musical products[53]. Discussions addressing aspects like musical structure, balance, arrangements, orchestration and style, among others, tried to promote a gradual development of the coordinators' musical judgments and musical problem-solving strategies. One of the first things the teacher did was to give the coordinators *access to all the material they've created* previously (V ex.s.) and, from that, there were several examples of the teacher being more demanding of the musical products and requirements of critical evaluation[111].

The teacher told the coordinators that their role was not more important than that of the other students, making an *analogy with [the teacher's] role in some of the sessions where [he] just organised the way the group was working* (RJ e83). Some examples of activities to be used by the coordinators to structure their work included: *listen to the ideas of others; experiment and integrate those ideas; ask specific tasks to their colleagues […];* and *think of ways to involve [other groups]* (RJ e85).

The scaffolding role of the teacher, helping to unblock the musical creation or to structure the work by suggesting specific activities[112], was maintained but, in this case, the teacher intervened in relation to the coordinators. The students' scaffolding by the teacher was one of the major transformations during the field project, transitioning from a directive approach into a role of the **teacher as co-creator**[113]. As the project progressed, and with the coordinators assuming much of the group work, it was getting more difficult to make a separation between the different roles of the teacher described above, and consequently it left him available to assume a more creative participation as a musician[114]. The adoption of a participative role as a co-creator had two positive aspects: on the one hand, this decision reduced *the distance between teacher and students, behaving as one of them and responding to the leadership of the coordinators* and, on the other hand, and because the teacher reached the conclusion that it was *too early to let [the coordinators be] completely alone in the task of composition and improvisation,* the inclusion as an equal member allowed him to *access and understand what they [were] doing and their needs and difficulties* (RJ e87). This awareness allowed the teacher to respond accordingly but only if it was really needed, many times intervening *in a pair with one of the coordinators* (RJ e102).

Conducting a musical ensemble is a more specific kind of leadership and, in this respect, different technical and musical aspects were the focus of the teacher's role in helping the coordinators lead their groups. This being one of the goals stated at the beginning of this phase, several times the coordinators conducted their colleagues, mainly during the small group work but also in several situations in whole group work[115]. In some situations, the teacher just brought some indications to their attention[116] but, in other cases, the teacher took over and tried to teach them how to do it[117]. At other times, the teacher shared the conducting with the students[118].

Besides the regular work during the sessions, the relationship between the teacher and coordinators included other levels of scaffolding, including discussions addressing aspects

53 Despite this intention, I am aware that the concept of 'quality' of a musical product in this context can be difficult to assess. Not to widen the focus of the research even more, I decided not to address this issue in this thesis.

such as the communication between coordinators and their colleagues, the planning of the activities (before the sessions), and the analysis of their leadership, the response of their colleagues, or the answers to some questions and doubts raised by the coordinators (after the sessions)[119]. In some situations, the teacher had to help the coordinators to overcome some immediate difficulties, reacting *in-action* to reach the proposed goals or intervening just to give them confidence[120]. In these cases, the teacher gave them *suggestions about some parts* and *after some time […] they started to be more 'in control', almost 'in flow'*. After overcoming the initial resistance, *often [students were seen] working collaboratively, discussing and exchanging musical ideas* (SA ex.s.). One of the conclusions was that the coordinators *were really needing a higher level of musical challenge* (SA ex.s.).

With regard to the relationship between the students and teacher, the students started to see him not as the supreme authority in the sessions, viewing themselves as equal creators, questioning some of the teacher's proposals, actions and even his musical choices, for example, criticising his way of conducting[121].

Potential to adapt the type of work done in this project to the formal music teaching system

Contrary to overly structured pedagogical settings, the undertaking of this field project implied the acceptance of unexpected events and external conditions that changed the course of the initial plan. However, a more structured way to work as a group allowed a considerable level of flexibility, differentiating the roles of the students and their relational dynamics according to the specific musical challenges[122]. Maintaining an exploratory approach, one of the goals of this phase was *to create bridges between the 'ideal'*[54] *music making settings and the 'traditional' music school* (RJ e77), but this process was not undertaken without some inner conflicts on the part of the teacher, mostly regarding the main focus on the musical products instead of the creative music making process. This was mainly related to the *'traditional rehearsing'* that the teacher considered *inevitable in the future* (RJ e93) and also the 'problem' of notated music, still believing that reading can be a constraint to fluency in music making (RJ e104). Despite this, the evaluation of the teacher was: '*we are getting near to what I think that, in the future, can be applied to a regular classroom setting in a formal music school*' (RJ e104).

Improvisational response

An improvisational pedagogical approach[123], responding to the flow of the work and to the students' reactions, showed greater confidence in assuming more risks in the teacher's pedagogical intervention. Some evidences of this were:

• the teacher stepped away from controlling the path of the music making activities, allowing students to risk more and make errors without correcting them;

• having transferred to the coordinators most of the decision-taking, much of the time the teacher was an observer of what was happening in the sessions, collectively and individually;

54 Once again, the concept of 'ideal' should be seen as a response situated according to specific goals (musical and others), and not a 'method' to be applied in every context.

• being released from the responsibility of leading the group work allowed him to respond to the students' reactions and be more capable to make different types of intervention to deal with specific difficulties (musical, technical), creative blocks or group work dynamics;

• reducing his level of intervention also allowed him to assume, gradually, a more participative role as a musician[124], playing and creating with 'his peers' and being led and conducted by the coordinators.

When asked what the teacher's role in this type of work should be, the students replicated some of the ideas they have previously suggested: *help [them to structure] the songs*; *to maintain order in the room*; *unblock ideas*; *to guide… if [they are] going the wrong way*. After these suggestions, they were asked if during this period the teacher was capable of assuming those roles and Isabel replied: ***'Yes, in recent times the guidance has been given in that way. While in the beginning the teacher gave more fixed ideas.'***

Another aspect to emphasise is that the teacher responded in a much more positive way to the students' noisy and sometimes chaotic behaviour in the sessions. The amount of evidence reporting negative behaviour was very reduced[125] and, although recognising his *difficulty in dealing with a less controlled class* (RJ e71), the teacher tried *not to be too much strict regarding the students' behaviour in the classes* (RJ e71). When viewing one of the sessions, the teacher reported a development in his attitude regarding the behaviour in the classes: '*I am much calmer and more relaxed about the noise and apparent confusion in the class […] Only a few times (mostly at the end of the session, perhaps when the students were very tired) I had to ask the students to be quiet to continue to work*' (RJ e105).

Final comment:

Despite a greater level of student autonomy, leading to a fading of his role in most activities, it was clear that the teacher was still needed in some situations. What was required from the teacher was always dependent on the activities and the characteristics of the students. One example of the different types of scaffolding was: '*despite the extremely big differences between the personalities and leading styles of the coordinators, [the] teacher was capable of managing the co-leadership with each one of them [changing his approach] in each situation and [intervening] when he felt it was needed… with Catarina he had to give her confidence, with Dina he had to scaffold her musical work, with Isabel he was almost absent (he left his seat and moved away) from the work and with Adriana he had to help her control the group*' (SA s42).

c) activities and group dynamics

Preliminary note

In this section every aspect related with the development of the musical work will be included, namely the activities, the work settings and relational dynamics,

Work settings – group settings

The beginning of this new phase was seen *as if it was the beginning of the project but with less resistance* (V s29). With this in mind, the intention in the first sessions was *to make an evaluation regarding the students' resistance to improvising [the goal being to understand] in what way they have changed to a more participative stance* (SR s29).

Regarding the way groups were formed, sometimes it was the teacher who suggested the formation[126], and other times the students decided how the groups were formed[127]. Sometimes the groups were chosen randomly and, although the students were not always happy with the result, the teacher saw this as positive because it would promote *different dynamics* (SR s30). On other occasions all the participants rotated from group to group, *allowing every student […] the opportunity to work with each of the leaders* (RJ e81).

Asked by the teacher about what was, in their opinion, the ideal number of students to work in groups, the answers varied. According to Isabel it *depends on the number of instruments* and Catarina stated that *it also depends on the balance* between instruments. When urged by the teacher to say a number, most of the students suggested from five to seven and Isabel said that *in a smaller group it is much easier for people to disinhibit themselves and give ideas*, but others defended that it would be better to always work as the whole group (all 17 students at the same time). Asked if it would be possible to reach the same outcomes working that way, some said 'yes' but Catarina stated that *[some parts]* would be impossible. Isabel defended *the choice of the leaders [to work in smaller groups]* and Clara said that *the ideal was to have two groups with two leaders in each group.*

During this phase the work was developed in **six main group settings**: 1) individual work of the coordinators, 2) collaborative work between coordinators, 3) small groups' work led by the coordinators, and 4) whole group work (with shared leadership and/or with the collaboration of the teacher). After having composed the first draft of the musical pieces, they were 5) 'tested' in the school's orchestras and, finally, they 6) rehearsed the final version with all the groups participating in the project. In this last case the work was led by the teacher but with the active collaboration of the coordinators and other students.

Regarding the collaborative work between coordinators, the teacher conducted a session where he presented *the musical material to the students so they [could decide] in what section [it] should be placed* (V s35). After that, the coordinators' first activity was taken in an extra session where they decided for which part of the piece they would be responsible. Later, in parallel with their group' and individual work, they engaged in discussions about musical aspects (for example, the transition between parts).

Regarding the coordinators' individual work, their role would be to engage in additional creative work within their group, generating new material, creating a piece with a logical structure and musical sense. For this to happen, they needed to have some idea about what to ask their colleagues, requiring a previous planning and structuring of the group work.

The work in small groups depended greatly on the coordinators' leadership. The main goals in this work setting were: 1) to test what the coordinator planned regarding the composition, 2) to create new material, and 3) to experiment with different instruments and decide the best instrumentation for each part. This implied an iterative work process because after each session the coordinators needed to evaluate what kind of changes they should propose for the next session, it being important *to achieve a good balance between what they have created and their colleague's suggestions* (SR s38). In this type of

work, sometimes, the coordinators were scaffolded by the teacher and there was relevant evidence of good work dynamics between the students.

After reaching a musical product, what had been done in small groups was transferred to the whole group. Mostly, this work was conducted by the coordinators (alone or in shared leadership) or by the teacher (sometimes in co-leadership with coordinators)[128]. This setting allowed the opportunity to test some aspects regarding instrumentation, but also to see the students' reaction to the proposals and anticipate possible difficulties of adapting the work for the school's orchestras. Regarding this way to work, the teacher said that he was not *comfortable with the fact that [they were] spending a lot more time rehearsing what they had composed instead of engaging them in more creative activities* (RJ e112) but, given the goals of the project, there were no alternatives to traditional rehearsing.

The transition to the work with the orchestras was one of the most important aspects regarding the students' motivation. During the rehearsals the coordinators were very active, not only by giving concrete suggestions, but also helping their colleagues to play the parts, for example suggesting strategies or showing their colleagues the best fingerings and bowings. Once again, it is important to stress the cyclical compositional process. After this 'testing', the coordinators discussed with the teacher the improvements to be made, proposing several changes until reaching the final version, in contrast to the beginning of the year, when the students rarely *engaged in the discussions [assuming always] that [it was] the final product* (RJ e79).

The final part of the creative process was the rehearsing with all the groups participating in the project and, as the time to rehearse was short, the teacher took the responsibility to lead the work with the groups that were exterior to the field project (school's orchestras, parents, and foreign students). However, the coordinators and some other students participated actively in some of this work, it being especially interesting to emphasise the relationship between them and the group of parents (in several cases, including their own).

Besides these six settings, another different format, that was tested only twice during the project, was to have students working autonomously without the teacher being present in the session. According to post-fieldwork viewings, what was more relevant was the opportunity given to the coordinators *to conduct and take decisions in real time about 'their' part of the music [in] a really good work environment, where the students had a lot of fun, but […] giving suggestions about ways to improve what was composed* (SR s45).

Another key aspect of any format of group work is the time the students had in which to create. It was very clear that *50 minutes [was] not enough to engage in this kind of work* (SA s43) and when the students had longer sessions, the amount and quality of their work was evident, not only regarding musical outcomes but also in respect of group work dynamics. According to the teacher, *the positive aspect of having longer sessions in which to engage in this kind of creative work [was] 'proven', [allowing] a much deeper musical awareness [and making] the students less and less resistant to experiment, improvise and compose* (SA s42). Relevant in this case was Catarina's comment, saying that *'the good ideas only appear when it's time to perform the composition'* (SA s35).

After experimenting a range of settings, at some point in the project, coinciding with the appointment of the coordinators, the teacher *assumed the 'final setting' of the group work* (RJ e85) affirming that this proposal could be a possibility to implement in future formal educational settings.

Type of activities - goals

In the last sessions of this phase a lot of the work was based on traditional rehearsals, but asking the students to be more actively engaged, telling them that what was written was just the basis for creative work and not the final product, the suggestion always being that they should change and adjust the 'draft'. With this in mind, when preparing the score, in *some situations [the teacher] inserted several possibilities for the students to choose what they want[ed] to play* (RJ e105), trying to promote their musical decision-making in-the-moment. The intention was to continue to engage in all the *praxial* activities, always including sound exploration and improvisation, but making more forays into composition, arrangements, conducting and performing. Always present in the teacher's discourse was the need for them *to test and experiment* (V s38), a wide range of very specific activities included in the *praxial* approach were explored[129], balancing these with other less directive activities[130].

Memory and decision-making vs Reaction to the use of sheet music

During the sessions the teacher often suggested that students should not *be too conditioned by what [was] in the score [because everything could] be changed and re-created* (V s43) and the *score [was] not 'rigid'* (V s46). In this respect, the use of notated music was, as it had been seen since the beginning of the project, one of the themes the teacher approached with a lot of doubts. The teacher resisted *to put a sheet music in front on them because […] they tend[ed] to be more rigid and less willing to take risks*. However, in this case, there was no *alternative if [the goal was] to compose and create a musical piece that [would] be played and performed by all the school's orchestras* (RJ e78). In the teacher's experience, when students are reading, *they stop listening to what they are playing* (RJ e77) and *their level of interaction [is reduced] drastically, even among the students who usually are very active and participative* (SA s31). Despite evidence in the project of the negative effect of playing by reading[131], in the last sessions, *although they [were] still somewhat conditioned by the existence of sheet music, they seem[ed] to be playing more naturally* (SR s47).

Given the amount of time available to prepare the concert, it was impractical to have the orchestras playing without reading. Accordingly, the decision was to write the composition and to give the parts to the students in the orchestras. However, the use of notated music was criticised by Catarina, who said that sometimes the students, when playing what is written, *instead of listening to the [other parts] of the song, [stare] at the score thinking about something else* (FG 4). The use of notated music was also a permanent tension: *should the notated music be completely eliminated? […] How can it be balanced?* (SA s31). The teacher acknowledged that he was *more inclined to accept that when [students were] not making anything new, and to save time, it [was] better to read (accepting all the problems that come with it)* (RJ e89).

Reaction from the other groups regarding the musical products composed by their colleagues

A very important aspect was to see how the other students (also highly shaped by the classical tradition), and later the audience, would react to the pieces composed in the scope of the project. Before the first rehearsal the teacher raised his *concern […] regarding the 'composers'* due to the possibility of having *negative comments* from their colleagues that

could *provoke a very negative feeling* (RJ e96) in the students. However, the reaction from one of the orchestras revealed that there was *a shift in the students' stance, [being] much more attentive and respond[ing] well to the piece* (RJ e97). Due to this reaction, the teacher questioned if this had happened *due to the novelty or […] because they enjoyed more, and [felt closer] to, this music [that had been] made by their colleagues* (RJ e97). According to the teacher's comments, it was *rewarding to understand that the student's reaction [was] much more embodied and relevant than [for] the other repertoire pieces that [they] had played [that] year* (RJ e107).

d) musical products

Having experienced, in the previous phases, different approaches regarding the goals for musical products, it can be argued that accepting the challenge to create several musical products to integrate in a school project was a conscious decision taken by students *with great enthusiasm* (RJ e77). However, in that moment, I had doubts as to whether *having the pressure to prepare a concert* (RJ e77) was positive for the students.

Type of musical products



Video 26.
https://tinyurl.com/2p8phkve

Resulting from the discussions in the scope of the Erasmus+ project and between teacher and students in the sessions, the products to be created during this phase would be a musical piece to serve as basis to a *flashmob* and another piece, or set of pieces, related to the theme of environmental awareness. Regarding the *flashmob*, most of the 'raw' material was created in the last two (longer) sessions of the third phase of the project. In the fourth phase, the goal was to develop and articulate that material until a final product to be performed was reached. Regarding the theme of environmental awareness, after exploring different possibilities related to *the theme 'Pollution'* (V s30), and because there were four coordinators, the proposal for the theme was *four seasons or 4 R's – reduce, reuse, recycle, replace* (RJ e79) leaving the final decision to the students. Later it was decided that the theme would be the **4 R's** because, besides a clear relation to the project's theme, the 'R's' could be associated to different musical compositional techniques. According to the teacher, it would be an *opportunity to help students make 'motivic development', associating those concepts to composition* (RJ e80).



Video 27.
https://tinyurl.com/ywxfc2bs

Another important decision to make was about who, besides the orchestras, would participate in the project. The first suggestion was to have a group *(preferably the students' parents and family) playing instruments made from recycled materials, [the] work with these people [being] organised as workshops where [the] students [would] work together with them* (RJ e72). The teacher, also responsible for the coordination of the Erasmus+ project, proposed the participation of the foreign students in one of the performances[132].

The compositional process

The composition of the musical pieces included several steps: generating musical material, definition of a structure and 'articulation' of the fragments, and the arrangements for the existent instrumentation. Most of these activities, although with some previous work done by the coordinators (individually or collaboratively), were developed in the regular sessions, first in small groups and then with the whole group. The final decisions about instrumentation were taken after trying the pieces with the orchestras.

The composition started with the creation of musical fragments and/or textures (some of which were created in the previous year and others composed according to what was necessary to create a coherent musical speech). The next 'musical problem', and perhaps the most difficult, was to 'connect' all the parts to compose one single musical piece. In this type of work the teacher had to form a closer collaboration with the coordinators, scaffolding the work by guiding them in the composition, suggesting the creation of *a scheme/form for the piece of music* and discussing concepts like *'tension' and 'intensification'* (RJ e87). In this part it was also necessary to refer to the students' musical decisions to edit the material, requiring from them *a critical view about the material, selecting what they think works better* (RJ e105). A real musical problem was the need to reduce significantly the duration of the pieces (more than 30 minutes long), *mainly because the school's orchestras [were] not yet prepared to play such a long piece* (RJ e105).

After reaching the first draft of the composition, it was necessary to make arrangements to adapt the music to the instruments of the orchestras, taking into consideration the technical level of some students. With this in mind, all the students (with different instruments) tried all the existent material, giving the coordinators indications for the best instrumentation for the pieces. In this part of the creative process the teacher participated more actively, mainly because the students were not aware of the possibilities and limitations of some instruments, but also to write their decisions, as they were made, in the music notation software.

Evaluation and feedback

Contrary to what happened before, quality of the musical products composed by the students was addressed in this phase. There were two main reasons for this: 1) to develop the students' musical skills in every dimension, promoting higher levels of critical analysis and problem-solving skills, and 2) the responsibility associated with the composition of pieces of music for a project that would be highly visible to the school's community and international partners.

Addressing the concept of the *quality of a musical piece*, the teacher asked himself: '*But what is musical quality? How can I assess that? What should be the goal?',* recognising that he had *no answer for those questions, mainly because [he had] no term of comparison [and he could not] compare their compositions with what they [were] used to playing in the orchestras* (RJ e89). Despite this, and addressing his own reflections in a project where the focus was placed on the process and not on the product, the teacher associates musical quality *with the coherence of the musical discourse* and related to the students' *evolution as creators (improvisors and/or composers) and not an evaluation of the pieces isolated from their context* (RJ e116). Regarding the musical products created by the students during the field project, the teacher's opinion was that some of them needed some improvement[133], although acknowledging a positive evolution in the quality of the compositions[134].

According to the teacher's evaluation of the musical work of the coordinators, in the first sessions, despite *reaching a basic musical structure for their composition*, the *sequence of compositions [was] still not very clear and [the students would] have some difficulties transferring it to the group work* (RJ e97). Giving total autonomy to the students in one of the sessions, the teacher wondered if they *would do something completely new or if they would use what they had composed [before]*. As it turned out, *one of the groups chose to make a completely new composition and the other started by playing what they had composed [the previous] week* (RJ e83). The teacher noted the students' *tendency to always return*

to the material they already [knew], not knowing if this was *positive or not*, because if, on the one hand, *this results in less material*, on the other, they could play *much more freely, allow[ing] that some of them [could] improvise* (SR s33).

Most of the time the teacher gave constructive feedback to the students regarding the quality of the musical products with the aim of promoting their critical thinking and problem-solving strategies, expecting a consistent improvement[135] in this respect. Other times the teacher's comments intended to encourage the students' motivation[136], by recognising the difficulty of their tasks and the nonexistence of the ideal conditions, and also making them aware of their progress with the compositions[137].

The students' comments about the musical products were extremely positive overall. As seen above, only Marco was not completely satisfied with the outcomes. The comments of the other players in the orchestras also had some impact on the students. According to Catarina, when finding out that the orchestras would play pieces composed by their young colleagues, they must have thought that *'it would be super simple'* and *'with nothing to play'* but, according to Isabel, later *they'd all changed their minds*.

e) Musical sense-making

For the first time in this project, it was possible to go more deeply into the questions related to musical sense-making. Bearing in mind that **we can only evaluate music skills that are demonstrated in music making** (Elliott 1995), it would be far easier to show the recordings of the evolutive process of the students' music making in order to evaluate their musical sense-making than to write about it. Not being possible to show all the video evidences, here an attempt is made to give some possible indications of what, using a given lens, signals the students' progress regarding musical sense-making. The teacher started to refer more to this concept[138], using also more frequently expressions such as 'musical understanding'[139], 'fluency' and 'musical knowledge'. One of the main indicators of some level of integration of these concepts were the discussions between students regarding several musical aspects[140], trying to find, in an active (*praxial*) posture[141], coherent phrasing, consistency of form, among other elements present in a compositional process. There was various evidence of an evolution regarding dimensions that can be associated with sense making, such as orchestration or balanced instrumentation[142], and the way students guided the musical work[143].

One of the main aspects that can be addressed in relation to musical sense-making, is the 'flow' experience in music making. The teacher asked: does *'flow' mean that the students are nearer to sense making? How can we measure it?* (RJ e102). The teacher reported cases where he noticed *some signs of flow during the rehearsal* and occasions when *the students […] were not so stuck to the reading, allowing themselves to play with some musical sense* (SA s37).

Main Outcomes and Milestones

The fourth phase was the longest, lasting a whole school year. Although the challenges were new and the level of musical activities increased considerably, the group dynamics were already established and much of the unexpected problems that happened in the first year were anticipated, overcome, or simply accepted as normal and treated as a positive part of a change process. In some aspects, **a gradual transition occurred**, the most relevant examples being the transference of some of the teacher's roles to the students, in

parallel with an increase in the students' critical reasoning, autonomy, initiative taking and musical problem-solving skills. The main milestones were the positive impact some of the activities had on students, a highlight being the moment when they affirmed themselves as composers to the wider school community.

In broader terms, the first important conclusion to highlight is that **resistance was inevitable and cyclical** in the students' behaviour, having occurred several times during this phase (more evident at the beginning and reducing through to the end of the project). However, there were some important moments that showed a gradual evolution of the students, with them being *more confident than a few months [before] regarding their creative skills* (V s48) and being *capable of doing something in two minutes that previously they were not capable of doing in two sessions* (V s47). Of more relevance in this case was the fact that even the most resistant students started to participate effectively in the creative work[144].

After more than one year's experience, **a 'final setting' of the group work** (RJ e85) gave different roles and responsibilities to the students, guaranteeing the development of the work without too much intervention from the teacher. However, this is not to defend a rigid structure of the groups, recognising the positive aspects of using different settings according to the activities and goals to be implemented or pursued.

Another milestone was related to the teacher's relationship with the students, assuming equal parts, as creator, as instrumentalist or even as leader. In this last instance, there were situations when *teacher and students [were seen] leading and conducting side by side* (SA s42), this being one of the aspects that the teacher thought would be possible to be implemented in ensemble classes in formal music education settings because, *although this was, in some ways, similar to a 'traditional' ensemble class, the differences promoted a context where the students seemed much more engaged and focused… and perhaps motivated* (SA s42).

The performances, two concerts where the musical products were performed by more than 150 musicians, were also extremely relevant milestones. The first performance was the final concert of the *Erasmus+* project (*flashmob* piece), and the second was in the school's final concert, with the musical products being presented to and audience of more than 500 in each concert. The students revealed that it was a big source of motivation because it was an opportunity *to show [their] work* […] *playing something […] made by [them]!* (FG 4).

Although seemingly impossible to assess with certainty, there was evidence of flow perceived by the teacher and also described by the students, for example when the teacher asked them *to write what they had done in the final presentation [and] some of them said that they were not capable of doing it because they were improvising 'in the moment'* (RJ e115). The teacher classified this as *a 'breakthrough' moment in this project* (RJ e115)

According to the teacher ***the key moment of the project*** **(RJ e84) was the decision to appoint students** with the responsibility of leading some of the musical activities in small groups and engage in other activities that required additional work outside the regular sessions. At some point, the teacher felt that this decision was *inevitable* for several reasons, the most important being the fact that some *students were really in need of a higher level of challenge in the project* (RJ e96). In accordance with the intention to promote a democratic environment, the decision about the selection of the coordinators was transferred to the students[145]. This decision increased the students' autonomy, for example being able to conduct a session without the teacher present, this being *the right moment to test the students' autonomy to work alone* (RJ e109).

The transition of the students' compositions to the other groups allowed the participants in the project the opportunity to engage in different roles. The rehearsals with the other groups served to 'test' the compositions, gathering information relevant to making improvements. The students revealed a great *enthusiasm,* it being *obvious that they felt responsible and proud* (RJ e107), a source of *self-esteem* and *motivation*.

Perhaps the most important aspect to highlight is that the students described **positive and meaningful musical experiences**, widely reported in the FG, not only associated to the performance moments[146] but also during the work in the sessions[147]. Related to this, even the teacher also experienced 'peak' experiences[148].

3.3. The end of the field project

At the conclusion of the field project, I made a brief evaluation of some of the most relevant outcomes. **There were two symbolic ends of the project: the final session and the final concert.** Regarding the final regular session, I wrote that it was a *fantastic moment [that] could be considered the perfect end to the field project [because] the students had a plan prepared but, in real time, they managed to alter it in order to make a good transition between the parts* (SA s49). Regarding the performances, although according to the principles of the project these were not the main focus, I saw them as *the perfect moment to demonstrate everything we'd achieved: the students developed a lot of different musical and non-musical skills by exploring, improvising, composing, arranging, performing, conducting, connecting to their musical interests, integrating a lot of different people in their music and, most of all, being empowered to assume a more participative role in their musical learning* (RJ e121). I believe that *the recordings of the concerts, together with all of the creative process documented in the sessions, will serve to document what they've achieved in these two last years* (RJ e121). After the concerts my words were: '*I'm extremely proud of what happened… not just because of the concert itself, but due to the students' feeling of accomplishment… it was a fantastic feeling for me and, I'm sure, also for them. For me, just for this, the project reached its main goals*' (RJ e122).

Video 28.
https://tinyurl.com/2p9ajzbk

In this chapter I tried to be more objective, adopting where possible a less implicated view in the data analysis. This led me to describe the data retrieved from the different sources, highlighting my voice as a researcher but, more importantly, giving voice to the students and highlighting the outcomes of all the interactions resulting from the implementation of the project. It is clear that, whilst possibly risking the fluency of the writing, and for methodological and academic reasons, the aim was to show evidence that support some of the conclusions and will serve as a basis for the discussion section.

As a final note, I must say that however much one tries to describe this experience, it will always fall short...

Category		Theme	Key findings
Initial themes	The process of Students' musical sense-making	Musical sense-making and musical understanding	it is possible to make the transition from the classical paradigm to a more transformative teaching context, but it requires engagement with active music making and a long-term investment of time
			when students perform their own compositions to a live audience the impact of the experience is more intense than when playing repertoire pieces
			the collaborative approach in creative work resulted in a clear evolution in the students' autonomy, empowerment, emancipation and, above all, in their critical reasoning about musical aspects, but also regarding other dimensions like group work, creativity and music making practices
			the students' evolution in musical and non-musical dimensions allowed them to achieve high levels of musicianship and listenership
		Use or not use notated music?	notated music can be used in creative settings but with moderation, in specific phases of the creative process, and in a way that does not impede the development of musical and expressive skills
		Theory/technical versus expression	theoretical or technical limitations are not an impediment to meaningful making music
		Collaborative learning in the context of musical sense- making	Collaborative music-making engaging in varied musical activities to develop aspects such as discussion, active communication, perspective taking, negotiation and collaborative problem-solving
			Collaborative settings have a positive impact on the students' motivation
			Students are not resistant to engage in democratic and respectful relationships in collaborative music-making between peers
			it is possible to develop musical and technical skills in a collaborative context where competition is not used as a pedagogical strategy
			Musical achievements are not dependent on competitive pedagogical settings
			the ideal setting for creative work is a combination of different group work models and relational dynamics, and varied musical activities
			in some situations it is possible to replicate, at least to some level, characteristics of non-formal settings in formal music teaching contexts
			Sometimes it is necessary for the teacher to take the lead, assuming a vertical hierarchy
	The reconfiguration of the roles of the music teacher	Democratic settings	it was difficult for a traditional teacher to abdicate from a directive role and give total control to the students
			it is possible to have students engaging in effective and meaningful music making and learning in contexts that are less strict with regard to behaviour
			all students are different and need different pedagogical approaches according to their characteristics and interests
		Personalised approach	not all the students want to participate in the same way and it is therefore important to value all kinds of participation
			combining teaching with researching brings a level of information regarding the individual students and their social dynamics that can positively influence the quality of the pedagogical intervention
		Teacher's roles	Teachers need to trust in the students and give them enough time to develop their skills, particularly if they are conditioned by a different system of values and practices
			in the context of a pedagogical relationship, when participating as co-creators and contributors to the musical outcomes, teachers can experience high levels of flow as musicians
			if the groups are formed in order to maintain a balance between more and less participative students, the ones that are more resistant reduce their level of participation because they know that the others will take the initiative and do all the work
Emergent themes	Students' resistance		Resistance is inevitable and cyclical, making it necessary to find pedagogical strategies to cope with it Students' resistance
			The creation of non-hierarchical and non-competitive environments, where there is clear horizontal communication and where students collaborate with each other, has a positive impact in reducing resistant behaviours
			An increase in the students' musical skills reduces resistant behaviour, enhancing student agency, empowerment, emancipation, and ownership of their own learning.
	Musical product		the existence of a musical product to be performed can be positive for allowing students to participate in all stages of the creative process
			orchestra rehearsals have the potential to incorporate more creative activities
			After just a few years of learning, students of all ages are already completely 'colonised' and framed by the practices of the classical conservatoire culture
Implications			the Portuguese music-teaching system, including its values, principles and practices, requires an urgent complete reconfiguration

4. PART IV
Discussion and Possibilities

< **Fig. 12** Key Findings

This discussion chapter embraces the questions that 'sparked' the research, and other dimensions that emerged from the experience in the field with students. My goal in this chapter is to identify and synthesise the most important findings related to the key issues raised in this thesis, positioning them within the fields of the literature presented in the first chapter. The following image (Fig. 12) presents an overview of the most relevant key findings, organised according to different thematic categories, providing a holistic view of the outcomes of the project.

4.1. Discussion of the outcomes addressing the questions raised at the beginning of the research

4.1.1. The process of sense making in music teaching and learning

Despite difficulties in reaching a clear understanding about what *musical sense-making* is and how it manifests itself, during this research some approximations to that concept were made. Perhaps what is nearest to its conceptual framework is *musical understanding* and *musicianship*, which are related to a certain view of *musical knowledge* (Elliott, 1995).

Musical sense-making and musical understanding

In this research, I described and analysed events and behaviours that were interpreted as indicators of musical understanding and fluency in musical discourse. Nicholas Cook refers to 'the third meaning, the meaning that can be heard but not spoken' in music (Cook in Almén and Pearsall 2006, 132). Combining the documentation of my participation as a teacher in the field project with the students' testimonies and the video recordings, I accessed manifestations of that 'third meaning' by seeing the students engaging in music and actively solving musical problems.

Despite student resistance in the transition to a *praxial* approach in a transformative educational setting, there was evidence of a strong multidimensional evolution with regard to the students' project goals (musical and non-musical), which enhanced their musical sense-making. This points to the conclusion that **it is possible to transition from the classical paradigm to a more transformative teaching context, but this requires engagement with active music making and a long-term investment of time**. The transformation process described in this project accords with some research concerned with the processes of change, stating that in most cases the highest level of resistance comes not from the individuals but from the organisational structure (Kotter 1995, 64). The initial resistance should be expected because 'it takes too much effort and time to learn new methods of learning' (Dembo and Seli 2004, 4) and processes of change can have a negative effect on the students' sense of competence and achievement (Clark 1991; Felder

2011, 131). This finding also reinforces the idea that only through internal motivation and participation of all the individuals in a group can real change be achieved (Dent and Goldberg 1999, 31; Gorzelsky 2009, 82). The long-term investment of time required to promote real change, mainly in the scope of a 'cooperative or problem-based learning' context, is highlighted by Felder (2011, 132), referring to a process that can take several years to produce results.

Regarding the performative dimension, according to the students, **the occasions when the musical products were performed for a wide audience assumed a more meaningful impact (in comparison with performances of other musical pieces) due to the fact of playing their own musical compositions**. Contrary to what happens when students are 'just' orchestra players performing repertoire pieces, in the approach followed in this project performance was only the last stage of a creative process in an intense relational setting. This key finding reinforces the idea that musical experiences and skills are 'multidimensional and multi-levelled' (Sloboda 2005, 168), and not limited to one specific kind of performance, including also, as Sloboda (2005, 168) stated, 'a range of cultural and contextual factors.'

An outcome of this project was that **the collaborative approach in creative work resulted in a clear evolution in the students' autonomy, empowerment, emancipation and, above all, in their critical reasoning about musical aspects, and also regarding other dimensions like group work, creativity and music-making practices**. The process through which *musical sense-making* can be constructed is now clearer for students, who are now more able to have a discourse about it, demonstrating critical reasoning and self-awareness. The students' testimonies are evidence of optimal experiences when working in the sessions, when envisaging the final product that they were creating, and when commenting and evaluating the quality of the compositions. This evidence of 'thinking and knowing emphasizes the place-based, embodied space of sense making' (Elliott and Silverman 2015, 222) and can be considered as an example of the positive aspects of group improvisation (Burnard, 2002), contributing to 'musical learning and construction of meaning'.

The students' evolution in musical and non-musical dimensions allowed them to achieve high levels of *musicianship* and *listenership*, 'a form of knowledge that is internally generated in students through their musical actions, transactions, and interactions with carefully selected musical praxes and challenges' (Elliott and Silverman, 432). The students offered critiques of the quality of the musical products, the identification of the musical and technical difficulties showed by some of them, the strategies they used to overcome those difficulties through peer scaffolding, and the quality of the performances of the orchestras and other groups in the concerts. The students were not limited musically or technically to what was written in a score, being able to create their own music and to manipulate the level of technical difficulty. This behaviour accords with McPherson's (2005, 9-10) description of manifestations of musicianship that included the performance of rehearsed music, sight-reading, playing from memory and by ear, and improvising.

Use or not use notated music?

Reading music is included as one of the abilities related to musicianship (McPherson 2005, 9-10). However, one of the self-imposed preconditions regarding the implementation of

the field project was not to allow students to use of notated music, reviewing this premise later when it was decided that musical compositions would be performed. I gave in to the arguments that memorising the pieces would take a great amount of time that should be used for more creative activities than rehearsing. As a consequence of this decision, before the performance of the musical products the sessions assumed the setting of a 'traditional rehearsal', although acknowledging the negative impact that the use of notated music was still having on the creative process. In some of the initial rehearsals it was noted that when students *see notated music, they assume that it's the final product…* (RJ e79) and, almost immediately, assume a less active stance regarding the transformation of the musical piece. Despite this, after the performance, most of the students affirmed that during the performance they were totally 'in the music' (in flow) and that they were capable of playing everything from memory, once again referring to one of the abilities of musicianship referred to by McPherson (2005, 9-10). Therefore, an important finding was that **notated music can be used in creative settings but in moderation, in specific phases of the creative process, and in a way that does not impede the development of musical and expressive skills**. This is in line with Gordon's statements that 'the most important elements of music cannot be put into notation' and 'with the achievement of improvisational dexterity, children are ready to bring meaning to music notation' (Gordon 2011, 6).

Theory and technical development versus expression

In line with research work that questions the prevalence of technical achievement over the musical and social aspects of music making (Cope 2002; Schmidt 2005; Swanwick 1994), one important key finding resulting from the implementation of this project was that **almost never were theoretical or technical limitations an impediment to meaningful music making**. According to Swanwick (1999, 69) 'complexity by itself is no virtue' and, on the contrary, 'it is certainly possible to perform, compose and enjoy a high quality of musical experience without any great complexity'. As a result of a collaborative music-making approach, in the field project, the musical and technical difficulties of some students were overcome, most of the time just with peer support and scaffolding. In other cases, when parts were too challenging for some students, the level of technical difficulty was lowered or, as Catarina said, *we always go around to adapt and we can all participate* (FG 3). This is evidence that the creative process was usually framed within the students' current musical and technical levels but, as some students mentioned, sometimes it served as a way to develop the students' technical skills, playing more difficult pieces than they played in the orchestras because they were only aware of the difficulty when they saw it written.

Collaborative learning in the context of musical sense-making

The outcomes of the field project emphasise **the merits of collaborative music-making settings in the development of aspects such as discussion, active communication, perspective taking, negotiation and collaborative problem-solving when applied to engaging in varied musical activities.** This description fits in the *praxial* approach defended by Elliott and Silverman (2015), also valuing the multidimensional character of the musical experience (Sloboda 2005, 168) and a holistic conception of musical knowledge (Schiavio and van der Schyff 2018, 1). It is also in line with wide research in

the field that highlights the problematic aspects of learning contexts that solely value long hours of solitary technical study (Hallam and Gaunt 2012, 7; Sloboda 2005, 293) to the detriment of a collaborative learning process that includes interaction, perspective-taking and negotiation between peers (Engeström 1987, 19; Schiavio and van der Schyff 2018, 5). The focus on individual achievements is characteristic of more competitive learning contexts, instead of a pedagogical approach that values the co-construction of knowledge and different meaning between all the participants in a 'musical conversation' around musical challenges (Elliott and Silverman 2015, 412; Swanwick 1999, 31). This approach is related to active participation that requires **a constant re-adaptation of each individual in favour of the well-being of the group** (Bois-Reymond 2003, 9).

Another conclusion taken from this research was that **the collaborative setting had a positive impact on the students' motivation**, this being evidenced by the high level of student participation (in the two years of the field project only one student left; an average attendance of 86% in the different activities) and the students' positive comments regarding a less controlled and more relaxed context (in comparison with formal orchestra classes).

One key finding was that **students were not resistant to engage in democratic and respectful relationships in collaborative music making between peers**. During the project, with or without designated leaders and despite different leaderships' characteristics, not once was there a situation when students did not respect each other or when they tried to impose their opinions by force. On the contrary, all of them tried to accommodate the individual characteristics, sometimes foregoing their own ideas in favour of those of the less participative students. This is one of the characteristics of pedagogical contexts that favour social interaction and communication (Allsup 2003; Biesta 2013; Dewey 1916; Freire 1983), becoming a 'transformative journey' where meaning making is achieved 'through mutually respectful musical conversation, discussion and exploration where knowledge is built through collaborative approaches' (O'Neill 2015 in Costa and Creech 2020, 149).

Some research argues against the use of competition as a pedagogical strategy to enhance, among other dimensions, motivation, pursuit of excellence, discipline and performance standards (Lowe 2018; Austin 1990, 22). In line with these claims, the fieldwork showed that **it is possible to develop musical and technical skills in a collaborative context where competition is not used as a pedagogical strategy.** In a similar vein, it was noted that **musical achievements are not dependent on competitive pedagogical settings**. Not once during the two years of implementation of the project was there any evidence of competition between students. For example, cooperation between all students was practised when some members of the group could not achieve a technical or musical goal, leading the others to combine efforts so that those colleagues could be reintegrated into the creative work. This key finding is in line with wide research about the theme of competition as a pedagogical strategy [see page 44].

There was a consensus among the students and teacher that **workshop formats were better suited to collaborative creative work**, allowing the development of relational dynamics and activities that, due to lack of time, were not possible during regular sessions. The workshops, seen as a setting where pre-established relationships in formal education are challenged and alternative roles are explored (MacGlone 2020), are supported by research in varied musical activities, such as: instrumental practice (Carey and Grant 2015; Swanwick 1999), improvisation (Brøske and Lysne 2020), arranging, composition and song writing (Elliott and Silverman 2015), and informal learning in jazz education (Virkkula 2016). Despite the acknowledgment of the benefits of workshop settings, I argue that the

good results achieved in the workshop sessions were the result of the previous regular sessions, where the work models were developed and 'tested'. For that reason, one finding that emerged from the fieldwork experience was that **the ideal setting for creative work is a combination of different group work models and relational dynamics, and varied musical activities**, this also being stressed by Carey and Grant (2015, 16).

Another important key finding is related to the tension between formal and non-formal learning contexts. According to the experience in this field project, **in some situations it was possible to replicate, at least to some level, characteristics of non-formal settings in formal music teaching contexts**. Some examples of this setting include the promotion of peer-directed activities where the teacher was almost, or even completely, absent, giving the control to the students and allowing the sessions to flow according to their interactions. This is an approximation to 'communities formed around a particular practice […] and informal learning arenas' (Johansen, Holdus, et al. 2020, 1). Other alternatives to the formal context were also explored and 'tested', including the 'workshop' format referred above, the changing of the learning space (working outside the school building) during school holidays (in a much calmer and relaxed environment). Referring to aspects associated to non-formal contexts I can add the fact that students volunteered to participate in the project and they were not being evaluated (or graded) on their technical achievements. In this respect, Bois-Reymond (2003, 12-13) highlights 'the advantages of the informal, voluntary and participatory character of non-formal education over formal education' in a context where the focus is not 'the need for formalisation, for reasons of recognition', valuing instead dimensions such as 'process skills or the recognition of transversal skills.'

4.1.2. The reconfiguration of the roles of the music teacher and the implications for his personal, professional and artistic identity

More than a construction and report of an exterior knowledge about what happened in this project and its main conclusions, what I prioritise in this discussion is if the pedagogical approach followed in this project had a positive impact on the multiple dimensions included in a holistic approach to music learning. From that, and according to the outcomes of the project and the following reflective process, I will address the key findings that, according to my personal view, can have a greater impact and a positive contribution to the students' autonomy, motivation and musical understanding, among other aspects.

Democratic settings

The research reported in this thesis was framed by a critical pedagogy positionality that defends the promotion of democratic and non-hierarchical relationships between all the participants in a pedagogical context (Cosme and Trindade 2007; Dewey 1916; Elliott and Silverman 2015). This positionality defends an intersubjective construction of knowledge (Gorzelsky 2009, 67; McGillen and McMillan 2005, 15) where all the participants are contributors by developing their own critical reflection and refusing the idea of superior intelligences (Freire 1996; Rancière 2002). Despite this, one of the key findings emerging from my personal experience in the project was that, **sometimes, it was necessary for**

the teacher (me) to take the lead, assuming a vertical hierarchy. In this project this happened mainly in three different contexts: 1) when the students' behaviour was an impediment to the group work; 2) when the work done by students was going 'off the rails' (this happened mainly when there was a need to meet a deadline), and 3) when I saw that students were having difficulties in achieving the musical goals, often causing anxiety and frustration. According to Engeström (1987, xxv), this hierarchisation is not necessarily negative because 'learning and innovation that only operate with horizontal or "flat" notions of cognition miss a crucially important resource in failing to explore the particular complementary potentials and limitations of different types of hierarchically arranged mediational means', defending that the introduction of hierarchy in the pedagogical relationship in order to use the teacher's knowledge is an important resource to be used.

According to my analysis of the outcomes of the field project, the distribution of tasks and the decision-making in the fieldwork were increasingly more horizontal, seeking the students' active participation and raising their ownership and agency regarding several aspects related to their own learning. However, despite the intended 'fading' in controlling the work with students, I realised that **it was difficult for me, as a traditional teacher, to step away from a directive role and give total control to the students**. According to post-fieldwork viewings, sometimes I did not resist taking charge even when it was not really necessary, revealing some difficulties in surrendering the control I was used to exerting, this being **a clear signal of an incomplete process of change regarding my role as a transformative teacher**. The teachers' resistance to a pedagogical setting aligned with critical and constructivist practices was widely addressed in the literature, with authors referring to aspects such as the threat to status, challenging self-esteem and self-image control issues (Kratus 2015; Tobias 2015). Arguably, these were not the reasons why I took over the control of the sessions. I am more inclined to acknowledge that my intention was to control the learning process, narrowing the many different paths suggested by the students to solve a given musical problem (Schrittesser, Gerhartz-Reiter and Paseka 2014, 152), trying to facilitate the reaching of a tangible musical outcome.

Analysing the project's outcomes also led to the conclusion that **it was possible to have students engaging in effective and meaningful music making and learning in contexts that are less strict (in comparison to orchestral classes) with regard to their behaviour**. I feel that I have made a significant evolution in respect of the students' behaviour, from the beginning of the project, when I felt extreme difficulties in dealing with the 'chaos' in the sessions, to a stance where I started to accept this alternative relational setting, dealing with a 'controlled chaos' that started to be seen as 'normal'. This setting allowed more 'space' for the students' expansive communication in collaborative work although, at times, I had to intervene to control some students' behaviour that was an impediment to the musical work. However, this intervention was not in the sense used by Popkewitz and Gustafson (2002, 82), as an attempt 'to order and discipline the subjectivities of its participants' but rather to only allow an effective musical conversation or, as stated by one of the students, **to maintain a 'controlled freedom' in the class**.

Personalised approach

Although it is acknowledged by me that **all students are different and need different pedagogical approaches according to their characteristics and interests**, experiencing this project as a teacher exponentially increased my awareness of this fact. At the beginning of the project, I thought that I was already acquainted with the students' individual

characteristics because all of them had previously been my instrumental or orchestra students. However, the pedagogical setting explored in the project exposed a multiplicity of layers to the students' personalities that were immensely richer, giving me access to information that had a significant impact on the strategies I used to promote their real involvement in music making. This was even more evident in the case of the students that were appointed as leaders because I had the opportunity to engage with them in higher level musical challenges that exposed their personal characteristics even more, my knowledge about them being complemented by watching their interactions with the other students. This finding is an argument in favour of varied and dynamic pedagogical settings where students have the opportunity to contribute to their own learning, assuming different roles and developing a personal voice (Elliott and Silverman 2015).

Another key finding of this study was that **not all students want to participate in the same way**. Some of them want to be leaders, some of them want to be followers, others like to discuss ideas verbally and others want to demonstrate by playing. As stated by Gordon (2011, 7-8) 'to teach as if all have average potential is to do an injustice to every child [because] when a teacher ignores the varying aptitudes of their students, average students are also prevented from reaching their potential.' Although, as a teacher who intended to intervene holistically, I wanted these roles to be blurred, I felt that **it was important to value all kinds of participation**, as long as the musical and non-musical goals could be developed in parallel, including democratic and engaged participation and a feeling of self-accomplishment.

Teacher's roles

What was striking for me in experiencing this field project was the awareness that **combining teaching with researching brings a level of information regarding the individual students and their social dynamics that can positively influence the quality of the pedagogical intervention**. As can be seen by the evidence presented in the previous chapter, the way I engaged with the students, from different perspectives and in varied activities, allowed me to get access to aspects of their personality that informed my intervention in respect of each one of them. These flexible interventions *in context*, responding to individual and collective problems that were identified by careful observation, were considered by me to be extremely positive, this being an essential transformation regarding the role of 'just' a music teacher, sometimes seen as a 'trainer' or 'instructor' (Swanwick 1999, 39). Research in the field defends an intimate relationship between teaching and researching, this being one of the features of participatory action research. Freire defends that 'there is no teaching without research' (1996, 29) and Custodero and Xu value interdependence, stating that 'when teachers become researchers, describing and interpreting what they see, they gain tools to best meet the needs of learners' (2008, 89).

One tension that emerged from this aspect regarding the role of **teacher–as–researcher** is related to the awareness that, given the amount of work that was involved in this project, it is impossible to adopt a similar approach in all my ensemble groups. For that reason, it is important for me to find a way, in the future, to integrate this experience in my daily pedagogical practice that, most of the time, does not provide the conditions in which to incorporate most of the changes proposed by this research.

Another major key finding emerging from the implementation of this project is that **teachers need to trust in the students and give them enough time to develop their skills, particularly if, as in this case, they are conditioned by a different system of values and practices**. Despite all the initial anxiety and insecurity, for both teacher and students, the exploratory approach followed in this project allowed a continuous search and the emergence of several surprises during the process, contributing to an active engagement from all those involved in the teaching/learning process. As said by one student, *the uncertainty of the process is a good thing* (FG 1), this being in line with the perspectives that value the creative process over the product, and the concept of music as a social praxis instead of a work-based concept of musical knowledge (Elliott and Silverman 2015; Martignetti, et al. 2013; Swanwick 1999).

The last key finding regarding the teacher's role was **the high level of flow that a teacher can experience as a musician in the context of a pedagogical relationship**. The horizontal relationship between me and the students allowed me to participate as 'one of them' in some of the musical activities, as an improviser, as a composer and as an arranger, even experiencing moments of 'flow'. Besides the positive contribution to motivation as a teacher, this flow was felt by the students, being 'contagious' and positively influencing the way students engaged with music making, determining 'the quality of the lesson and, indirectly, the enjoyment of the student' (Bakker 2005, 30-31). I argue that this **participation as co-creator and contributor to the musical outcomes** must not be seen as a 'new role' but as a consequence of a *praxial* approach. In the case of this field project, me and the students became equal beneficiaries of the educational act and of the musical experiences.

4.2. Discussion of themes that emerged during the fieldwork with students

4.2.1. Students' resistance

Addressing how to deal with resistance in the collaborative work, one important key finding was that **if the groups are formed in order to maintain a balance between more and less participative students, the ones that are more resistant reduce their level of participation because they know that the others will take the initiative and do all the work**. This was a very significant conclusion, with possible implications for all music-making settings. There may be possible tensions between the adoption of a setting where there is no differentiation between the students according to their characteristics, and the creation of conditions where less participative students are 'forced' to take ownership of their learning, instead of just following the guidance of more active colleagues. As seen above, this finding also argues in favour a pedagogical setting where students explore 'different roles and relationships' as happens, for example, in musical interactions during improvisation (Burnard 2002, 169), where every student has the opportunity to be highlighted and lead the work.

Another important conclusion was that **resistance is inevitable and cyclical, making it necessary to find pedagogical strategies to cope with it.** The evidence demonstrated that **an aspect that has a positive impact in reducing resistant behaviours is the creation of**

non-hierarchical and non-competitive environments, where there is a clear horizontal communication and where students collaborate with each other. This included the opportunity given to students to develop their own interests and have their opinions heard and valued (Martignetti, et al. 2013, 9), and the creation of collaborative dynamics in which students helped each other to overcome some technical or musical difficulties (Biesta 2013, 136).

It was seen in the project that **an increase in the students' musical skills had a positive contribution to reducing resistant behaviours, enhancing student agency, empowerment, emancipation, and ownership of their learning**. This positive evolution in the students' initiative taking emerged from their increasing familiarity with the musical concepts and related musical skills, with a gradual fading of the support given by the teacher, obliging the students 'to explore various decision-making routes and thereby take ownership of their musical goals and accomplishments.' (Elliott 1995, 279). Students' agency, ownership of their learning and musical and social challenges resulting from a connection with their real life fit clearly in what Dewey (1934) calls *an experience*, that is closely associated to the concepts of participation and communication.

4.2.2. Musical product

In accordance with the idea that 'the eventual outcomes of musical practices are not only musical works but new musical practices' (Elliott 1995, 68), this project was focused on music-making practices alternative to the classical tradition and not on the final musical product. However, the performance opportunities during the project led to the decision to compose musical products. The key finding here was that **the existence of a musical product to be performed can be positive for allowing students to participate in all the stages of the creative process, from the initial idea and sound exploration, to composition and rehearsing, ending with the performance**.

My main concern regarding the decision to compose musical products to be performed was that, at some point it would be necessary to allocate most of the working time in the sessions to rehearsals that I considered to be a 'non-creative' activity. According to Elliott and Silverman (2015, 342), my initial assumption 'that performing cannot be creative, only "re-creative" and that composing and improvising are always, and automatically, creative', is common among music teachers and… **it is false**. I reached the same conclusion when witnessing the students participating in the orchestra rehearsals, foreseeing the creative potential of what I considered to be a 'traditional' orchestra rehearsal. Important in respect of the promotion of a more active role of the players, in comparison with repertoire pieces usually associated to the classical tradition, was my decision to include in the musical score several possibilities, giving the orchestra students the 'power' to decide what to play, according to their evaluation 'in context'[55]. Combining these two decisions, one key finding was that **orchestra rehearsals have the potential to incorporate more creative activities, developing critical skills that will allow the students to make musical decisions in a dynamic musical practice**. Wide research values this multidimensional engagement of students in authentic music making associated with their active contribution to the final musical product (Allsup 2003; Elliott 1995; Swanwick 1999).

55 Although parallel to this discussion, this decision also allowed students to choose what they would play according to their level of technical skills. In some cases, students challenged themselves to play the more difficult parts, even if, initially, above their technical level.

Another aspect to highlight regarding the musical product was the reaction of the school's orchestras to the pieces composed within the scope of the project. I distinguish between two different orchestral groups: 1) more advanced students, and 2) students of the same age or younger than those in the project. The students' reaction to musical activities not common in the classical tradition proves that **students from all ages, after just a few years of learning, are already completely 'colonised' and framed by the practices of the *classical conservatoire culture*.** This was shown by the students' resistance to activities that were not related to reading and performing, but also regarding their role as music makers, always assuming a passive role, having someone telling them exactly what and how to play. Despite this, the younger students seemed to be more physically involved than in most of the other types of music they were accustomed to play in the orchestras.

4.3. Implications of the key findings for pedagogical practice, theory and educational policy

Combining research in the field of music education with the most important key findings identified and discussed above leads to my conclusion that **the Portuguese music-teaching system, including its values, principles and practices, requires an urgent and complete reconfiguration**. My research is based on evidence that points to possibilities other than the traditional classical approach to teaching and learning. Although assuming a close affinity with the *praxial* approach (as a philosophical positionality), in this research the adherence to any new prescriptive method is not defended. What is proposed is the transition of school managers, policy makers, researchers, music teachers and students to a more active, critical and problematizing positionality regarding music education. In parallel with the traditional training in conventional pedagogical methods, an investment should also be made in the exploration of alternative models to music making in schools and the development of critical thinking skills in all music education stakeholders. Regarding teachers, all teachers, what is essential is the undertaking of an improvisational stance that allows them to respond *in action* and *in context* in a world that is evolving so rapidly that the methods (old or new) cannot keep up.

4.4. Possibilities for the future of music education

Notwithstanding a call to action in favour of a real transformation of Portuguese music education, the process of change faces some difficulties. The first is **the passive stance and lack of critical thinking skills of most of the protagonists of the system**, framed by ancient beliefs and models. Related to this, Kratus (2015, 345) affirms that **those who are prone to a transformation of music education are clearly in a minority**, with the majority of people interfering with any attempt to implement a systemic change. Another difficulty is **a nonexistence of spaces where teachers can engage with alternative approaches to teaching,** making a 'contamination' that can spark individual questioning impossible. The focus in this research was on the need to promote an effective transformation in a system in which one of the worst enemies is our (music teachers) 'unthinking action' (Bowman 2013, 6). Signs of

stagnation are evident and teachers are 'fixated on past constructions of the natures and values of music', leading Allsup (2016, 273) to raise a central point: 'if knowledge and learning look differently today than they did a decade ago, then so does teacher professionalism, and then so do common sense notions of student roles and teacher roles.'

A declared and pragmatic goal of this research was the exploration of alternatives to the traditional classical model. Hovering between the wide background research about music education, my experience prior to this project, and the outcomes of the field research, some insights about the future of music education will be shared in this section. For the construction of these 'visions' about the future **the students' critical analysis about their experiences in this project was central**, valuing, this way, the philosophical and methodological approach in this research. However, this also means that what was perceived by me and by the students as positive in this specific personal, relational and musical experience cannot be assumed as liable to be transferred uncritically to other contexts.

This research had as its departure point a real–life problem, a desire and a question. The problem was related to the perceived lack of relevance of a formal teaching context to the music students' learning, leading to the desire of transforming that reality and to question how to promote, as a teacher, that transformation. This departure point from a place of 'not knowing' is highlighted as positive by Makinen (2018), asserting that, despite provoking feelings of 'holding our breath, confusion, helplessness, fragility, sensitivity, and uncertainty' (Heikinheimo 2020, 170) it is, in itself, a signal of some previous knowledge of the theme.

Any possibilities to be advanced in the field of music education imply a systemic discussion and reconfiguration, involving all stakeholders, policy makers and the community. One of the main contributions of this research to that discussion is that the basis of its outcomes are the real experiences of those who were directly involved in the act of making music in a pedagogical space. In this respect, special relevance was accorded to the students' critical processes and consequent contributions, and also to the teacher's considerations based on the structured observation of what happened in a real music making context.

Most of the authors referred to in this thesis advance possibilities for an alternative music education system, suggesting changes that will, most certainly, elicit generalised resistance. However, from a critical perspective, this tension between past and present or present and future (Allsup 2016, 271) or between *permanence* and *change* (Freire 1983, 67), should be the spark to a reflective process that must lead to concrete action through problem-finding and problem-solving processes (Randles 2015, 337).

In respect of some concrete proposals for the future of music education, Elliott and Silverman (2015, 461) refer that, in the short run, a transformation of the nature of schooling is necessary, increasing its inclusivity and social relevance, working 'for the benefit of [people] and their communities' and providing all stakeholders and enlarged communities 'with opportunities to experience music-in-action'. The nature of schooling is also raised by Wright (2018, 13), who doubts if the future of musical education lies in a model of compulsory schooling, giving examples of alternative models where students are afforded 'autonomy and creativity in relational, dialogic learning spaces' (Wright 2018, 23). In the long run, Elliott and Silverman (2015, 461) suggest the necessity to enrol everyone in the system 'in the quest to make schools more *educative* in nature and, therefore,

more hospitable for music teaching and learning'. The same idea is reinforced by Nichols (2011, 10), saying that 'a realistic vision for change in music education' needs the active participation of 'students, parents, colleagues, administrators, higher education professors, policy makers, politicians, music retailers, textbook publishers, facilities managers, and performing artists, as well as a host of others.' In other aspects, Mantie (2015, 179) suggests a resurrection of 'leisure and recreation [as] a fundamental rationale for school music, as a legitimate aim and purpose for music education', arguing against promoting solely the consumption of music. Hallam and Creech (2010, 342), giving voice to students about a 'school of the future', underline aspects like 'technology, relevance and flexibility in relation to learning and teaching', the importance of challenging activities in non-formal places of learning, the reduction of the number of students in classes, the development of 'academic and non-academic skills', assessment models based on constructive feedback and partnerships with groups of musicians, and personalised learning. Jorgensen (2001) reinforces the need for a dialogical and horizontal movement between teachers and students where all the aspects of the pedagogical relationship are discussed and negotiated 'play-acting' according to the real problems they deal with and transferring that knowledge to other situations, this being in line with what is defended by constructivist education models.

A significative number of real experiences in the field that attempt to fight against the hegemony of the *classical conservatoire culture*, are often 'enclosed' in the classrooms and do not have the possibility of affecting the practices of other teachers. Related to this, Sandra Stauffer (2012), quoted by Martignetti et al. (2013, 4), says that the 'stories of teachers who have changed' must be told disseminated and engrained 'in the educational imaginary'. In this thesis I am one of those teachers, telling 'my story', i.e., the report of my transformative experience in this project.

Seizing the 'creative' and transformative potential of a tension between my past experience and my will to change, in this section I will make some suggestions that merge the inputs of relevant authors with the outcomes of this research. These must be seen just as possibilities and should not be applied without a shared critical process and analysed according to the specific context in which it is applied.

I have used the concept of *systemic* several times in this thesis. What separates the approach in this research from Bronfenbrenner's (1979) original model is the assumption that the inner circles, besides being influenced and conditioned by the outer circles, have also the capacity to contribute to the transformation of the other levels of the system. Bronfenbrenner's model also seems to indicate that the main influence is exerted by those levels that are adjacent, for example, assuming that cultural beliefs, placed in the *macrosystem*, are separated from the individual. Contrary to this view, Vélez-Agosto et al. (2017, 905) state that 'learning processes are related to cultural practices that dictate the type of engagement the child will partake in the community', i.e., it is clearly ingrained in the individual's microsystem.

This introduction to the concept of *systemic* serves to clarify that, despite inter-influences with other levels (that are desired and inevitable), the main focus of this research was at the level of what I can associate to Bronfenbrenner's *microsystem*. Being coherent with a systemic approach to my critical view regarding music education, I will address all its levels but, not to be conditioned by the 'popular' conceptualisation of the terms used by Bronfenbrenner, I will not use the same designation for the different levels.

4.4.1. Level A

One of the concepts used by Bronfenbrenner is *chronosystem*, to which I associate the concept of *zeitgeist*. What is seen in the context of this research is a tension between an attempt to 'freeze' time, using anachronic practices and musical languages, and a parallel and unstoppable evolution of the social and individual world. Traditional music teaching approaches try to transport students to a previous time, demanding behaviours and skills that are extremely difficult to undertake in the current context, for example regarding the students' learning characteristics, time investment in music learning, and musical preferences. What is defended is a more open communication between different views on what music education is, accompanying the inevitable social and individual changes, although not disregarding a responsibility for the pursuit of a multicultural music education, including in this the music associated to the classical tradition.

4.4.2. Level B

Students

The proposals for music education are based on the principle that students are always the central elements of educative systems, leading every policy and endeavour to be made in order to give them varied, relevant and meaningful learning and experiences. As stated by Gordon (2011, 7-8), it must be clear and assumed by all the stakeholders that every child is capable of learning music and that the system needs to accommodate the personalised conditions in which each individual's interests are valued and their potential maximised. This means that teachers need to 'spark' the students' interest for learning music, feeding their curiosity in order to make them want to pursue increasingly higher levels of engagement with music making. This will lead to the refusal of strict methods and, by contrast, to the adoption of personalised teaching according to the students' learning characteristics and contextual conditions. In this pedagogical setting students can assume different roles in the classroom (as happened in this project), leading them, through the engagement of creative activities (as opposed to normative) to develop a critical positioning and a personal voice by intervening and assuming some control in their own reality. However, students are also 'beings-in-a-situation' and 'beings of "praxis": of action and of reflection' (Freire 1983, 14) and, for that reason, there must be an articulation between the individual and social conditions in which learning takes place. In this respect, what results from this research is the proposal that **the focus of music making must shift from individual and solitary technical training to situations in which students create and communicate intersubjectively, using, with an increasing level of fluency, the musical language**.

Music teachers

Despite an apparent reduction in the teacher's intervention in a constructivist model, **the teacher is still the central component in a transformative process in education**. Most of the thesis being based on that belief, many of the roles and requirements of music teachers were already widely addressed. Apart from some bureaucratic rules and

strictness regarding the Portuguese curricular organisation in music education, teachers and schools have some autonomy to decide how to intervene according to their particular circumstances. However, cases where the practices diverge considerably from one conservatoire to another are extremely rare, a clear indication of a generalised adherence to the classical approach. What is suggested is the taking of risks in the pedagogical intervention, developing a 'reflective musical practicum' and exploring 'solutions to teaching-learning problems in relation to their own situations' (Elliott 1995, 286). Teachers must distance themselves from the replication of strict and acontextual models and methods, engaging in a self-reflexive process that will determine the pedagogical strategies to use in each context. Some concrete proposals for the role of the teacher, most of them explored in the fieldwork with students, are:

- the adoption of a permanent critical posture, being sceptical about every imposed methodology or pedagogical dogma, recognising that each teaching context is unique;
- make use of different strategies, formats and tools, including a wide range of musical languages, musical activities, technology (*blended learning*), among others;
- create links to the students' authentic musical world, implies this a radical change in the teachers' musical, pedagogical and didactical training;
- rather than focusing almost exclusively on teaching technical and static knowledge, teacher and students should favour creative activities in a dialogical setting where the students can have a voice regarding their learning;
- engage in democratic relationships with students, seeking to promote their curiosity and active participation in problem-posing and problem-solving activities;
- scaffold the students' learning process, making use of constructive feedback, questioning students about their own process of learning and trying to make them progress to more autonomous behaviours, this being accompanied by a fading of the teacher's intervention in the musical work;
- promote an environment of mutual trust between teacher and students, acknowledging that the teacher does not know everything and that learning can be a collaborative process where the teacher is an equal partner;
- acknowledge that, despite individual characteristics, all students are capable of engaging in meaningful music making;
- refusing the labelling of the students according to their *level of talent*, teachers must give time to students to develop fully their creative and musical potential, always trying to promote meaningful musical experiences independently of the level of technical and musical skills;
- engage in training courses or structured research that confronts teachers with problematic situations, including 'theoretical, historical, social, cultural, political, artistic, and creative dimensions of music making, musical processes, musical products, and so forth' (Elliott and Silverman 2015, 113), to which I can include the immersion in other musical languages, the interaction with other forms of art and the development of technological skills.

Although highlighting the importance of teacher training in a process of individual and organisation transformation, what is more vital is the development of a critical assessment about their teaching contexts. From that, teachers can be emancipated to empower

students, and themselves, to engage in the exploration of the most effective pedagogical relationships… from that, almost anything is possible.

> A central proposal that stems from my professional experience but that was amplified by my experience in this field project is related to the belief that educational policies should also take into account the teachers' well-being, including their job satisfaction. In this respect, what I consider central is **the valorisation of the 'musician-in-the-teacher'**, engaging actively and permanently in authentic music making practices. In this respect, I ask: **how can a music teacher persuade and motivate students to maintain an active and lifelong musical activity if he or she, as a musician, does not set an example?**

Pedagogical setting

The pedagogical settings to be advanced here are framed by what was defended above regarding the role of teachers and students, the most important being the belief that the relationship between students and teacher in an educative setting is a multidirectional communication. Some suggestions are:

- the focus should be on active music making, valuing collaborative and creative settings and activities; however, making connections to theory is important, both theory and practice being beneficiaries of this dialectical relationship;

- the traditional work in choirs and orchestras can be, for some students, a major source of motivation, self-accomplishment and musical development. However, these settings tend to promote a passive posture in the students and, for that reason, they must be balanced with other creative activities that require more active roles from all the participants, and ownership of their learning;

- activities with significant connections to the students' real life and musical worlds should be favoured, but also an immersion in other musical languages that can broaden the students' musical horizons and allow a 'conversation' between different musical worlds;

- regarding the class setting, instead of a rigid structure, if possible (this is closely related to the maximum number of students in the class), the work should favour close collaboration between peers, allowing fluid and diverse settings;

- the duration of the classes must be flexible, varying between short and long sessions, allowing the development of different types of activities. The workshop format should be favoured, giving more time to the students to develop their creative achievements;

- music reading should be used in moderation and only in later stages of music making when it is perceived as not being an obstacle to expression and effective communication;

- in cases where students resist transformative learning, they must be given time to use that resistance in a positive and creative way. Instead of risking anxiety in the students, by assigning them deadlines or specific products, the focus should be given to the musical experience, metacognitive processes and relational *bildung*;

- risk-taking should always be favoured in music making contexts by exploring alternative ways of engaging in music making, for example, those used in popular, rock or jazz music. In this case, more important than the products of those languages is the exploration of the creative processes associated with them;

• students must have the possibility to lead the sessions, sometimes in an autonomous way or, in other cases, in co-leadership with the teacher. If possible, students should be given the opportunity to work independently without the teacher present in the class, thus promoting their autonomy and responsibility.

Although some of the suggestions were already referred to above, some conclusions emerged from the experience in the field project, especially relevant being the students' view on the best way to engage in collaborative music making in a formal context:

• the ideal group setting for creative work should have between six and eight students. This number combines the possibility given to students to participate in collaborative musical work, with an individual impact on the collective creation, with the diversity of ideas that must be discussed and negotiated;

• whenever possible, the group should have the opportunity to work autonomously in a democratic, relaxed and less constrained environment. In this case, minimum conditions of student behaviour must be guaranteed (by self-management or, if not possible, by the teacher);

• the work dynamics must be negotiated according to the specifics of each group, personalising the students' learning. This includes the response to students that require additional challenges and also to guarantee those that are more resistant are able to participate at their own learning pace without being highlighted or exposed;

• activities in which the students are completely alone, without the 'safety net' provided by the teacher, should be promoted. As suggested by one of the students, the ensemble classes could be interspersed with autonomous work without the teacher (two or three sessions) followed by a session to show the results of their work and receive feedback from the teacher;

• assuming that this must not be seen as a rigid structure, musical work should include most of the following stages: 1) discuss with the students the goals of the session (through a shared decision-making process); 2) divide the group into small groups (six to eight students) according to certain criteria (instruments, students' personalities or just randomly); 3) give some time to the students to create individually, forming the basis for group work; 4) allow time for the groups to structure or plan their creation (according to the goals of the session and using the individual ideas as its starting point); 5) engage groups in the creative process: *Experiment, Decide, Rehearse and Perform*; 6) final creative work, mixing all the groups, with or without a final performance (according to the predefined musical goals); 7) critical discussion and feedback.

Anticipating the possibility of transferring some of the practices experimented with in the field project to bigger instrumental ensembles, I set **four main principles that should be in the basis of any music making context**: 1) the first contact with music should be made in exploratory contexts and without barriers from the point of view of direct access to production and expression (reading, posture, technique, etc.); 2) everyone can be involved in significant musical experiences, regardless of their level of musical knowledge or experience; 3) the appreciation of the 'present moment' (not delaying the musical rewards too much) to the detriment of the preparation of works and pieces that may take months of preparation to perform; and 4) to focus on creation instead of imitation and reproduction.

According to my professional experience, the full application of these principles in my teaching context is limited by the conditions of the formal teaching system. However,

and arguably, any level of application of these principles will have a positive impact that goes towards promoting the well-being of students, generating greater motivation and involvement. For example, as I stated referring to the last phase of the creative process, when the musical products were already being rehearsed by the whole orchestra, the simple alteration of the way the rehearsals were conducted collaboratively between teacher and students could be seen as *a very good example of how the classes in a traditional music school can be in the future* (RJ e107). Another possibility of making a gradual transition between the traditional orchestral rehearsals and a more *praxial* approach could be, for example, to have two teachers in the class with different goals regarding their work: one could maintain the traditional approach (repertoire work in large ensembles), while the other could have the opportunity to develop more creative work (improvisation, composition, …) in very small groups. As it was in this field project, the work done in these small groups could be used later in the whole orchestra and, in this case, whenever possible, the students could be challenged to assume some leadership roles.

4.4.3. Level C

In this level I address the contexts in which the students interact directly, namely the music school and the wider community, including in these the parents and families, the other schools they attend and some local cultural, political, social and religious institutions.

Music school

Music schools are responsible for the significant improvement in the calibre of Portuguese musicians in recent years, mainly by providing higher education institutions with better prepared students (according to the classical tradition requirements), raising the general musical and technical level of access to performance and music teaching courses. However, **I argue that this improvement was due to an increase in the number of students in the system, and not associated with an improvement in the quality of teaching**. This diagnosis and the critical approaches to music education presented allow the suggestion of some possibilities for the roles of music schools in order that they become more relevant and effective in relation to their praxis:

- Schools should engage in generalised discussions that will lead to the construction of a coherent and effective educational project, stating the values and principles of its intervention, including musical and non-musical dimensions. This can be done following these phases: 1) a structured institutional reflective process, involving all the community, about the school's teaching practices and its outcomes; 2) making clear and public the values defended by the school; 3) an active search for a wide range of teaching approaches that could lead to the pursuit of those goals; 4) engaging in the experimentation of those alternative approaches in context; and 5) a critical analysis and evaluation of the process. All these steps (more frequently the last three) should be a part of a cyclical process, including the phases of planning, 'testing' and evaluation or, more simply, r*eflection-action*.

- In this transformative path there is a clear tension, that is not easy to solve, between the freedom teachers should be given to develop their own views about music education and the goals and values defended by the school as a whole. The freedom given to teachers entails greater responsibility by asking them to reflect critically about their own experience

and develop the capacity to defend their teaching options, being sceptical of pre-imposed beliefs or practices, in order to deal with internal tensions and doubts. The following step is to share the outcomes of an individual reflective process with colleagues in order to create a shared rationale in the same institution[56]. This requires the need to promote effective communication between teachers of all subjects, engaging them in discussions to create common approaches (methodological, musical, philosophical) to teaching. This approach will be unsuccessful without a complete reframing of the current music teaching system and without continued efforts to maintain a critical positionality regarding teaching practices.

- If within the principles of a school there is the belief that a music education is possible and a right for all children (as defended by this thesis), then that school must have instruments and mechanisms with which to assess, regularly, if the wider educational goals are being achieved, not only by a small percentage, but by *all* students. For this assessment, the teachers' grading of the students is not enough, with detailed and frequent reports about the students' achievements and difficulties being necessary, in parallel with a pedagogical stance that explores alternative teaching approaches (once again, this is perceived as extremely difficult in such a rigid educational model). Instead of using grading as an evaluation system that promotes comparison between individual achievements, the school must promote transformative learning and reflect on the possibility of transitioning to a system based on constructive feedback where personalised assessment is favoured.

- The creation of links with non-formal or even informal learning settings should be promoted. This does not mean that it is possible to replicate all the conditions associated to non-formal or informal contexts in a school (that would be a clear contradiction). The 'art of the possibility' is somewhere 'in between', in the 'third environment', bringing to the school dimensions that are valued in non-formal and informal settings: relational contexts, collaborative learning in egalitarian relationships, less strict environments and the opportunity for students to develop their individual interests. However, another possibility can occur by building effective connections with the world outside the school, involving institutions from the community.

- Although not always possible to implement in schools due to the centralised legislation, schools must refuse a curriculum based on the assumption that every music student learns in the same way, leading to the adoption of the same practices and strategies with every student.

- As defended by several authors, and reinforced by all the participants in this research, to allow the kind of work that can lead to more effective, rewarding and meaningful music learning, the number of students per class needs to be reduced significantly. As the reduction of the number of students per class is linked to financing aspects, perhaps one possibility is to reduce the time each teacher spends with a group of students but, at the same time, promote the conditions for students to work collaboratively with peers without the teacher being present. As this would be a huge transformation regarding the existent practices, and presumably difficult to implement in short term, especially with students that are already shaped by traditional teaching practices, it could be one of the changes with a greater potential impact in the formal music teaching system.

56 This does not mean the same practices or methods followed by every teacher.

Community

The relationship between schools and students with the community was only briefly approached in this thesis but I consider it extremely relevant to address the potential of the synergy in music education. As stated above, traditional music education intends to decontextualize students. Opposite to this is a constructivist learning approach that recognises students as individuals in a given cultural context and bearers of specific principles and values that affect the way they learn. Based on the belief that music schools should not be isolated, and that every learning situation is always context-specific, students and schools will benefit from an immersion in authentic music making that can include groups from the community. This can contribute to an increase in the diversity of the musical experiences, the development of a wider range of relational and social skills and also the raising of cultural awareness.

As in every educational system that defends that learning does not occur in isolation, music education should strengthen ties with the community. In this wide concept I include the individuals and groups with which students can be directly involved (parents, families, professional musicians and groups, other schools, or local cultural, social, political or religious institutions, or others) by sharing common pedagogical, artistic or social projects using music making as a common denominator. Engaging with the community strengthens the possibility of merging formal and informal contexts, improves the students' self-image and motivation and, perhaps more importantly, attributes a wide range of meanings to their multidimensional learning. The 'third environment' referred to above can assume a central importance, also contributing to the fight against the 'schooling of society' and, at the same time, empowering people that are involved in many institutions from the community, increasing their contribution to the building of society. According to research and empirical knowledge, this type of collaboration allows the 'synchronisation' and the alignment between the worlds of school and real life, attributing meaning and relevance to the *experience* as conceptualised by Dewey.

The most important aspect regarding an effective relationship between the school and the community in which it is embedded, is that it allows the possibility to transform and to be transformed in a dialogical relationship, this being one of the main goals of a humanistic education. In a sense, this is an expansion of the role of the school, not in the way that politicians tend to do, by attributing new social roles to school, but by focusing on the educational goals of its students that can be shared with all the community, going towards the old saying: 'It takes a village to raise a child!'

4.4.4. Level D

> All the possibilities advanced in the previous levels were based on the outcomes of the field project with students. I must clarify that most of what is going to be suggested in this section is less supported by evidence in the field and more the result of my personal reflective process during and after the implementation of the project, using a combination of inductive and deductive approaches to the data.

This level is related to dimensions with which students and teachers do not relate directly but that have implications for their lives. As examples, I will address the macrosystem

of the music schools (for example music schools' associations), universities and teacher training programmes, and the educational policies in the field of music education.

An important transformation to undertake in music education, including all types and levels, is to reclaim an active role in the Portuguese educational system and not as an isolated, elitist and special part of it. With specific regard to the music education system, instead of a horizontal relationship, there is a hierarchisation of music teaching institutions according to the goals of teaching, the most valued being the higher education schools, where goals are focused on training performers, and at the other extreme the generic schools where music, as stated above, is relegated to the periphery of the curriculum. The isolation referred to above is not only between the specialised music teaching system and the generic schools, or between higher education and primary/secondary education, but also within the sub-system of music schools and conservatoires. Therefore, the first proposal in this respect is **the creation of networks from different environments that can put teachers, researchers and schools communicating between themselves**.

In this work I problematize the fact that music teachers are not sensitive to their students' voices regarding their musical and training experiences. In the same vein, I also criticise the reduced communication between universities and the basic and secondary level music schools, those contacts being limited to the need to have future music teachers undertaking an internship in the music school to get their graduation level. This situation seems analogous to the 'difference of intelligences' referred to by Freire, being, in this case, a difference of institutional intelligence, where most of what is done in the lower levels is dictated by the entry requirements of students to higher education. The proposal in this case is, once again, **the creation of open lines of communication between different teaching levels**, allowing a more effective discussion between all the stakeholders, giving them a more profound and real view of the system. Higher music education institutions should take the initiative to call all the players in the field, viewing them not only as providers of future students but as equal partners in the construction of more meaningful musical experiences for music students.

Still referring to higher education institutions in music, and according to my professional opinion, they have the responsibility to form a balance between the tradition of which they are bearers and the progressive movements in arts and education. In addition (and not an alternative) to transporting the musical cultural heritage to the present, these institutions also have an obligation to reflect upon the present, finding the best ways to accommodate the individual and social changes.

Most of the possibilities raised in this section are related to teacher training programmes. Schools from every level should seek to maintain a process of structured reflection about their practices, creating opportunities for teachers to share perspectives, discuss pedagogical practices or just to have contact with other alternatives to music making or teaching. In this respect, I suggest **the creation of training offers for music teachers that can contribute to the development of their reflective process**. The almost nonexistence of a continuous policy in music education is a tacit acknowledgment that the initial training (sometimes just as a performer) is sufficient throughout the teachers' life, but also a symptom of the lack of interest in changing music teaching.

Regarding the Portuguese context of music schools, academies and conservatoires, and despite positive changes in some aspects of the schools' pedagogical autonomy in the last years, the system is still overly centralised, with most of the decisions being taken by the Portuguese Ministry of Education. According to examples of other countries, and being

perfectly aware of the political risks of such an option, **a shift of the decision centres to more local political bodies could be positive regarding a better connection of the school's educational project with the communities and local circumstances**.

Still regarding the centralism of the system, although with major risks if we believe that the main stakeholders are not still prepared (or willing) to engage in relevant discussions that can redefine the goals and practices of music education, increased flexibility in the system regarding the curricular structure, access and financing rules could be positive. This would imply a collective emancipation to take some risks by implementing alternative models, being clear that it would lead to resistance and contention by creating relevant transformations to the status quo of the music teachers' and musicians' classes. In parallel, this would also imply a continuous discussion movement, contrary to the usual occurrence of 'events' (conferences, encounters, …) where a really small and homogeneous part of the system (most of the time the school managers and researchers) discuss some of its problems but, almost always, omit to discuss the system's rationale and the teaching practices in the field.

Referring more specifically to educational policies, one of the main tools of an educative system is the **curriculum** that, on the one hand, includes in itself a given social, political and philosophical rationale but, on the other hand, and perhaps more often, is used as an instrument of control of school managers by policy makers, of teachers by school managers, and of students by teachers. Having presented above a critical view about some approaches to curriculum making [see page 41], I am aware that what is proposed by several authors regarding the existence of an open curriculum (in more radical approaches, its elimination) is somewhat utopic in our current reality. What I propose is that, using the theme of curriculum to ignite a wide discussion in the music teaching system, all stakeholders should reach a compromise between a radical transformation and a way to gradually instil in the players in the field new teaching approaches and more responsibility for decisions regarding the values, principles and goals of music education.

In my view, the main principles for a curriculum change should value the following aspects: 1) one can only learn music by making music; 2) the elimination of barriers between the various disciplines; 3) the assumption of music as a mainly social activity (music making in groups), valuing both musical and non-musical skills; and 4) the creation of authentic contexts, for example connecting music teaching practices with the students' musical listening habits or by making a real connection with the community. Most of these proposals are also in line with the *praxial* approach defended by Elliott and other authors, assuming a 'learning by doing' and exploratory approach to learning that goes beyond the narrow concept of 'practice' (technical and noncritical drilling), and includes a wide range of skills, types of knowledge and philosophical stance.

> Referring to my personal experience of studying and visiting some other formal and music education systems, most of what is defended here is already being implemented, at least to some extent, in some European countries. Some of what I consider to be good practices to explore are:
>
> • the flexible grouping of students in small ensembles, where music learning is firstly and mainly an authentic music-making experience;
>
> • the flexible grouping of students according to individual characteristics, instead of the traditional classes organised by ages;

- a flexible organisation that allows, after assessment of the characteristics of the groups, the restructuring of the groups every six weeks, enabling a more immediate and effective response to any problem detected in the pedagogical setting;

- a less linear acquisition of knowledge and a greater focus on musical problem-solving activities associated to the real interests of the students, thus connecting the music school world with their real musical world[57];

- These proposals need to be discussed in the scope of a concrete reality. In some contexts, some of these proposals may be considered inadequate, impractical or even harmful.

In this thesis curriculum is not seen as a strict set of rules or a list of works graded by their level of technical difficulty. A curriculum should be a set of generic principles that, in order to be followed, need effective teachers that reunite musical (expressive and technical) and pedagogical competencies, following an ethical behaviour in which the students are the central concern of the teacher. For this to happen, it is important that the system trusts the teachers to be responsive and active regarding their students' and the context's characteristics, always favouring a personalised teaching. Therefore, instead of a superficial understanding of music education based on secondhand knowledge of the pedagogical relationship (Jorgensen 1990), teachers need to engage themselves in the pursuit of an involved process of becoming acquainted with their own realities. **However, if the teachers refuse to accept this challenge and increase in responsibility, it is wise to consider a return to teacher-proof curricula**.

In Portugal, the financing system of music schools and conservatoires is based on a given amount of money per student, according to their age level and regime of attendance, and schools need to guarantee that they strictly follow the fixed curricular structure. Grounded in the belief that every reality is different, I defend that the funding of the system can be used in a less prescriptive way but, in this case, school owners or managers might not resist the temptation of trying to maximise their profits, with negative consequences for the teachers' work conditions and the quality of the students' learning. However, this proposal is based on the belief that the public managing bodies would have the means to evaluate and manage the proper application of funds.

Another perceived problem in the current funding system is that almost the totality of the funds is spent (at least in non-profit institutions) on personnel (mainly teachers) and operational expenses. Contrary to previous financing models in Portugal (prior to 2009), this leaves no space for the development of pedagogical, artistic or social projects that could enhance the impact on the students, on the school and in the wider community (the same can be said regarding the lack of funds for the majority of schools to invest in teacher training programmes). A possibility regarding this aspect could be the cooperation between the Ministries of Education with others such as Culture or Social Security, attributing funds that could allow the development of cultural, social and community projects.

57 Once again, I want to stress that these strategies should be used in addition to an immersion in other musical languages, including classical music, in order to widen the students' musical experiences and musical understanding.

4.5. Final comment on this section

As defended above, a comprehensive transformation, involving all the dimensions of the Portuguese music-teaching system, needs to be undertaken. However, as experienced personally in the development of my research project, even if all the policy makers agreed with some new approaches and a new rationale for the music teaching system, I do not defend that these should be implemented in a top-down movement. Following Kratus' suggestion for 'small acts of subversion' within the principles of critical social theory and constructivism, the transformation process should begin by giving time and space for the teachers (as main change agents) to be aware of the new possibilities potentiated by a less restrictive context, allowing them to explore new pedagogical relationships and new musical worlds, confronting their own previous experiences with their current teaching contexts. This would require some previous preparation from teachers but, most of all, it should provide a context of freedom where the teachers could emancipate themselves to look actively for answers regarding their specific teaching practices.

Despite the proposals presented above, I am aware that, currently, this kind of movement in music education is not possible because, to be successful, most of the teachers, school managers and even researchers need to recognise a problem in the traditional teaching approaches… and, in my professional opinion, this still cannot be said for the majority of cases in Portugal. Thus, the alternative for those who assume a different positionality regarding the traditional practices, is to assume a resistance movement against a generalised practice that will inevitably, again according to my professional opinion, lead to an implosion of the system.

> This advancing with concrete proposals assumes a clear a tension between a utopian ideal (clearly defined in my mind and, desirably, transposed for this work) and a pragmatic exercise, suggesting themes to provoke discussion. Although this may seem as an act of defiance (is it?), it would be extremely rewarding to have school managers, music teachers, researchers in the field, and policy makers contesting and arguing against (or in favour) of some of these proposals in respect of their context. The confrontation of these stakeholders with these proposals should be seen, in itself, as an act of critical reasoning and political and philosophical positioning that could ignite the much desired, and urgent, systemic transformation.

5. CODA

5.1. Limitations

This research tells 'the story' of a collective transformative process within a Portuguese music school. The main limitation is that the pedagogical strategies, activities or outcomes cannot be transferred to other contexts without being subject to critical analysis, in accordance with a philosophical and methodological stance that acknowledges the uniqueness of every educative context. However, I argue that this is only a limitation from a positivist and determinist research perspective. In contrast, from a qualitative, critical theory perspective this research can be understood as potentially transformative, providing the participants (teacher and students) with tools for a deeper understanding of their experience and for engaging with the world through active participation and construction of knowledge through intersubjective processes.

5.2. Future Research

> My experience as a researcher in these past years can be seen as an unfolding process that, instead of leading to definite conclusions, is constantly raising questions that embrace several different fields. It has also been a kind of addictive and obsessive process and, for that reason, it seems almost impossible to resist the urge to continue the path that was started more than a decade ago. Despite the countless possibilities for future research, it is clear to me that, regardless of the theme, the research positionality will be maintained, following the principles of critical social theory, always with the final goal of intervening in my own reality. Also acknowledged is the desire to research larger systems (pedagogical, cultural, social or political), although always defending the need to be connected to research at a micro level.
>
> Still not knowing where the flow of events will take me, in the present moment I identify some strands with the potential for future research.

During the implementation of the field project some questions with potential for future research emerged:

• What would be the outcomes of a similar project undertaken with students without any formal musical training, thus, not being already so conditioned by traditional practices?

• What would be the results if, instead of an isolated experience, all the music curriculum was influenced by the *praxial* philosophy?

• How should an effective learning community in a formal music education setting be built?

• What would be the best 'common ground' between non-formal music making and formal music education contexts?

• What changes would it be necessary to implement in 'traditional' orchestra rehearsals in order to promote a more creative and participative role for all its individual musicians?

More directly related to the research reported in this thesis, in a few years' time I would like to 'map' the longer-term musical paths of the participants in this field project. At the moment, most of them still participate in the school's orchestra for which I am responsible. My interest (academic but also personal) would be to know if at a later stage in their life they would still maintain an active musical practice, but also to assess their perception of their experience in this project.

5.3. Synopsis and overview

In perspective, I am aware that this thesis reveals some of the difficulties I encountered during the process of writing: 1) the limitations of writing when trying to describe musical experiences; 2) the articulation of an explorative approach to research with an adherence to methodological rigour and validity; and 3) the inexperience of writing in a foreign language, limiting the fluency and vocabulary. However, my main intention in 'telling the story' of a transformation process shared by students and teacher was achieved through the 'polyphonic approach' adopted in the thesis, 're-orchestrating' multiple perspectives in a cohesive narrative.

The first part of the thesis can be seen as both detailed and comprehensive, covering a wide range of topics instead of focusing solely on the two major themes raised by the initial research. This exploration of several fields framed a critique of and displacement from the belief system of the *classical conservatoire culture*.

The methodology chapter was also a challenge because I soon realised that I was being 'dragged' by the events in the field. However, I feel that the final result, that I call my personal research method for that specific context, is coherent with the philosophical stance defended in this research.

Regarding the presentation of the data, I want to stress the difficulty of reducing significatively the massive amount of data from different sources and of different types. Seeing this research in perspective, perhaps each one of its phases could serve as a basis for a separate research project but, as shown by the outcomes presented here, the transformative process would not be as visible, reinforcing the idea that, in education, students and teachers need time to integrate changes and new behaviours.

Regarding the last chapter, where I tried to emphasise the most important key findings, I highlight the section where some possibilities for the future of the Portuguese music teaching system are advanced. That was not done without serious doubts regarding the coherence of the positionality I assumed throughout this thesis, mainly the assumption of a sceptical posture regarding external 'prescriptions' of methods. Those possible alternatives to music education reinforced a permanent tension between the values, principles and goals of education and the 'real world' of schooling. The final decision to advance with this section rests in the idea that the school institution is the best prepared and socially accepted to implement a transformation of policies in music education. The other justification is given by both critical pedagogy and action research: that one of the goals of a teacher is to participate and actively intervene in his own context.

Regarding the writing of the final document and its broad scope of themes, it was analogous to a process of 'sculpting', carving and grafting. Departing from a much deeper immersion in a wide range of themes, for practical reasons, I tried to focus on its essential ideas. However, it is my belief that most of the themes raised in this thesis, some of them only recently approached in music education, carry a high potential to have a positive impact on our field.

5.3.1. Results of the research

> As a final personal evaluation of this research, and at the risk of being interpreted as self-praise, I consider that the main goals of the project were achieved. The results can be divided between the ones whose evidence seems to be clear and others that are inferred. In the first case I stress the transformative process undertaken from the traditional approach to instrumental ensembles teaching, to settings more in line with critical social theories and constructivist principles and approaches to the creation of musical knowledge. I stress specifically dimensions related to *musical knowledge* or *musical understanding*, including new music-making practices explored in the classroom setting. In the case of a deeper understanding of the concept of *musical sense-making* or related concepts, a clear process of approximation was made, allowing a definite evolution in the awareness of the concept and its relevance to music teaching and learning.

With their participation in this project, students and teacher engaged in what was seen (by me and by them) as a meaningful experience (musically and non-musically)[58], this being a desired consequence at the beginning of the project. Some evidence that reinforces this belief includes teacher and student testimonies, the level of participation in the activities and the fact that all except one of the students remained in the project from beginning to end, despite its long duration. Some aspects in which the impact was felt include their self-confidence (mainly as creators and musicians), motivation, group dynamics, critical thinking and musical problem-solving skills and overall musical understanding. Emancipation and autonomy were also apparent but not to the same level in all the students, although, given the gradual and consistent evolution during the project, one would expect even higher levels of autonomy if the project continued for some time.

Assuming one of the main goals of music education to be the promotion of a life-long musical practice, there are some indications, five years after the end of the field project, that can prove the students' ongoing involvement in music making: the large majority of students (15 out of 18) continued their musical formal training at secondary level and, from these 15 students, 14 of them concluded the secondary music course, and 13 of them (even those who are no longer students of the school) still participate in the school's choir and/or orchestras. Although the sample is extremely small and it is still too soon to see this as a clear and solid result, this information can be considered relevant if comparing these numbers with the average of the school. Another aspect to stress is the fact that, from the 18 initial students, four of them are attending music courses in higher education. Although motivation for the students to pursue a professional career as musicians was not one of the goals of the project, a possible conclusion is that this *praxial* approach does not exclude those who want to become professionals in the field of music.

58 Only one of the students reported some divergence compared with the opinions of the other students, revealed as lacking motivation in some moments.

> One of the most important conclusions drawn from this project was that all the students experienced meaningful music making, regardless of their level of musical and technical skills. This reinforced my belief that in music making **predisposition is not the same as predetermination**, i.e., it is not only those students that at a given age show better musical and motor skills who can benefit from music education. This leads me to argue, once again, in favour of a refusal of the concept of 'talent' as an early selection method, limiting, at the outset, some students' engagement in meaningful musical practices.

Returning, one last time, to the title of the thesis, my conclusion is that the transformation needed to reconfigure the teacher's role in order to promote the students' musical sense-making implies an engagement that goes beyond the replication of teaching methods. However, having experienced this project does not mean that I would be comfortable to engage in similar future projects, foreseeing the same difficulties and anxiety of never knowing what to expect due to the unpredictability of the challenges. Despite the duration and level of involvement in the project, I did not reach specific 'prescriptions' for dealing with all the possible events occurring in a pedagogical setting. In this respect, one of my conclusions is that we (teachers) need that a space of ***a-pedagogy*** (not *anti-pedagogy*) be developed, arguing against a concept which, in its Greek etymology, assumes that the teacher is active (leads the child) and the student is passive (is lead…), this being perfectly accepted in the Socratic approach but strongly contested by critical educators for setting up the highest form of *brutalization*. What is proposed for the role of the teacher is solely a transition to a more active positionality, reexamining what is taken for granted, and assuming a sceptical and critical view regarding everything that is dictated by some 'authorities' in the field. Teaching always implies an engagement with real life, going through 'the messy business of exploring and weighing alternatives' (Bowman 1998, 9-10) and making choices in context.

> As a teacher, this project prepared me to be more flexible, to believe in the learning potential of my students and not to be so concerned with the end product, focusing primarily on the process, that should be creative, collaborative and transformative. Reinforcing two of the most important conclusions drawn from this work with students, if we give them more responsibilities, they become more responsible for their learning and, that way, teachers can really teach what they do not know.
>
> Regarding the process of *musical sense-making*, I think I know what it is, I think the students understood the concept, but I am not sure if I really can describe it in words. However, by engaging in research in an exploratory and participatory way, my initial concept of *sense making* was widened, it being clear now what it is and how it is manifested musically. Although being difficult to 'prove', it seems probable that raising the level of musical sense-making, or musical understanding, had a positive impact on the students' learning. This musical awareness led them to want to achieve some musical goals that, sometimes, implied technical skills that were above their current skills. This leads me to make the following statement: **Even if we, as teachers, defend that the main focus of music education should be technical mastery, perhaps this path to sense making is also the best way to achieve it!**

5.3.2. Personal experience in the project

As a teacher and as a researcher, the 'adventure' of undertaking this PhD and this research was personally and professionally transformative since the moment I was integrated into a research 'tribe' and a context that promoted constant self-questioning. Although the first impact carried a feeling of some 'isolation' and 'tension' due to the novelty of the discussions in an unfamiliar ground, it allowed me the displacement from my own professional context that I was looking for. However, and as foreseen initially, after a permanence in a drifting territory (this research), I returned to my place of origin, i.e., the traditional school system.

Seen as extremely important in this academic journey was the possibility to make research without being forced to follow rigid academic constraints, being supported (scaffolded), challenged and stimulated by my advisers, teachers and colleagues to follow 'my own' research method. My individual process of transformation passed the phases of *initial critical awareness* (recognition of a problem), *emancipation* (detachment from my reference values), *empowerment* (engagement in critical action) and *refleshment,* by reframing myself and my role as a teacher after developing a conscious awareness (Elliott and Silverman 2015, 175). In parallel with all these stages of individual transformation, the most difficult process to deal with was *unlearning,* conditioning most of the other stages of the transformation because, as said by Morrice (2013, 266-7), quoted by Qi and Veblen (2016, 106), these experiences were not 'a straightforward process of building on previous learning', but involved an act of 'unlearning' and 'identity deconstruction'.

Isolation was also felt in relation to my teaching context where, despite some increasing openness to discussion of a very small number of my colleagues, most of my arguments were not easily accepted or even fully understood, forcing me to review my thoughts and tighten my arguments.

In such a context, hostile to any kind of change or transformative process and where an immensity of reasons and difficulties (nonexistent, perceived and/or real) are presented to prevent any kind of threat to the status quo, in the future I have two options: 1) to engage in small acts of subversion, as suggested by Kratus, or 2) to assume a more radical speech against what, in my view, will contribute to the deterioration of the music teaching system by it not being capable of engaging most of its students in meaningful musical experiences. In respect of my future intervention, an ethical issue related to democratic decisions arises: *should I, based on my personal beliefs, try to promote change and transformation in an institution where the overwhelming majority of teachers are against those changes?* Dealing with this inner conflict, I decided to ask myself a different question: *how can I be passive in the face of a situation that I consider to be detrimental to the students' interests?* Perhaps the strongest argument I can use for my active agency in favour of a transformation that, according to my personal and professional view, is not desired by the majority of teachers, is that our music teaching system is at risk of losing its relevance if we do not fight against its endemic immobility. Only by 'practising' this active stance can I assume, as defended by Freire (1996, 103), **a coherence between what is said, what is written and what is done.** Therefore, I think I have the responsibility to defend what I believe and commit all my efforts, using convincing arguments, to promoting what I perceive to be a positive and essential transformation.

Swanwick (1994, 1) stated that 'we only get to understand and like music by rubbing up against it', and I dare to suggest that this statement also applies to research: only those who engage in research are prepared to understand its fundamentals and wider impacts, it being extremely difficult, or even impossible, to retrieve the same impact just by reading about the research made by others. Despite the ethical doubts of researching my own students and myself, it is my belief that no one could have done this research on my behalf.

This research highlights a paradigm where teachers are empowered **to risk and create their own stories** instead of continuously reviving and 'staging' the stories told by others, in another time, in another place and with different people. This research work is an example of a profound professional questioning of someone with more than 25 years' experience in the *classical conservatoire culture*. But real experience is gained by assuming an active role, continuously reflecting and responding in context. It is desirable that, from multiple experiences of teachers involved in transformative action in their own teaching context we can start discussing from a common ground where transformative teaching is assumed to be the norm (Stauffer 2012).

Although seemingly an attempt to end in a more conciliatory way, I need to stress that there are extremely competent music teachers, most of the time this being related to their personal qualities that can surpass some of the problems of the system. However, I argue that in our profession there lacks a real philosophy that can guide our professional and ethical behaviours. The immersion in the principles of the *praxial* approach to music making can be a 'stone in the pond' that will agitate the 'standing waters' of the traditional approach, breaking the conformity and fuelling a dialogical relationship between stakeholders in music education. However, Rancière and Freire warn us that some critical pedagogues or progressive educators, despite announcing the emancipative character of their intervention and the principle of equality of 'intelligences', end up in the trap of suggesting that, without them, learners would not have arrived at what was envisioned by the educators, this being a clear example of *brutalization*. Was I not one of those examples at some moments during this project? And even if that happened, was this project worthwhile regarding the goals of individual and collective transformation? **Is there a middle ground between *brutalization* and *emancipation*?**

Stressing again the point: no one could have done this research on my behalf... in the same way, I am certain that the outcomes of this research will never have the impact on other music teachers that it had on me. The research project started eight years before the writing of this thesis and the field project with students ended almost five years before. It seems a long time but, despite professional and personal circumstances that did not allow me to continue with writing the thesis, in my mind the research has never stopped, in a process that I can call, in perspective, somewhat obsessive. This is the research of my life and it is clear to me that this new 'obsession' will always be present, independent of the written results it can, or not, produce. However, more important than the products of the research, is the continued practice of research... I have still not decided what to look for, but the search will always be there.

5.3.3. Final notes – Where am I at this moment?

In accordance with critical social theories, the outcomes of this research led me to reclaim a more participative role in forums, conferences, seminars and research meetings, where I started to expose the themes developed in the scope of this research. Contrary to what had happened before, when, being surrounded by 'true believers' of the classical tradition, I usually adopted a more cautious approach, in these interventions I started to provoke my colleagues into going beyond the 'traditional' discussions. Undertaking an assertive positionality regarding my beliefs, the message I intended to convey was that we, music teachers, need to be more prepared to reflect critically upon our 'heritage' regarding pedagogical practices. Instead of being carriers of an unquestioned tradition, we must commit ourselves to 'the art of not being governed' (Foulcalt 1978). My evaluation is that there is an increasing number of teachers that are restless or disquieted regarding the current music teaching system in Portugal. However, the percentage of teachers that defend the total dominance of the classical approach to teaching music is still overwhelming.

Pursuing a coherence between the theory emerging from my research and practice, the critical stance defended in this thesis increased my social responsibility to intervene in other ways, advancing with proposals that, combined, could potentiate the positive impact of the system as a whole. The proposals were made in the following fields:

- Teacher training – I structured a short training course for music teachers[59], school managers and other stakeholders based on the main issues raised by the *praxial* approach. The main goal was to provoke and engage participants in a discussion about the principles and practices of music education, making connections between the content of the course and their own circumstances.

- Community music – I designed a project called *Gaia Ensemble*[60], where the main goal was the empowerment of institutions of the community to engage in collaborative music making, not only among its own members but, most importantly, in collaboration with other institutions of different types.

- Culture – Another project created was 'Fosso de Orquestra'[61], being mainly intended for professional musicians without opportunities to engage in professional performative practices, and future professional musicians. Exposing an inconsistency in the speech of music teachers (inactive as musicians) who defend that their students should engage in long-term music practices, this project intends 'to activate' these musicians that are 'hidden' from the public (hence the name of the project).

Hopefully, given the expected wide scope of the projects, their implementation and following discussions will have an impact on the local public policies in the fields of artistic education and culture.

59 The first edition of this training course (25 hours) took place in July 2021, for music teachers of a music school, with one more edition in another music school being planned for January 2022.

60 This project was presented to the local City Hall, proposing the implementation of a pilot project involving a small group of institutions, the goal being the creation of a basis for discussion and implementation of future local policies in the field of social assistance, education and culture.

61 'Fosso de Orquestra' ('Orchestra Pit') intends to give opportunities for 'hidden musicians' to be engaged in musical practice. Although not being solely intended for orchestral music, in the scope of this project the 'Theatre Orchestra' was created, with its inaugural concert, supported by the Culture Department of the Municipality, on September 24th 2021.

As an active learner participating in this project, I could not be more in agreement with Biesta's statements in the *Prologue* of his book 'The Beautiful Risk of Education' (2013). According to him, referring to Yeats, 'education is not about filling a bucket but about lighting a fire', refusing the *input/output* model of some pedagogical approaches, stating also that 'if we take the risk out of education, there is a real chance that we take out education altogether' (2013, 1).

I feel that I must end this thesis by speaking about the achievements of the students, as the most ambitious goals of the research were associated with them. It is rewarding to really feel that I was a part of their journey to a more independent and meaningful use of the musical language, widening their musical opportunities and also contributing to their positive self-image as musicians and thus, hopefully, to their motivation to maintain an active and lifelong musical practice. As happened with me, these students were also subjected to a process of 'unlearning', appearing to be completely 'colonised' and conditioned, in their musical practice, by the values, principles and pedagogical practices of the *classical conservatoire culture*. However, in the end...

And when we heard them play just us, it was beautiful ... we liked it. But in concerts and rehearsals, whenever I heard it, I was super proud because it seemed a very different thing ... we did it! And then Mário said: 'Oh, it gave me shivers!'

References

Abrahams, Frank. "Critical Pedagogy for Music Education: A Best Practice to Prepare Future Music Educators." *Visions of Research in Music Education* 7, no. 1 (2006): 1-8.

—. "The application of critical pedagogy to music teaching and learning." *Visions of Research in Music Education* 6 (2005): 1-16.

—. "Transforming classroom music instruction with ideas from critical pedagogy." *Music Educators Journal* 92, no. 1 (2005): 62-67.

Adler, P. A., and P. Adler. "Observational techniques." In *Handbook of Qualitative Research*, translated by N. K. Denzin and Y. S. Lincoln, 377-392. California: Sage Publications, 1994.

Allsup, Randall Everett. "Dissertation review: Johan Nyberg's Music Education as an Adventure of Knowledge: Student and Teacher Experience as Conceptualizations of Musical Knowledge, Learning, and Teaching." *Nordic Research in Music Education* 17 (2016): 271-278.

—. "Mutual Learning and Democratic Action in Instrumental Music Education." *Journal of Research in Music Education* 51, no. 1 (2003): 24-37.

—. "Of concert bands and garage bands: Creating democracy through popular music." In *Bridging the gap: Popular music and music education*, edited by Carlos Xavier Rodriguez., 205-223. MENC, 2004.

Almén, Byron, and Edward Pearsall. *Approaches to Meaning in Music.* Indiana University Press, 2006.

Alperson, Philip. "What Should One Expect from a Philosophy of Music Education?" *The Journal of Aesthetic Education* (University of Illinois Press) 25, no. 3 (Autumn 1991): 215-242.

Alves, Luís Alberto Marques, and Catarina (Coord.) Martins. "Estudo de Avaliação Sobre o Impacto das Políticas Públicas na Área da Educação Artística em Portugal." Relatório Técnico, CITCEM/I2ADS, 2015.

Alves, Rubem. *Educação dos sentidos e mais...* Campinas, SP: Verus Editora, 2005.

Apple, Michael W. *Cultural Politics and Education.* New York: Teachers College Press, 1996.

Austin, James R. "Is Music Education the Loser?" *Music Educators Journal* (MENC: The National Association for Music Education) 76, no. 6 (Feb. 1990): 21-25.

Azmitia, M. "Peer interactive minds: Developmental, theoretical, and methodological issues." In *Interactive minds: Life-span perspectives on the social foundation of cognition*, edited by P. B. Baltes and U. M. Staudinger, 133-162. New York: Cambridge, 1996.

B., J. "The Origin of the French Conservatoire." *The Musical Times and Singing Class Circular* (Musical Times Publications Ltd.) 31, no. 569 (Jul. 1890): 393-395.

Bada, Steve Olusegun. "Constructivism Learning Theory: A Paradigm for Teaching and Learning." *IOSR Journal of Research & Method in Education* 5, no. 6 Ver. I (Nov. - Dec. 2015): 66-70.

Bakker, Arnold B. "Flow among music teachers and their students: The crossover of peak experiences." *Journal of Vocational Behavior* 66 (2005): 26-44.

Ballantyne, Julie, Jody L. Kerchner, and José Luis Aróstegui. "Developing music teacher identities: An international multi-site study." *International Journal of Music Education* 30, no. 3 (2012): 211-226.

Barthes, Roland. *Writing Degree Zero.* Translated by Annete Lavers and Colin Smith. New York: Hill and Wang, 1953 (1968).

Beegle, Amy C. "A Classroom-Based Study of Small-Group Planned Improvisation with Fifth-Grade children." *Beegle, Amy C. 2010. 'A Classroom-Based Study of SmJournal of Research in Music Education* 58, no. 3 (2010): 219-239.

Benedict, Cathy L. "Critical and Transformative Literacies: Music and General Education." *Theory Into Practice* 51 (2012): 152-158.

Benson, Ciarán. *The Cultural Psychology of Self: Place, Morality and Art in Human Worlds.* New York: Routledge, 2001.

Berger, Guy. "A investigação em educação: Modelos socioepistemológicos e inserção institucional." *Educação, Sociedade & Culturas* 28 (2009): 175-192.

Bernard, Rhoda. "A dissonant duet: discussions of music making and music teaching." *Music Education Research* 6, no. 3 (November 2004): 281-298.

Beyer, Landon E. "Aesthetics and the Curriculum: Ideological and Cultural Form in School Practice." University of Wisconsin-Madison, 1981.

Biesta, Gert. "Good education in an age of measurement: on the need to reconnect with the question of purpose in education." *Educ Asse Eval Acc* 21 (2009): 33–46.

—. *The Beautiful Risk of Education.* Boulder: Paradigm Publishers, 2013.

Bingham, Charles W., Gert Biesta, and Jacques Rancière. *Jacques Rancière: Education, truth, emancitation.* London: Continuum, 2010.

Blair, Deborah V. "Stepping Aside: Teaching in a Student-Centered Music Classroom." *Music Educators Journal* (Sage Publications, Inc. on behalf of MENC: The National Association forMusic Education) 95, no. 3 (Mar. 2009): 42-45.

Boog, Ben W. M. "The Emancipatory Character of Action Research." *Journal of Community and Applied Social Psychology*, no. 13 (2003): 426-438.

Bowman, Wayne. "Envisioning the Future." *Action, Criticism, and Theory for Music Education* 9, no. 3 (2013): 1-7.

—. *Philosophical Perspectives on Music.* Oxford University Press, 1998.

—. "Philosophy, Criticism, and Music Education: Some Tentative Steps down a Less-Travelled Road." *Bulletin of the Council for Research in Music Education* (University of Illinois Press on behalf of the Council for Research in Music Education), no. 114 (Fall 1992): 1-19.

—. "Sound, Sociality, and Music: Part One." *The Quartely Journal of Music Teaching and Learning* 5, no. 3 (1994): 50-59.

—. "The Community in Music." *International Journal of Community Music* 2, no. 2&3 (2009): 109-128.

—. "The Virtues of Philosophical Practice in Music Education." In *Music Education: Navigating the Future*, edited by Clint Randles, 43-60. New York: Routledge, 2015.

—. “Why Musical Performance? Views Praxial to Performative.” In *Praxial Music Education: Reflections and Dialogues*, edited by David J. Elliott, 142-164. New York: Oxford University Press, 2009.

Boyce-Tillman, June. “Another Perspective: And Still I Wander … A Look at Western Music Education through Greek Mythology.” *Music Educators Journal* 99 (2013): 29-33.

Braun, Virginia, and Victoria Clarke. “Using thematic analysis in psychology.” *Qualitative Research in Psychology* 3, no. 2 (2006): 77-101.

Bresler, Liora. “Qualitative Paradigms in Music Education Research.” *The Quarterly* 3, no. 1 (Spring 1992): 64-79.

British Council. “Developing visions of the school of the future.” Budapest, 2009.

Bronfenbrenner, Urie. *The Ecology of Human Development: Experiments by Nature and Design.* Cambridge, Massachusetts: Harvard University Press, 1979.

Broomhead, Paul. “Shaping expressive performance: a problem-solving approach.” *Music Educators Journal* 91, no. 5 (2005): 63-67.

Brøske, Brit Ågot, and Geir Lysne. “Crossing the line: Collective improvisation and artistic ownership in The Norwegian Wind Ensemble.” In *Expanding the space for improvisation pedagogy in music: A transdisciplinary approach*, edited by Guro Gravem Johansen, Kari Holdhus, Christina Larsson and Una MacGlone, 229-244. Routledge, 2020.

Burnard, Pamela. “Investigating children’s meaning-making and the emergence of musical interaction in group improvisation.” *British Journal of Music Education* (Cambridge University Press) 19, no. 2 (2002): 157-172.

Burwell, Kim. “Apprenticeship in music: A contextual study for instrumental teaching and learning.” *International Journal of Music Education* 31, no. 3 (2012): 276-291.

Cain, Tim. “The characteristics of action research in music education.” *British Journal of* 25 (2008): 283-313.

Campbell, Patricia Shehan. “Of garage bands and song-getting: The musical development of young rock musicians.” *Research Studies in Music Education* 4 (1995): 12-20.

Campbell, Patricia Shehan, Claire Connell, and Amy Beegle. “Adolescents’ Expressed Meanings of Music in and out of School.” *Journal of Research in Music Education* (Sage Publications, Inc. on behalf of MENC: The National Association for Music Education) 55, no. 3 (2007): 220-236.

Carey, Gemma, and Catherine Grant. “Teacher and student perspectives on one-to-one pedagogy: practices and possibilities.” *British Journal of Music Education* 32, no. 1 (April 2015): 5-22.

Cavicchi, Daniel. “My music, their music, and the irrelevance of music education.” Edited by Thomas A. Regelski and Terry Gates J. Dordrecht: Springer, 2009.

Claire, Leslie. “The social psychology of creativity: The importance of peer social processes for students’ academic and artistic creative activity in classroom contexts.” *Bulletin of the Council for Research in Music Education* 119 (1993/1994): 21-28.

Clark, Andrew H. “Making Music Speak.” In *Speaking of Music: Addressing the Sonorous*, edited by Keith Chapin and Andrew H. Clark, 70-85. Fordham University, 2013.

Clark, R. E. “Ten cognitive science principles for human performance technologies.” In *Handbook of human performance technology*, edited by H. Stolovich and E. Keeps. New York: Macmillan, 1991.

Clifton, T. *Music as Heard: A Study in Applied Phenomenology.* New Haven: Yale University Press, 1983.

Collens, Paula, and Andrea Creech. “Intersubjectivity in Collaborative Learning in One-to-one Contexts.” In *Collaborative Learning in Higher Music Education*, edited by Helena Gaunt and Heidi Westerlund. Abingdon, Oxon: Routledge, 2016.

Colwell, Richard. “Taking the temperature of critical pedagogy.” *Visions of Research in Music Education* 6 (2005).

Comenius, Iohannis Amos. *Didactica Magna.* 6ª edição. Translated by Joaquim Ferreira Gomes. Lisboa: Fundação Calouste Gulbenkian, 2015.

Cope, Peter. “Informal Learning of Musical Instruments: the importance of social context.” *Music Education Research* 4, no. 1 (2002): 93-104.

Cosme, Ariana, and Rui Trindade. *Escola a tempo inteiro: escola para que te quero?Exportar publicação no formato APA.* Porto: Profedições, 2007.

Costa, João A. “A relevância dos contextos educativos para a promoção da motivação e participação no ensino vocacional da música (Masters’ thesis).” Faculdade de Psicologia e Ciências da Educação da Universidade do Porto, 2010.

Costa, João A., and Andrea Creech. “Teaching and learning in unfamiliar territory.” In *Expanding the Space for Improvisation Pedagogy in Music: A Transdisciplinary Approach*, edited by Guro Gravem Johansen, Kari Holdhus, Christina Larsson and Una MacGlone. Routledge, 2020.

Counsil of Europe. “Recommendation of the Committee of Ministers to member states on the promotion and recognition of non-formal education/learning of young people.” Vol. Rec(2003)8. 30 de April de 2003.

Coyle, Daniel. “Forget 10,000 Hours — Instead, Aim for 10 Minutes.” *Daniel Coyle.* 07 June 2013.

—. *The Talent Code: Greatness Isn’t Born. It’s Grown. Here’s How.* New York: Random House Publishing Group, 2009.

Creech, Andrea, and Susan Hallam. “Learning a musical instrument: The influence of interpersonal interaction on outcomes for school-aged pupils.” *Psychology of Music* 39, no. 1 (2011): 102-122.

Creech, Andrea, et al. “Investigating musical performance: commonality and diversity among classical and non-classical musicians.” *Music Education Research* 10, no. 2 (2008): 215-234.

Creech, Andrea, Maria Varvarigou, Susan Hallam, Hilary McQueen, and Helena Gaunt. “Scaffolding, organizational structure and interpersonal interaction in musical activities with older people.” *Psychology of Music* 3, no. 42 (2013): 430-447.

Creswell, John W. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches.* Second Edition. Thousand Oaks - London - New Delhi, 2003.

Csikszentmihalyi, Mihaly. *Flow: The psychology of optimal experience.* New York: HarperCollins, 1990.

Custodero, L. A., and Z. Xu. “Teachers as researchers: The use of video analysis in early childhood music educator preparation.” Edited by L. Suther. *Proceedings of ECME Commission - 13th International Seminar of ISME: Music in the early years: Research Theory and Practice.* Rome, Italy, 2008.

Custodero, Lori A. “Origins and expertise in the musical improvisations of adults and children: a phenomenological study of content and process.” *British Journal of Music Education* (Cambridge University Press), 2007: 77-98.

Dale, Edgar. *Audio-Visual Methods in Teaching.* 3rd. New York: Dryden Press, 1969.

Dekker, Jeroen J. H., Bernard Kruithof, Franck Simon, and Bruno Vanobbergen. “Discoveries of childhood in history: an introduction.” *Paedagogica Historica: International Journal of the History of Education*, Jan 2012: 1-9.

Dembo, Myron H., and Helena Praks Seli. “Students’ Resistance to Change in Learning Strategies Courses.” *Journal of Developmental Education* 3, no. 27 (2004): 2-9.

Dent, Eric B., and Susan Galloway Goldberg. “Challenging “Resistance to Change”.” *The Journal of Applied Behavioral Science* 1 (March 1999): 25-41.

Denzin, N. K. *Interpretive interactionism.* 2nd ed. Thousand Oaks, CA: Sage, 2001.

Department for Education and Skills (DfES). “Music Manisfesto: More music for more people.” 2004.

Dewey, John. *Democracy and Education.* Free Press, 1916.

—. *Experience and education.* New York: Simon and Schuster, 1938.

du Bois-Reymond, Manuela. “Study on the links between formal and non-formal education.” Study, Secretary General of the Council of Europe/Directorate of Youth, Counsil of Europe, 2003.

Elliott, David J. *Music Matters: A New Philosophy of Music Education.* New York: Oxford University Press, 1995.

—. “Putting matters in perspective: Reflections on a new philosophy.” *The Quartely Journal of Music Teaching and Learning* 7, no. 2-4 (1996-1997): 20-35.

Elliott, David, and Marissa Silverman Silverman. *Music matters: A philosophy of music education (2nd ed.).* New York: Oxford University Press, 2015.

Engeström, Yrjö. *Learning by expanding: An Activity-Theoretical approach to Developmental Research.* 2nd. New York: Cambridge University Press, 1987.

Felder, Richard M. “Hang in there! Dealing with Student Resistance to Learner-Centered Teaching.” *Chemical Engineering Education* 45, no. 2 (2011): 131-132.

Fernandes, Domingos, Jorge Ramos do Ó, and M. Ferreira. *Estudo de avaliação do ensino artístico.* Lisboa: Direcção Geral de Formação Vocacional do Ministério da Educação e Faculdade de Psicologia e de Ciências da Educação da Universidade de Lisboa., 2007.

Finney, John. “The rights and wrongs of school music: considering the expressivist argument and its existential component.” *British Journal of Music Education* (Cambridge University Press) 16, no. 3 (1999): 237-244.

Foucault, Michel. “Qu’est-ce que la critique? Critique et Aufklärung.” Bulletin de la Société française de philosophie 82, no. 2 (avr./juin 1978): 35-63.Fox, Richard. “Constructivism examined.” *Oxford Review of Education* 27, no. 1 (Mar. 2001): 23-35.

Fox, Richard. “Constructivism examined.” *Oxford Review of Education* 27, no. 1 (Mar. 2001): 23-35.

Freire, Paulo. “A dialogue: Culture, language and race.” *Harvard Educational Review* 65, no. 3 (1995): 377-402.

—. *Extensão ou Comunicação?* 8ª. Rio de Janeiro: Paz e Terra, 1983.

—. *Pedagogia da Autonomia: Saberes necessários à prática educativa.* 35ª. São Paulo: Paz e Terra, 1996.

—. *Pedagogia do Oprimido.* 34ª. Rio de Janeiro: Paz e Terra, 1970.

Frith, S. *Performing rites: On the value of popular music.* Cambridge MA: Harvard University Press., 1996.

Galvão, Afonso. “Cognição, Emoção e Expertise Musical.” *Psicologia: Teoria e Pesquisa* 22, no. 2 (Mai-Ago 2006): 169-174.

Gardner, Howard. *Frames of mind: The theory of multiple intelligences.* New York: Basic Books, 1983.

Gaunt, Helena. “One-to-one tuition in a conservatoire: the perceptions of instrumental and vocal teachers.” *Psychology of Music* 2, no. 36 (2007): 215-245.

Gellrich, Martin, and Bertil Sundin. “Instrumental Practice in the 18th and 19th Centuries.” *Bulletin of the Council for Research in Music Education* 119 (1993/1994): 137-145.

Gijlers, Hannie, and Ton de Jong. “The Relation between Prior Knowledge and Students’ Collaborative Discovery Learning Processes.” *Journal of Research in Science Teaching* 42, no. 3 (2005): 264-282.

Giroux, Henry A. *Lessons from Paulo Freire.* 17 Oct. 2010. https://www.chronicle.com/article/Lessons-From-Paulo-Freire/124910 (accessed 02 03, 2019).

—. *On Critical Pedagogy.* London: Continuum, 2011.

Goodman, Diane J. *Promoting diversity and social justice: Educating people from privileged groups.* Thousand Oaks, CA: Sage, 2001.

Gordon, Edwin E. “Early childhood music abuse: Misdeeds and Neglect.” *Visions of Research in Music Education* 17 (2011).

Gorzelsky, Gwen. “Working Boundaries: From Student Resistance to Student Agency.” *College Composition and Communication* 61 (2009): 64-84.

Green, Chelsea C. “Permission to play: Obstacles and open spaces in music-making.” *Visions of Research in Music Education* 18 (2011): 1-31.

Green, Lucy. *Music, Gender, Education.* Cambridge: Cambridge University Press, 1997.

—. *Music, informal learning and the school: a new classroom pedagogy.* Farnham: Ashgate, 2008.

Greenwood, Davydd, and Morten Levin. *Introduction to action research: Social research for social change.* 2nd. Thousand Oaks: Sage Publications, 2007.

Grimm, P. “Desirability Bias.” In Wiley International Encyclopedia of Marketing (eds J. Sheth and N. Malhotra), 2010. https://doi.org/10.1002/9781444316568.wiem02057

Hall, J. *A Review of Musical Instrument Instruction in Scotland.* Edinburgh: Scottish Council for, 1999.

Hallam, Susan. *Instrumental teaching: a practical guide to better teaching and learning.* Oxford: Heinemann, 1998.

—. *The power of music: A research synthesis of the impact of actively making music on the intellectual, social and personal development of children and young people.* London: Institute of Education University College.: Institute of Education University College, 2015.

Hallam, Susan, and Andrea Creech. *Music Education in the 21st Century in the United Kingdom: Achievements, analysis and aspirations.* London: Institute of Education, 2010.

—. “Where now?” In *Music Education in the 21st Century in the United Kingdom: Achievements, analysis and aspirations*, 329-346. London: Institute of Education, University of London, 2010.

Hallam, Susan, and Helena Gaunt. *Preparing for success: A practical guide for young musicians.* London, UK: Institute of Education., 2012.

Hargreaves, D. J., R. M. Purves, G. F. Welch, and N. A. Marshall. “Developing identities and attitudes in musicians and classroom music teachers.” *The British Journal of Educational Psychology* 77, no. 3 (2007): 665-682.

Hargreaves, David J., Nigel A. Marshall, and Adrian C. North. “Music education in the twenty-first century: A psychological perspective.” *British Journal of Music Education* 2, no. 20 (2003): 147-163.

Heikinheimo, Tapani. “Communication in musical improvisation performances: Common languages across practices in real-time arts.” Edited by Guro Gravem Johansen, Kari Holdhus, Christina Larsson and Una MacGlone, 164-180.Routledge, 2020.

Herbert, D., and Patricia Shehan Campbell. “Rock music in American schools: Position and practices since the 1960s.” *International Journal of Music Education* 36 (2000): 14-23.

Heuser, Franck. “Understanding the Tools: Technology as a Springboard for Reflective Musicking.” In *Music Education: Navigating the Future*, edited by Clint Randles, 155-163. New York: Routledge, 2015.

Higgins, Kathleen Marie. *Music of Our Lives.* Philadelphia: Temple University Press, 2011.

Hill, S., and T. Hill. *The collaborative classroom: A guide to cooperative learning.* South Yarra, Victoria, Australia: Eleanir Curtin Publishing, 1990.

Holdus, Kari. “Pedagogical improvisation: Music improvisation’s little sister?” Editado por Guro Gravem Johansen, Kari Holdus, Christina Larsson e Una MacGlone, 195-210. New York: Routledge, 2020.

Hollander, Jocelyn A. “The Social Contexts of Focus Groups.” *Journal of Contemporary Ethnography* (Sage Publications) 33, no. 5 (2004): 602-637.

Illeris, Knud. “Towards a contemporary and comprehensive theory of learning.” *International Journal of Lifelong Education* 22, no. 4 (2003): 396-406.

Illich, Ivan. *Deschooling Society.* New York: 1972, 1972.

Isbell, Daniel S. “Musicians and Teachers: The Socialization and Occupational Identity of Preservice Music Teachers.” *Journal of Research in Music Education* (Sage Publications, Inc. on behalf of MENC: The National Association forMusic Education) 56, no. 2 (Jul. 2008): 162-178.

Johansen, Guro Gravem. “Seven steps to heaven? An Epistemological Exploration of Learning in Jazz Improvisation, fro the Perspective of Expansive Learning and Horizontal Development.” In *Expanding the Space for Improvisation Pedagogy in Music: A Transdisciplinary Approach*, edited by Guro Gravem Johansen, Kari Holdus, Christina Larsson and Una MacGlone, 245-260. Routledge, 2020.

Johansen, Guro Gravem, Kari Holdus, Christina Larsson, and Una MacGlone. *Expanding the Space for Improvisation Pedagogy in Music: A Transdisciplinary Approach.* New York: Routledge, 2020.

Johansson, Karin. “Experts, entrepreneurs and competence nomads: the skills paradox in higher music education.” *Music Education Research* 14, no. 1 (2012): 45-62.

Johnson, Barry. *Polarity management: Identifying and managing unsolvable problems.* Amherst, MA: HRD Press., 1992.

Johnson, Mark. “Mind Incarnate: From Dewey to Damasio”.” *Daedalus* 135, no. 3 (2006): 46-54.

Jones, Patrick M. “Preparing Music Teachers for Change: Broadening Instrument Class Offerings to Foster Lifewide and Lifelong Musicing.” *Visions of Research in Music Education* 12 (2008): 1-15.

Jorgensen, Estelle R. “A Dialectical View of Theory and Practice.” *Journal of Research in Music Education* 49, no. 4 (2001): 343-359.

—. “Philosophy and the Music Teacher: Challenging the Way We Think.” *Music Educators Journal* 76, no. 5 (Jan. 1990): 17-23.

Kao, John. *Innovation Nation: How America Is Losing Its Innovation Edge, Why It Matters, and What We Can Do to Get It Back.* New York: Free Press, 2007.

Kiehn, Mark T. “Development of Music Creativity among ElementarySchool Students.” *Journal of Research in Music Education* 51, no. 4 (2003): 278-288.

Kohn, Alfie. *No Contest: The Case Against Competition (Revised Edition).* Boston: Houghton Mifflin, 1986.

—. “Resistance to Cooperative Learning: Making Sense of Its Deletion and Dilution.” *Journal of Education*, 1992: 38-56.

Kotter, J. P. “Leading change: Why transformation efforts fail.” *Harvard Business Review* 73, no. 2 (1995): 59-67.

Koza, Julia Eklund. “Listening for Whiteness: Hearing Racial Politics in Undergraduate School Music.” *Philosophy of Music Education Review* 16, no. 2 (Fall 2008): 145-155.

Kratus, John. “Music education at the tipping point.” *Music Educators Journal* 94 (2007): 42-48.

—. “The Role of Subversion in Changing Music Education.” In *Music Education: Navigating the Future*, edited by Clint Randles, 340-346. New York: Routledge, 2015.

Lalonde, M. “Reshaping competition to refine music education.” *The Canadian Music Educator* 55, no. 2 (2013): 20-23.

Lampert, M. “Meeting student teachers on their own terms: Experience precedes understanding.” In *Constructivist Teacher Education*, edited by V. Richardson, 84-105. Washington, DC: Falmer Press, 1997.

Larsson, Christina. “A Deweyan take on improvisation as an experience: An example from a Swedish Year 4 music class.” In *Expanding the Space for Improvisation Pedagogy in Music: A Transdisciplnary Approach*, edited by Guro Gravem Johansen, Kari Holdus, Christina Larsson and Una MacGlone, 66-81. Routledge, 2020.

Lebler, Don. “Popular music pedagogy: peer learning in practice.” *Music Education Research* 10, no. 2 (2008): 193-213.

Leman, Marc, and Pieter-Jan Maes. “Music perception and embodied music cognition.” In *The Routledge handbook of embodied cognition*, edited by L. Shapiro, 81-89. Cambridge, MA: MIT Press, 2014.

Letts, L., S. Wilkins, D. Stewart, J. Bosch, and M. Westmorland. “Guidelines for Critical Review Form: Qualitative Studies (Version 2.0).” *Canchild*, 2007: 1-12.

Lortie, D. *The schoolteacher: A sociological study.* Chicago: University of Chicago Press, 1975.

Lowe, Geoffrey M. “Competition Versus Cooperation: Implications for Music Teachers following Students Feedback from Participation in a Large-scale Cooperative Music Festival.” *Australian Journal of Teacher Education* 43, no. 5 (2018): 78-94.

Määttänen, Pentti. “Aesthetic experience: A problem in praxialism– On the notion of aesthetic experience.” *Action, Criticism & Theory for Music Education.* Edited by Thomas A. Regelski, Wayne Bowman and Darryl A. Coan. April 2000.

MacGlone, Una. “Young children’s talk about improvising. How conceptual tools and workshop roles are formed through musical improvisation workshops.” In *Expanding the space for improvisation pedagogy in music. A transdisciplinary approach*, edited by Guro Gravem Johansen, Kari Holdhus, Christina Larsson and Una MacGlone, 115-132. Routledge, 2020.

Mantie, Roger. “Liminal or Lifelong Leisure, Recreation, and the Future of Music Education.” In *Music Education: Navigating the Future*, edited by Clint Randles, 167-182. New York: Routledge, 2015.

Mantie, Roger, and Lynn Tucker. “Closing the gap: does music-making have to stop upon graduation?” *International Journal of Community Music* 1, no. 2 (2008): 217-227.

Martignetti, Frank, Brent C. Talbot, Matthew Clauhs, Timothy Hawkins, and Nasim Niknafs. “’You Got To Know Us”: A Hopeful Model for Music Education in Urban Schools.” *Visions of Research in Music Education* 23 (2013): 1-17.

Martins, Catarina Silva. “The Arts in Education as Police Technologies.” *European Education* 45, no. 3 (2013): 67-84.

Masschelein, Jan. “Can Education Still be Critical?” *Journal of Philosophy of Education* 34, no. 4 (2000): 603-616.

McGillen, Christopher, and Ros McMillan. “Engaging with adolescent musicians: Lessons in song writing, cooperation and the power of original music.” *Research Studies in Music Education* 1, no. 25 (2005): 1-20.

McPherson, Gary. “From child to musician: skill development during the beginning stages of learning an instrument.” *Psychology of Music* 33, no. 1 (2005): 5-35.

Mezirow, Jack. “Transformative Learning: Theory to Practice.” *New Directions for Adult and Continuing Education* 74 (1997): 5-12.

Mildred, J., and X. Zúñiga. “Working With Resistance to Diversity Issues in the Classroom: Lessons From Teacher Training and Multicultural Education.” *Smith College Studies in Social Work* 74, no. 2 (2004): 359-375.

Miles, Matthew B., A. Michael Huberman, and Johnny Saldaña. *Qualitative Data Analysis: A Methods Sourcebook.* 3rd. Thousand Oaks, CA: Sage, 2014.

Molander, Bengt. *Kunskap i handling [Knowledge in action].* Göteborg: Daidalos, 2004.

Morrice, Linda. "Learning and refugees: Recognizing the darker side of transformative learnig." *Adult Education Quarterly* 63, no. 3 (2013): 251-271.

Myers, David E. "Freeing Music Education from Schooling: Toward a Lifespan Perspective on Music Learning and Teaching." *International Journal of Community Music* 1, no. 1 (2008): 49-61.

Nichols, Jeananne. "Music Education for Changing Times: A Review Essay." *International Journal of Education & the Arts*, 2011: 1-11.

Nyberg, Johan. *Music Education as an Adventure of Knowledge: Student and Teacher Experience as Conceptualizations of Musical Knowledge, Learning and Teaching (Doctotal dissertation).* Luleå: Luleå University of Technology, 2015.

O'Donnell, Marcus. "Walking, writing and dreaming: Rebecca Solnit's polyphonic voices." *Journalism*, 2015: 936-952.

O'Neill, Susan. "Transformative Music Engagement and Musical Flourishing." In *The Child as Musician: a handbook of musical development*, edited by Gary E. McPherson, 606-625. Oxford: Oxford University Press, 2015.

Patton, M. Q. *Qualitative evaluation and research methods (2nd ed.).* Newbury Park, CA: Sage, 1990.

Popkewitz, Thomas S., and Ruth Gustafson. "Standards of Music Education and the Easily Administered Child/Citizen: The Alchemy of Pedagogy and Social Inclusion/Exclusion." *Philosophy of Music Education Review* 10, no. 2 (2002): 80-91.

Prince, Michael. "Does Active Learning Work? A Review of the Research." *Journal of Engineering Education* 93, nº 3 (2004): 223-231.

Qi, Nan, and Kari K. Veblen. "Transformative learning through music: Case studies from Brazil." *Action, Criticism & Theory for Music Education* 15, no. 2 (2016): 101-125.

Ramberg, Magnus Rye. "Teacher Change in an Era of Neo-Liberal Policies: a neo-institutional analysis of teachers' perceptions of their professional change." *European Educational Research Journal* 13, no. 3 (2014): 360-379.

Rancière, Jacques. *Le maître ignorant: Cinq leçons sur l'emancipation intellectuelle.* Fayard, 1987.

—. *O Mestre Ignorante: Cinco Lições sobre a Emancipação Intelectual.* Belo Horizonte: Autêntica, 2002.

—. *The Ignorant Schoolmaster: Five Lessons in Intelectual Emancipation.* Stanford, California: Stanford Universty Press, 1991.

Randles, Clint. "A Theory of Change in Music Education." Em *Music Education: Navigating the Future*, 323-339. New York: Routledge, 2015.

Reason, Peter. "Choice and Quality in Action Research Practice." *Journal of Management Inquiry* 15 (June 2006): 187-203.

Regelski, Thomas A. "'Music Teacher' – Meaning and Practice, Identity and Position." *Action, Criticism, and Theory for Music Education* 6, no. 2 (2007).

—. "The ethics of music teaching as profession and praxis." *Visions of Research in Music Education* 13 (2009).

Regelski, Thomas A., and J. Terry Gates, . *Music Education for Changing Times: Guiding Visions for Practice.* Springer, 2009.

Reimer, Bennett. "Beyond Performing: The Promise of the New National Standards in Music Education." *The Quarterly Journal of Music Teaching and Learning* 6, no. 2 (1995): 23-32.

Reybrouck, Mark. "Body, mind and music: musical semantics between experiential." *Trans. Transcultural Music Review* 9 (2005).

—. "Musical Sense-Making and the Concept of Affordance: An Ecosemiotic and Experiential Approach." *Biosemiotics* 5 (2012): 391-409.

—. *Music and Semiotics: An Experiential Approach to Musical Sense-Making.* 2017.

Reybrouck, Mark, Tuomas Eerola, and Piotr Podlipniak. *Music and the Functions of the Brain: Arousal, Emotions, and Pleasure.* Lausanne: Frontiers Media, 2018.

Reynolds, Alison M., Kerry B. Renzoni, Pamela L. Turowski, and Heather D. Waters. ""Pssst... Over Here!": Young Children Shaping the Future of Music Education." In *Music Education: Navigating the Future*, edited by Clint Randles, 201-214. New York, NY: Routledge, 2015.

Robinson, Ken. *Out of our minds: Learning to be creative.* Chichester, UK: Capstone, 2011.

Rodari, Gianni. *Gramática da Fantasia: Introdução à arte de inventar histórias.* 6ª. Lisboa: Editorial Caminho, 2006.

Rogoff, Barbara. *The cultural nature of human development.* New York, NY: Oxford University Press, 2003.

Ross, Malcolm. "What's Wrong With School Music?" *British Journal of Music Education* (Cambridge University Press) 12, nº 3 (1995): 185-201.

Sachs, J. "Teacher education and the development of professional identity: Learning to be a teacher." In *Connecting policy and practice: Challenges for teaching and learning in schools and universities*, edited by P. Denicolo and M. Kompf, 5-21. Oxford, UK: Routledge, 2005.

Salvador, Karen. "Indentity and Transformation: (Re)claming an Inner Musician." By Music Education: Navigating the Future, edited by Clint Randles, 215-232. New York: Routledge, 2015.

Sarath, Ed, Patricia Shehan Campbell, and David Myers. "Transforming Music Study from its Foundations: A Manifesto for Progressive Change in the Undergraduate Preparation of Music Majors." 2014.

Sawyer, Keith R. "Creative Teaching: Collaborative Discussion as Disciplined Improvisation." *Educational Researcher* 33, nº 2 (2004): 12-20.

—. "Improvised Lessons: Collaborative discussion in the constructivist classroom." *Teaching Education* 2, no. 15 (2004): 189-201.

—. "Educating for innovation." *Thinking Skills and Creativity* 1 (2006): 41-48.

—. "What Makes Good Teachers Great? The Artful Balance of Structure and Improvisation." In *Structure and and Improvisation in Creative Teaching*, edited by R. Keith Sawyer, 1-26. Cambridge: Cambridge University Press, 2011.

Schiavio, Andrea, and Dylan van der Schyff. "4E Music Pedagogy and the Principles of Self-Organization." *Behavioral Sciences* 8, no. 72 (2018): 1-15.

Schiavio, Andrea, and Fred Cummins. "An inter(en)active approach to musical agency and learning." Edited by R. Timmers, et al. *Proceedings of ICMEM 2015. International Conference on the Multimodal Experience of Music.* Sheffield: The Digital Humanities Institute, 2015.

Schiavio, Andrea, Damiano Menin, and Jakub Matyja. "Music in the Flesh: Embodied Simulation in Musical Understanding." *Psychomusicology: Music, Mind, and Brain* 24, no. 4 (2014): 340-343.

Schmidt, Patrick. "Music Education as Transformative Practice: Creating New Frameworks for Learning Music through a Freirian Perspective." *Visions of Research in Music Education* 6 (2005): 1-14.

Schön, Donald A. *The Reflective Practicioner: How Professional Think in Action.* New York: Basic Books, 1983.

Schrittesser, Ilse, Sabine Gerhartz-Reiter, and Angelika Paseka. "Innovative Learning Environments: about traditional and new patterns of learning." *European Educational Research Journal* 13, no. 2 (2014).

Silverman, Marissa. "Critical Ethnography as/for Praxis: A Pathway for Music Education." In *Music Education: Navigating the Future*, edited by Clint Randles, 253-270. New York: Routledge, 2015.

Skilbeck, Ruth. "Art journalism and the impact of 'globalisation': New fugal modalities of storytelling in Austral-Asian writing." *Pacific Journalism Review* 14, no. 2 (2008): 144-161.

Sloboda, John. *Explorind the musical mind: Cognition, emotion, ability, function.* Oxford: Oxford University Press, 2005.

Small, Christopher. *Music, Society, Education.* Hanover, New England: Wesleyan University Press, 1977.

Smit, Jantien, Henriëtte A. A. van Eerde, and Arthur Bakker. "A conceptualisation of whole-class scaffolding." *British Educational Research Journal* 39, no. 5 (October 2013): 817-834.

Smith, Ralph A. "The Changing Image of Art Education: Theoretical Antecedents of Discipline-Based Art Education." *Journal of Aesthetic Education* 21, no. 2 (Summer 1987): 3-34.

Sousa, Rui Paulo. "Factores de abandono escolar no ensino vocacional da música." 2003.

—. "Factores de abandono no ensino vocacional da música." *Revista Música, Psicologia e Educação*, no. 6 (2004): 19-31.

Spruce, Gary. "'The National Music Plan' and the Taming of English Music Education." *Arts Education Policy Review*, 2013: 112-118.

Stauffer, Sandra L. *Placing Curriculum in Music.* Vol. 7, in *Music education for changing times: Guiding visions for practice*, edited by T. Regelski and J. Gates. Dordrecht: Springer, 2009.

—. "Trading places: Transformation in progress in the lives of music educators." *Paper presented at the MayDay Group Colloquium 24.* East Lansing: MI, 2012.

Swanwick, Keith. *Music, Mind, and Education.* London: Routledge, 1988.

—. *Musical Knowledge: Intuition, analysis and music education.* London: Routledge, 1994.

—. *Teaching Music Musically.* London: Routledge, 1999.

Thiollent, Michel. "Action Research and Participatory Research: An Overview." *International Journal of Action Research* 7, no. 2 (2011): 160-174.

Thompson, Evan. *Mind in Life: Biology, Phenomenology, and the Sciences of Mind.* Cambridge, MA: Harvard University Press, 2007.

Tobias, Evan S. "Inter/Trans/MultilCross/Nee Media(ting): Navigating an Emerging Landscape of Digital Media for Music Education." In *Music Education: Navigating the Future*, edited by Clint Randles, 91-121. New York: Routledge, 2015.

—. "Toward Convergence: Adapting Music Edcuation to Contemporary Society and Participatory Culture." *Music Educators Journal* (Sage Publications, Inc. on behalf of MENC: The National Association forMusic Education) 99, no. 4 (June 2013): 29-36.

Torrance, Harry. "Assessment as learning? How the use of explicit learning objectives, assessment criteria and feedback in post-secondary education and training can come to dominate learning." *Assessment in Education: Principles, Policy & Practice* 14, no. 3 (2007): 281-294.

Tregear, Peter, Geir Johansen, Harald Jorgensen, John Sloboda, Helena Tulve, and Richard Wistreich. "Conservatoires in society: Institutonal challenges and possibilities for change." *Arts & Humanities in Higher Education* 3-4, no. 15 (2016): 276-292.

Tuckman, Bruce W. "Developmental Sequence in Small Groups." *Psycological Bulletin* 63, no. 6 (1965): 384-399.

Tuckman, Bruce W., and Mary Ann C. Jensen. "Stages of Small-Group Development Revisited." *Group & Organization Management* (Sage Publications) 2, no. 4 (1977): 419-427.

"UN Commission on Human Rights, Convention on the Rights of the Child." March 7 1990.

van der Schyff, Dylan. "Concepts for an Enactive Music Pedagogy: Essays on Phenomenology, Embodied Cognition, and Music Education (PhD Thesis)." Simon Fraser University, 2017.

Vélez-Agosto, Nicole M., José G. Soto-Crespo, Mónica Vizcarrondo-Oppenheimer, Stephanie Vega-Molina, and Cynthia García Coll. "Brofenbrenner's Bioecologial Theory Revision: Moving Culture From the Macro Into the Micro." *Perspectives on Psychological Science* (Sage) 12, no. 5 (2017): 900-910.

Virkkula, Esa. "Informal In Formal - The relationshihp of Informal and Formal Learning in Popular & Jazz Music Master Workshops in Conservatoires." *International Journal of Music Education* 34, no. 2 (2016): 171-185.

Vygotsky, Lev S. *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press, 1978.

Walker, Margaret E. "Movement and Metaphor: Towards an Embodied Theory of Music Cognition and Hermeneutics." *Bulletin of the Council for Research in Music Education*, no. 145 (2000): 27-42.

Weber, W. "Conservatories. I: The rise of the conservatory." *Grove music online.* Edited by L. Macy. 2008.

Webster, Peter R. “Composition Software and Issues Surrounding its use in Research Settings with Children.” *Psychomusicology*, 1989: 163-169.

Wegerif, Rupert. “Dialogic or Dialectic? The Significance of Ontological Assumptions in Research on Educational Dialogue.” *British Educational Research Journal* 34, no. 3 (2008): 347-361.

Weick, Karl E., Kathleen M. Sutcliffe, and David Obstfeld. “Organizing and the Process of Sensemaking.” *Organization Science* 16, no. 4 (July-August 2005): 409-421.

Westerlund, Heidi. “Garage rock bands: a future model for developing musical expertise?” *International Journal of Music Education* (International Society for Music Education) 24, no. 2 (2006): 119-125.

Westman, M. “Stress and strain crossover.” *Human Relations* 54 (2001): 717–751.

Wibeck, Victoria, Madeleine Abrandt Dahlgren, and Gunila Öberg. “Learning in focus groups: an analytical dimension for enhancing focus group research.” *Qualitative Research* 7, no. 2 (2007): 249-267.

Wilén, Sara. “The play of vocal actors: Exploring performative agency through opera improvisation.” In *Expanding the Space for Improvisation Pedagogy in Music: A Transdisciplinary Approach*, edited by Guro Gravem Johansen, Kari Holdus, Christina Larsson and Una MacGlone, 82-101. Routledge, 2020.

Wood, David J., Jerome S. Bruner, and Gail Ross. “The Role of Tutoring in Problem Solving.” *Journal of Child Psychiatry and Psychology*, no. 17 (1976): 89-100.

Woodford, P. G. “The social construction of music teacher identity in undergraduate music education majors.” In *The new handbook of research on music teaching and learning*, edited by Richard Colwell and Carol Richardson, 675-694. New York, NY: Oxford University Press, 2002.

Wright, Ruth. “Is Gramsci Dead: Revisiting Hegemony in 21st Century Music Education.” Edited by Bernd Clausen and Susanne DreSler. *Proceedings of the 39th Annual Conference of the German Association for Research in Music Education.* Münster - New York: Waxmann, 2018. 13-25.

Yılmaz, Derya, and Gökhan Kılıçoğlu. “Resistance to change and ways of reducing resistance in educational organizations.” *European Journal of Research on Education* 1, no. 1 (2013): 14-21.

Zander, A. F. “Resistance to change—Its analysis and prevention.” *Advanced Management* 4, no. 5 (1950): 9-11.

Zander, Rosamund S., and Benjamin Zander. *The Art of Possibility.* Boston, Mass: Harvard Business School, 2000.

End Notes

1 (*the teacher asked Isabel to play and sing the notes for the others to play as well* (V s1); asking *Marco to suggest a melodic rhythm* (V s2); *several times the students ask in what octave they should play... the teacher says that it's their decision* (V s5); *the wind students ask the teacher to go there but the teacher says no and that they should decide on their own* (V s7); s*eeing the difficulties and the lack of autonomous work, the teacher tries to put the students working, giving them examples of what they should do* (V s7);

2 (*the teacher answers: - "It's never wrong!"* (V s1); *the teacher says: - "Good! Cool!"* (V s2)

3 (*help the students start to create, giving some suggestions* (V s2); *the teacher remembers that the new melody needs to be conclusive* (V s5); *the teacher tells the students that they have to plan better their time when working alone: Experiment, decide and then rehearse* (V s5); *after some attempts the teacher decides that the additional beat is the same as the first* (V s6); *the teacher explains that there are different ways to compose a music piece: starting by melody or harmony or lyrics* (V s7)

4 (*to arrange the several parts, including some solos, resulting in a nice musical piece* (V s2); *the teacher asked the cello group to play and the others to imitate that melody* (V s3); *the teacher helps the students create a 2nd part of the accompaniment* (V s7); *the teacher says: "You must not think... you should play and experiment"* (V s7)

5 (*the teacher talks to students about bar changes* (V s2); *the teacher suggested a slower beat... even in this tempo there were a lot of difficulties in the joining of the parts* (V s3); *the teacher asked only the cellos to play to "fix" their part* (V s3); *the teacher makes a step back trying to make students think in bars without worrying with notes and rhythm of a melody* (V s3); *the teacher explains what is a bass line* (V s5); *the teacher needs to teach the students several major chords* (V s6); *the teacher tells the difference between harmony and accompaniment* and also *gives an example of what could be a bass line* (V s7)

6 (*the teacher works with one of the groups* (V s3); *the teacher works with Marco and Débora* (V s3); *the teacher asked her to memorize so she could teach to the others* (V s3); *the teacher takes the lead of the session in a more traditional approach of the teacher activity* (V s4); *the teacher needs to take the lead - he says that everyone must experiment* (V s7); *the teacher has to work with different strategies to put them play correctly (conducting, making slower, accentuating the first beat, reducing the pattern, ...)* (V s8)

7 (*the teacher needs to take a more disciplined posture saying to the students that they must be calm and concentrated* (V s4); *the teacher asks the students to be concentrated* (V s5)

8 (*the teacher says the he is very disappointed with the result of this session* (V s4); *... they should have a different organization a behaviour* (V s4); *the teacher says that the melody has a phrasing structure and a conclusive character but it has not the duration it was decided* (V s5)

9 *one or two made the proposals and the others just repeated and memorized the music* (SR s2)

10 [students take] *too long to start working* (V s5), *work in an unorganized way* (V s5), *talking a lot instead of experimenting* (V s8)

11 *some of them experiment different cello sounds and they seem more focused in the work* (V s5), *after a few attempts, the students seem very engaged and concentrated* (V s6), *some students show strategies that help them to play better* (V s8), start *working together, exchanging ideas and debating them* (V s8) and *negotiating the best way to experiment* (V s8).

12 *Catarina suggest[ed] the change of the melody to simplify the transition* (V s2) and, despite an unorganized way to work from one of the groups, *Isabel and Dina [took] the lead and the others follow[ed] them* (V s3)

13 *Dina, Isabel, Catarina e Adriana were very participative, Juliana, Marco, Íris, Tomás and others were very quiet and Jorge and Mário very agitated and, sometimes, destabilizing the session* (RJ e20).

14 *Rute resists, saying that she only will play one note. The teacher asks her to play an improvised melody but she plays only G in long notes* (V s11); *in the first attempt the students don't play and the teacher tells them that they only have to try... it will not be wrong* (V s11); *many of the students don't play... they are not capable of taking risks.... the violin players risk a bit more* (V s12); *it's especially interesting the way Rute (one of the most resistant to take risks) leads some parts of*

the work (V s13); *Juliana and Dina volunteer themselves... the teacher selects Juliana (she is lot less participative)* (V s13); *they still maintain their constant questions about how to do things* (V s14); *all of them are participating in the discussions and, contrary to what happened a few months ago, we can see a really dynamic in the work and all of them participate. It's always clear that some students are leaders and others follow* (V s14); *Rute says she is not capable of doing it* (V s19).

15 *the teacher asks the students not to be blocked by notation. They are not listening... they are only reading* (V s18).

16 *Catarina says that they don't know if what they composed is in 4/4 bar* (V s10); *very poor and very repeated* (V s10); *the cellos were completely out of tune* (V s10); *not very well played (not together and out of tune). Rute says "With that sound I would run..."* (V s10); *Isabel gives the entrance to the colleagues but with the wrong tempo indication* (V s11); *the first attempts are not in the correct harmony* (V s11); *the tuning is not good* (V s12); *the transition was a bit chaotic* (V s13); *composition based in only one melody... the flute (out of tune) makes long notes and creates a slight sensation of harmony* (V s13); *Bruno says that he didn't knew that was D major... he just knew that it has F and C sharp* (V s13); *the students cannot maintain the pulse - Juliana gives up* (V s13); *the students are having difficulty in maintain the pulse* (V s16); *the students show some difficulties in transposing the melody one octave* (V s17); *the students are having difficulties to learn it by memory. They ask for help... they spend some time learning it but must of them are playing wrong notes and out of tune* (V s17); *some students don't know the notes of the chords C Major, F Major, G Major and A minor* (V s17); *Marco not always is capable of accompanying* (V s17); *Bruno is showing a lot of difficulties to conduct (giving the entrance and the tempo). The rhythm is also not correct* (V s18); *a lot of students play wrong notes (D #)* (V s18); *Débora is having difficulties to play her part... that she created by ear...* (V s18); *the strings are out of tune* (V s18) and *Jorge fails a lot of times the rhythm* (V s19).

17 *most of the students repeat very well the melody remembered by the teacher* (V s12); *Catarina corrects some things, remembering what they have made a few weeks before* (V s12); *Isabel remembers how to divide the parts between instruments* (V s12); *this group makes a very interesting composition because they create several voices/melodies and different sections with consecutive entrances* (V s13); *the first group creates several different soundscapes, using harmony, melodies and ostinatos. There is some concern regarding the different instruments (flutes vs cellos)* (V s14); *the second time they play it's much better* (V s17); *musically much better than in the rehearsals: in tune, together and with better sound* (V s3eprae.3).

18 *there are always some students who try to destabilize* (V s10); *they spend a lot of time talking and not experimenting* (V s10) and *in some moments the confusion is total. Sometimes, some of the students shout, asking the others to be quiet* (V s15).

19 *Dina said that [...] they can create their own music and it's more fun like* this; Catarina *says that in the project they don't have limits for their imagination, they have fun but they also learn.... All of them agree... Rute says: It's much more cool!* and *we can do something completely different... we can be inspired but everything is new... we are not limited*

20 (*Bruno says that the result is not good* (V s11) and *the students suggest some changes for what they have done* (V s16), and in aspects related to the group work dynamics (*Gabriel said that the structuring of the time was fundamental. In the other sessions they were unorganized and lost* (V s13) and *Catarina says that they are too many to do it right* (V s14)

21 (*the teacher asks the students if they don't prefer to play one octave lower but they affirm that they want the first possibility* (V s12) and *the teacher asks their opinion about one music for the march. They tell him that it is too slow and suggest another* (V s16)

22 *Isabel asks the others to participate and give suggestions. Isabel plays what they have composed in the last session [...] Excellent example of Isabel conducting the session [...] Isabel says that it's difficult to be in charge / in command [...] Isabel is capable of conducting all the students and maintain her focus in the piece of music* (V s11), *Isabel remembers how to divide the parts between instruments* (V s12); *the group nearer to the camera is led by Rute and Adriana and the other group in the stage by Dina but also by Mário* (V s14); *Catarina and Isabel are the ones who lead most of the work and sometimes engage in some intense discussions* (V s14); *Dina conducts all the elements of the group* (V s14).

23 *the sections were a bit "separated", without a perceived relation between them* (V s14); *a lot of sections - some of them very well linked but others not* (V s14); *the students are still in a low level of musical understanding* (V 3eprae.3).

24 *this group makes a very interesting composition because they create several voices/melodies and different sections with consecutive entrances. It gives also a sense of logical structure* (V s13), *in all the groups they've created music with a calm character and they were able to think on different musical functions - harmony, melody, accompaniment, etc.* (SR s13); *musically much better than in the rehearsals: in tune, together and with better sound* (V 3eprae.3).

25 *we worked with fixed groups ... before we worked in groups that were changing; we were much more autonomous and independent and did things much more easily. What was difficult was the starting point. But after we started things were more fluid, and that didn't happen before; The time it took to compose the music ... In the first part of the project*

we would spend a whole class just to create a little phrase; We used to be afraid of making mistakes ... we did not play because it was not going to be good. Now we experiment and most of the time we thought, we were pretty sure, that it was not going to be good and it turned out to be a rather interesting melody; [now] we have the perception that is easier to create. Before it was harder to create a song

26 *in the groups, it is always the same people doing melodies*

27 *Well, the fact that the teacher wrote and know what we've done before helps*

28 *[the teacher:] ... told the students [...] that they should start to be more pragmatic and organized in their autonomous work; ... explains the goal of the group work, assuming a "passive" posture, giving the leadership to Isabel; ... goes to the groups and tells them that they must explore and experiment; ... assumes the total leadership of the session; ... talks about the way the students should work: making proposals, experimenting, selecting, arranging; ... maintains the concern of explaining to the students the process and making an evaluation of the project; ... decides that, for the moment, the groups of this session will be maintained (with a few exceptions) in the next sessions; ... says that they can do anything and opens several possibilities* (V s10); *... congratulates Isabel; ... reinforces the idea that all the students should learn all the material, and later they will decide who plays it; ... asks different students to experiment alone with solo cello, giving them some highlight; ... says to the students that some of the improvisations made before were very interesting; ... is not capable of being passive... he tries to help the students learning the musical material* (V s11); *"I need to be more pragmatic about the work because the students' presentation is going to happen very soon"* (RJ e25); *... plays some melodies the students created in the previous sessions; ... stops speaking until the students calm down; ... integrates the two new sections into the music; ... says that he is going to think about ways to develop and mix the musical material according to the "Peace and War" theme. He asks Isabel to do the same. He asks her to write; ... asks proposals (to be made at home) for the students that include old and new musical material (including body percussion and cup song); Rute says that they have already a lot of material but the teacher says to her that it's not structured; ... manifested his worries about the fact that nothing was ready to present* (V s12) *... says that the final result was very positive but more important than that was the way the students worked together in groups; ... questions himself: "Example of scaffolding?"; ... walks through the groups seeing what they are doing but without any intervention; ... pics Juliana [to create a melody] (she is a lot less participative); ... said that he was very happy with the results because the students were capable of creating something in less time; ... tells the students that the mixing of the musical material will be his responsibility for now but in the future the students will be able to do it* (V s13); *... was able to stay 20 minutes without any kind of intervention... just seeing the students work cooperatively and autonomously*; *... [re-arranged] the material they've made in order to present it* (RJ e29); *... stops the work to explain again the suggested process. However, he tells them that they can work in a different way if they decide to do it; ... tells the students that in the last session their work was very positive..., [because] the students don't reach to an agreement [...] decides to choose the group with piano and the drums because, this way, Marco doesn't have to learn new material; ... says to the students that they must adapt to the whole group (active listening); ... suggests that they already have enough material to start the composition and the goal is to create, in large group, the piece, changing, deleting or adding new musical material* (V s14) *... shows the score to the flutists and to the pianist so they can see what they have played when the created the music; ... tells the students that, this time, he will make the proposals for the music because there is not much time to do it. And then students have the possibility if changing it; ... is now more comfortable with the role of mixing the musical material; ... is trying to put students working together but trying not to intervene too much... but sometimes, when the students are not agreeing he takes the final decision to make the work advance; ... asks the students some questions about the musical proposals they have made for the story created by them; ... asks for suggestions [After the mixing of the material]* (V s16) *... remembers the students some hand signals to guide them in the piece; ... introduces irregular bars; ... says that he has made a proposal following the text they've created and asks them to suggest changes and improvements; ... introduces one more element; ... introduces other parts that they have worked before; ... is keeping the music always playing...* (V s17) *[seeing the students' difficulties], says that, for the moment, he will conduct and later they will decide what to do; ... explains how the score is organized; ... suggests that it should be Mário to end in solo because he was the one who composed the melody; ... [conducts] like in an orchestra rehearsal* (V s18); *... remembers the students that they must play by memory* and *... assumes a mistake but the students say that they like it and the teacher decides to accept the students' suggestions* (V s19); *... was completely quiet during the creative process. The process was completely students-driven* (R eprae).

29 *when we are in the orchestra classes the teacher needs to assume a rigid posture so we don't speak ... when we are in the project... we are volunteers, we are between friends... we know each other for a long time... when we are all together we are at ease... the teacher is not only a teacher but also a person that is preoccupied if we are doing something that we like doing, and if we know what we are doing* (V 3eprae.3),

30 *'Regarding my skills as arranger, I really think I'm not capable of doing something that will meet my standards but, in this project, it is necessary that I force myself to do it and deal with the consequences... for now, there is no alternative'* (RJ e36).

31 *explore and experiment* (V s10); *compose a melody [over] the Bach's Prelude of the first suite for solo cello* (V s11); *learning by memory and not by sheet music* (V s12); *select and arrange pre-existent musical material to introduce in a musical product* (V s12); *to compose some pieces that have a more "calm" and "smooth" character* (RJ e28); *"integrate"*

the work [of each group] in a common beat (V s13); *compose something departing from 2 different images [and] create a narrative* (V s14); composing using the following words as provocation: *Competing; Collaborating; Compromising; Avoiding and Accommodating* (RJ e30); *presentation of the musical product made previously [and] the creation of a piece of music from a provocation (image, poem, word) "in the moment"* (V s14); *[mix] new compositions with older material* (V s14); *[create] several different soundscapes, using harmony, melodies and ostinatos (*V s14); *create some music proposals regarding the structure of the story created by students* (SR s16); *present the material the students created since the beginning of the project and ask the students to improve it* (SR s17); *keeping the music always playing [to see how the students react]* (V s17).

32 *... the groups created should be maintained, at least for a few sessions [...] the idea is to see if, maintaining these groups' dynamics, the results are better* (RJ e24); *In this session the students will work autonomously without the teacher present* (SR s15); *I will try to make a session putting all the students composing in big group and try to put them creating [...] The option for the big group is to reduce the amount of time the students spend without being focused when they work alone* (SR s16).

33 *students and teacher seem very engaged in music making* (V s10); *very clear example of the structure of the piece (*V s11); *I had to use notated music...* (RJ e27); *this group makes a very interesting composition because they create several voices/melodies and different sections with consecutive entrances. It gives also a sense of logical structure* (V s13); *the teacher says they have a challenge like "Masterchef" - they have 20 minutes to present something - they have to plan: ideas / Experiment/Decide/Rehearse* [and, following this indication], *perhaps due to the time imposition the students start immediately to work and they seem all engaged in the work. It was the first time ever they have done this... it really worked* (V s13); *[the students] said that the fact of having [the teacher] saying how to structure the work [...] helped them a lot being focused on the work. The time given for each phase was also a structuring element and a motivation for them* (RJ e29); *it's visible that the group in the stage has decided the structure and they will start rehearsing the musical product* (V s14); *the quality of the musical work is also improving, getting more complex and indicating a higher level of musical understanding* (SR s14); *it seems that the teacher is now more comfortable with the role of mixing the musical material...* (V s16); teacher's comment in the session: *"To be faithful to the goals of the project, I will not intervene in any part of the creative process. The students must feel that they are the sole responsible for the work. They seem very focused and competent in the work they are doing."* (V 3eprae.2); *the first musical product of the project* (V s19); *musically much better than in the rehearsals: in tune, together and with better sound. They were totally engaged...* (V 3eprae.3).

34 *all of them are participating and engaged except, sometimes, when they are asked to improvise or play individually* (SR s27); *they still don't to know how to play it* (V s21), *forgotten what [they] should play* (V s24)

35 *[Íris] has been one of the most timid elements but in this session she showed an interesting posture and musical competence* (SR s24)

36 *the teacher asks for volunteers to lead... after several refusals, Marco accepts* (V s27)

37 *Marco takes the lead but also shows insecurity. Other students remember him some of the material created* (V s27)

38 [the students were] *already working as if this was completely natural for them. They seem[ed] not to be questioning anything [...] and, although some of them [were] just following the ideas of others, it is interesting that they don't question their "authority."* (V s28).

39 *(even if it does not look good, at least [they] try...; at first, [they] were afraid to try ... and now [they lost] that fear completely* (Adriana); *[they are] more comfortable doing things ... making [them] more comfortable with the group ... over time it happened* (Marco); *it's not like in the beginning [...] now [they] are able to create the musical pieces* (Bárbara); *[they] have evolved since the beginning* (Bruno) and *it's getting easier* (Íris).

40 *very interesting in the session was Rute's behaviour: when asked to present a musical proposal she refused but when she was working with the others she was extremely active and participative* (SR s26); *in the group Rute is more open to experimentation [...] she participates a lot in the creation, mainly giving suggestions about the work of the colleagues* (V s26)

41 *the teacher asks Rute to teach the Body Percussion part [...] she resists* (V s27)

42 *after all this time we have been able to compose more easily, even faster... and we are working all in a group ... sometimes individually but later joining the all group... after putting things together, we can change the musical material [...] but maintaining all the ideas* (Tomás); ***we do not limit ourselves*** *... for example in the orchestra we have sheet music ... but here we are the ones who create* (Juliana)

43 (*some of them continued to make some confusion between harmony and melody* (RJ e54)

[44] *There are people of the same instrument who are more advanced than others, but we always go around to adapt and we can all participate ... even if we do not always do the same thing ... it can be facilitated*

[45] the students *discuss [...] reach a consensus and agree* (V s21), *divide the group in several parts to work in different elements [while] one of the groups works separately [and] some students leave the room to work autonomously in some parts* (V s27), showing *how the group should function* (V s28) and, in other cases, the students helped *each other to learn the music* (V s27)

[46] *we've learned to work better as a group, without having the teacher giving indications* (Rute); *we were more autonomous! Now we can create!* (Isabel); *we learned to work in groups, to create songs made by us instead of playing songs made by others* (Mário); *we work in groups, we give our ideas, we create songs together, to learn to work better together ... also to develop our ability to create new things* (Clara).

[47] [the students said that they have] *learned to adapt to situations ... for example, if we had a melody and accompaniment that did not look good, we gave up. We have now been able to adapt in a way that allows us to put everything together ... even if we modify a little, the idea is still there... we have been able to adapt better to the situations* (Catarina) (FG 3)

[48] [the students said that they have] *learned to adapt to situations ... for example, if we had a melody and accompaniment that did not look good, we gave up. We have now been able to adapt in a way that allows us to put everything together ... even if we modify a little, the idea is still there... we have been able to adapt better to the situations* (Catarina) (FG 3)

[49] *it is interesting that [the others did not] question their "authority"* (V s28).

[50] *Sílvia does not play in tempo... Catarina conducts her. Then Rute enters but is insecure... Catarina also tries to conduct. She remembers Mário's part* (V s26); *Isabel and Adriana continue to lead the discussion and creation* (V s27); *Isabel is clearly conducting all the work, almost always standing up and seeing if the others are playing their part well* (V s27); *Adriana and Catarina lead the session together - the teacher assumes the lead several times - but they take over* (V s27); *Isabel takes the lead. She is the more secure in this task, giving clear entrances and articulating well all the parts* (V s27); *Isabel conducts the work... even talking when playing.... It's also she who corrects the mistakes...* (V s27); *Isabel is playing in her knees and she assumes the conducting of the group* (V s28).

[51] *Rute is the student that has an enormous evolution during the time of the project. Many times she takes the lead of the group* (V s27); *Mário tries to take the lead... it is the first time this happens* (V s27); *Rute suggests some things but she is always very insecure. She leads the work in the group* (V s27); *the teacher asks for volunteers to lead... after several refusals, Marco accepts* (V s27); *Marco is capable of playing with some variation and he conducts (by playing) all the piece* (V s28).

[52] *never a session was so quiet!* (V s24); *the work environment is very relaxed [...] for now they are really calm* (V s27). In some situations, some students were *really committed and others show[ed], sometimes, that they [were] not engaged in the work* (V s27)

[53] *it's impossible to work with Jorge* (V s22)

[54] *some of them are trying to create the melody but without hearing the harmony. They seem a bit lost* (V s22); *all of them make the same thing in unison... not interesting. It has no musical sense. There is no coherence in the music presented by the group, making very strange changes in tempo, key and time signature* (V s25)

[55] *the melody is simple and beautiful and follows the question/answer structure* (V s22); *the students reach a musical product... the teacher asks them if it makes sense... Catarina says no* (V s24); *it's very interesting because all the 4 students have different voices that complement each other... good musical product...* (V s25); *the musical product was created with some structure and musical sense* (V s27).

[56] *the teacher suggests that three of them play the harmony while the others experiment the melody. Later they should switch the parts* (V s22); *he thinks he needs to take control of the session to make the students advance* (V s23); *divides the students into 2 groups (as they were disposed in the classroom)* (V s24); *gives different tasks to the groups of instruments* (V s24); *says to Catarina to take some of her colleagues for another room to teach them the melody* (V s27); *assumes all the teaching of the parts* (V s27); *Adriana takes the lead but the teacher takes the lead to teach the students the bass line* (V s27); *seeing Rute's difficulties, the teacher takes the lead* (V s27); *Marco takes the lead but also shows insecurity [...] the teacher helps him* (V s27); *the teacher, seeing that the discussion is not advancing, tries to unblock the work* (V s27); *gives some indications about how they should conduct their colleagues* (V s27); *[the teacher] assumed the selection and the "remix" of the musical material* (RJ e66)

[57] *Gabriel says that he has nothing to play - he experimented a lot but he says he was not capable - the teacher doesn't insist* (V s24); *Mário says he doesn't want to improvise and the teacher doesn't insist and asks other students to do it* (V s27); *I asked them to play but I didn't force them... respecting their visible discomfort to be exposed in front of their colleagues* (RJ e63)

[58] *Gabriel says that he has nothing to play - he experimented a lot but he says he was not capable - the teacher doesn't insist* (V s24); *Mário says he doesn't want to improvise and the teacher doesn't insist and asks other students to do it* (V s27); *I asked them to play but I didn't force them... respecting their visible discomfort to be exposed in front of their colleagues* (RJ e63)

[59] *sometimes the teacher needs to be quiet because the students are not paying attention and making a lot of noise* [and] *gives up talking and finishes the session [earlier]* (V s21)

[60] (*the teacher remembers that a song must have Chorus and verses* (V s21); *talks about what is a melody (phrases, sections, etc)... he talks also about the harmony and that the melody and harmony can be articulated* (V s21); *to structure their musical thinking [...] scaffolding the students learning to compose* (SR s22); *using the students' proposals, the teacher makes a proposal for the second part* (V s22); *the students suggest and the teacher plays. The teacher asks the students to experiment harmonies* (V s22); *explains several possibilities to* create a song [...] *1) Create the harmony 2) Decide the number of bars and phrasing* (V s22); *gives some examples of questions that the students can put themselves when composing* (V s22); *remembers that they should maintain the pulse... otherwise the character will be different* (V s22); *gave a more traditional lesson about structure, form, orchestration, parts, melody, harmony, accompaniment, etc.* (RJ e54); *gives some musical examples of what the students can do in their tasks [and] remembers the work structure: experiment, decide, rehearse* (V s23); *answering to the students' doubts, the teacher tells them that, for the moment, they must follow that harmony that was given in the beginning of the session* (V s23); *gives them the task to integrate all the students' proposals... the idea is to think about how to integrate and make the transition between the parts* (V s24); *tries to help the group work - he conducts the entrances* (V s24); *suggests that they can use the last part created by the 2nd group* (V s24); *tries to adapt the material that was created changing some of its characteristics* (V s25); *suggests that they try to explore different ideas that can be provoked by previous ideas* (V s26); *asks them to think about Recycling (for instance, instruments made by recycled materials) as a possibility for creation* (V s27); *talks about the form of the flashmob* (V s27); *talks about several possibilites for parts of the flashmob: melody, beat, bass line, etc... [...] the teacher asks them to try to put all those elements, although it's not mandatory* (V s27); *during the group work the teacher is taking doubts. He says that when structuring the piece, they can also join some musical ideas* (V s27); *says that they should not create what is too obvious [and] to risk more, using "strange" sounds and dissonances* (V s27); *goes around the groups trying to develop the musical material* (V s27); *works again the rhythmic part giving other suggestion for the students to think* (V s27); *seeing that the discussion is not advancing, tries to unblock the work* (V s27); *works with Marco some riffs for the piece* (V s27); *gives some indications about how to improvise [...] tries to help some students playing the rhythm [and] work[s] on the rhythmic part* (V s27); *answers to the students' doubts* (V s27); *tells her that they can mix all the material or create something new departing from that material* (V s28)

[61] *the teacher calls the attention [...] some of the things they are doing were not requested* (V s21); *makes an evaluation of the work and tells the students that they didn't followed his indications* (V s21); *says that he feels the students are not happy with that option... and the students agree* (V s23); *the teacher says that he realizes that are things that are not working and, for that reason, he will think in alternatives* (V s23); *reinforces the idea that nothing is wrong* (V s24); *says that the result was positive regarding the musical material... but they need more time to work* (V s25); *the teacher says that the part is very interesting because it's an irregular bar* (V s27); *makes an evaluation of the session saying that a there is a lot of good musical material* (V s27); *makes a challenge for the students to compose music for a future concert for an Erasmus+ project. They reveal to be very excited and happy with the idea* (V s27); *Adriana suggests another possibility but the teacher says that she is playing a quarter-note and not a quaver - the teacher exemplifies* (V s27)

[62] *the teacher goes to the piano and asks the students to create a harmony collectively with him* (V s22); *the teacher says he will think about the theme but asks the students to do the same* (V s23); *the teacher improvises himself* (V s27); *the teacher also participates as a cellist [and] integrates all the compositions* (V s27); *hearing the melody taught by Catarina, the teacher makes a harmonic change in the accompaniment* (V s27); *scaffolds the students' compositions, extending what they've created* (V s27); *the teacher also plays with the students and he seems "in flow"* (V s27)

[63] *the teacher says that he understands them when they say that it's difficult. He assumes that he himself does not know how to do it* (V s23)

[64] *perhaps I need to be clearer in the indications or give suggestions and examples* (SR s21); *perhaps I should've been more patient* (RJ e53)

[65] *create a song* (RJ e51); creating *the melody and bass line* (V s21); *create some music only by giving them verbal*

instructions and let them be autonomous (V s21); *to bring a text (that can be original or not) to serve as lyrics of the song - with the theme "dawning"* (V s21); *compose a song and compose all its elements and sections* (V s22); *suggest a harmonic scheme [and] compose departing from the chords created* (V s22); *using what the students made in the first part of the song [and] compose other lines – rhythmic, bass line, accompaniment, 2nd melody* (RJ e55); *improvise something in the drums [and] change the character in the different parts* (V s23); *make the 3 parts: intro, verse and chorus* (V s23); *join with an idea and experiment a lot of times until they reach a satisfactory result* (V s23); *integrate all the students' proposals... the idea is to think about how to integrate and make the transition between the parts* (V s24); *the teacher gives the students 10 minutes to create individually. He remembers the students that they have to create melodies, soundscapes, bass lines, ostinati* (V s24); *from the very different proposals that each one of them has made ("concept binomials") they can adapt and transform the initial material to fit together in a new musical product* (RJ e62); *to develop a contrasting part from the harmony... this new part has no rules... they can do everything they want* (V s26); *if they want, they can write the music... this is also the first time I allow this in the sessions* (RJ e64); *work on three steps: 1) planning the form, 2) create the musical material and 3) try to articulate the musical material between the two groups [...] this way to start creating was the first time to be made in the project. In the other situations they start by the sound* (V s27); *think about Recycling (for instance, instruments made by recycled materials) as a possibility for creation* (V s27); *the intention is to make a flashmob where other schools will participate, to include the idea of a dance* (RJ e65); *mix all the material or create something new departing from that material* (V s28)

66 *the teacher joins the students by groups [...] (1) Violins; (2) Cellos - (3) the others* (V s26); *put students creating completely alone and also put some of them leading the session individually* (SR s27); *I divided the groups trying to balance them [with the concern] to separate Bruno and Isabel and to have in both groups students that could lead the composition* (SR s27)

67 *the teacher gives a paper to the students... the students take one paper and each paper has 4 letters... the elements of the groups are chosen randomly* (V s21); *divides the students into 2 groups (as they were disposed in the classroom)* (V s24)

68 *by one side, I do not want to expose them individually but, by the other side, perhaps I can help them in some way to prepare their material to be used in the group creation* (RJ e57).

69 *the teacher tells the students that, at least for some time, these groups' formation is going be maintained to see if it work or not... if not, the teacher can promote some changes* (V s21).

70 *Catarina said "I like this one", but Rute says "I didn't like it"* (V s25)

71 [They] were *not conditioned by time schedules (they had all day to work) and they had also time to relax and to spend time with each other and with the teacher in an informal setting (for example, sharing a lunch)* (SR e66).

72 *in other classes the time is shorter ... we have less time to do things, and when we are in the middle of the work, when we have the next class we no longer remember what we did. While here we had, at most, one-hour break for lunch ... and we remember what we did* (Bruno); in regular sessions *we were tired [...] and the [following] week we do not remember the notes.* Isabel said that *it's really the question of time duration* because in some regular sessions the work was really good, giving as an example the session when *the teacher said: "You have "x" time to invent, "x" time to ..., then "x" time to remember everything ... and then we'll present to the others".*

73 *the melody is very fast and somewhat confusing... but good* (V s22); *the melody is simple and beautiful and follows the question/answer structure* (V s22); *regarding the musical products, and for the first time, I decided not to use [the students' compositions] because they are really poor* (RJ e56); *Isabel´s proposal was very strange regarding time signatures - Isabel was inspired by the lumberjacks* (V s24); *Catarina starts by making instrument percussion... and them she makes a melody in the basses and she explores different sounds of the instrument... she says that she intends to represent the "deformation of the Earth"* (V s24); *Adriana does a very clear and structured melody* (V s24); *the first group creates an interesting intensification of the sound... but it lacks other kinds of elements to make a coherent structure* (V s24); *these groups make a better connection between the parts that were created by the students... however, it seems a "collage" from the musical themes. An interesting element is the last part, where they integrated 2 melodies and a basic harmony.... However, it's difficult to understand the beat and time signature and also the relation between the parts* (V s24); *one good surprise was Íris that was able to present a proposal with structure and interest* (RJ e58); *the results are always small fragments and usually not very structured* (SR s25); *all the 4 students have different voices that complement each other... good musical product... although not with diversity* (V s25); *all of them make the same thing in unison... not interesting. It has no musical sense. There is no coherence in the music presented by the group, making very strange changes in tempo, key and time signature* (V s25); *I think that most of the students still create [...] fragments but they are not still capable of developing them and create some coherence* (RJ e61); *the biggest difficulty now is putting them developing the material* (SR s26); *the musical product had very clear parts but the drums was too loud and the melodies were just a simple melodic pattern* (V s26); *the groups payed no attention to aspects like "tempo" and harmony. Even the melodies, in most cases, were just some motivic fragments. In this respect (the composition), I think we only achieved the*

first part of the process: the creation of motivic material (RJ e63); *VERY INTERESTING MATERIAL - it shows very different soundscapes* (V s27); *VERY GOOD - several parts and sections - good melodies, accompaniment. It includes singing and body sounds and percussion* (V s27); *good group groove [...] good sound and rhythmic pattern [...] good transition* (V s27); *very strong character (almost warrior) in the beginning. Good difference between the different parts (bass, rhythm, melody, ...). Good transition between the parts. Very good!* (V s28); *a complex rhythm... but very interesting. Inclusion of body percussion* (V s28); *in the beginning all the material seems very well rehearsed and the outcome is very good* (V s28); *the mixing of the parts is not easy but the students are capable of adapting to each other... even when the tempo accelerates* (V s28)

[74] *the teacher also plays with the students and he seems "in flow"* (V s27)

[75] *"If last week I thought that if the project ended in that moment the results I had to show were somewhat poor"* (RJ e66)

[76] *the students are focused but the teacher makes all the work* (V s29); *only Marco, Catarina, Isabel and Adriana start to play. Other experiment with some resistance (for example, Bruno tries with pizzicato)* (V s29); *most of the students are resistant... they say that some months passed since the last session* (V s29); *once again Rute is the only one who does not play* (V s29); *Marco is very passive* (V s32); *when they started to compose in groups the students maintained a resistant posture* (SR s36).

[77] *Rute refuses to play - the teacher doesn't force her* (V s29)

[78] *"Why can't we do these things now?", "This proves that our ideas are running out! It's like natural resources: if we use them a lot they run out", "I'm having much more difficulty now than before!"* and *"Before it was more natural and now we are blocked"* (V s35).

[79] *even Rute is trying but she stops a lot of times* (V s29); *Débora also tries some accompaniment* (V s29); *in this group Íris is also being very active (and this is not very frequent)* (V s30); *Rute gives some suggestions* (V s31); *the students called the attention because Íris made a suggestion. It was really funny to see her colleagues' reaction* (V s33); *Mário is experimenting* (V s42); *Mário discusses with Catarina the best way to play a part - good initiative* (V s43)

[80] *Íris this year spoke more [and Rute and Sílvia] already play!; we have all improved in the giving of ideas; I have evolved since last year; now I think it's a bit automatic a bit automatic*. (FG 4)

[81] *[the students] continued to make a good work, maintaining a good balance between good mood, experimentation, discussing, composing and performing* (SA s40); *a lot of students, that usually don't give suggestions, participating [being] very rewarding to see this group work dynamics* (RJ e83)

[82] *[some students] still make long notes or just replicate the rhythm of the first suggested pattern [...] don't pay attention to the tonality of the pattern [...] show difficulty regarding the tempo, [play] in a completely different key [and] completely out of tune* (V s29); *have difficulties in maintaining the pulse* (V s29); *play wrong rhythm* (V s31); *play wrong notes [and are] making the rhythm wrong* (V s31); *it was not well rehearsed and they were not capable of playing it until the end without interruptions* (V s32); *they continue to show difficulties regarding the development of new material and the structure* (SR s32); *Íris and Jorge show some musical and technical difficulties* (V s35); *Sílvia had some tuning problems and also wrong notes* (V s35); *they are having some difficulties because the rhythm is difficult (they are playing in different time signatures)* (V s40); *transition was not well made* (V s41); *difficulties in making the transition... there are still some doubts* (V s44).

[83] *it's very obvious the level of naturality and also the level of musical interest and complexity made by Catarina's and Adriana's improvisations* (V s29); *the first group makes an interesting introduction [...] It includes a violin solo* (V s30); *Good sonority - also interesting for an overture. Good balance between instruments - beautiful flute solo followed by a violin solo and then a cello solo. It shows some ideas for a structure* (V s30); *the piece has three distinct parts... it's good in this aspect because it is the first time they are capable of doing it* (V s30); *the piece shows several elements: bass line, rhythm (body percussion), harmony, accompaniment, 3 melodies (divided between violins and flute), and singing* (V s32); *they've created different melodies played simultaneously by different instruments. A musical piece with some structure is already seen... good work* (V s33); *good musical ideas, with good transition between parts. The piece was structured and well-rehearsed* (V s34); *Good character and sound. Very rhythmic fragment* (V s34); *the composition has some new material regarding the initial proposal... the work achieved its goals. Good work!* (V s38); *the work shows some diversity regarding the sounds and contrast. Almost every student play different parts* (V s38); *Good character ("hard sound"... almost violent). Several parts combined... very interesting* (V s39); *the changing of the existent material was also interesting* (V s48); Isabel was *extremely secure about what she wants. It was also noted the way Adriana saw that the score had some mistakes... she was also very clear about her musical ideas* (RJ e108); *musically it was extremely interesting the way the students were capable of making the transitions between the parts [...] It was really a problem-solving situation* (SR s49).

[84] *the students discuss the bowings* (V s31); *one of the groups started to work almost immediately [and] most of them were experimenting when the suggestions were being made* (V s32); *the group seems to be working better. All of them seem more concentrated* (V s34); *they discuss the character of the pieces* (V ex.s.); *they are working very well together* (V ex.s.); *in one of the groups the students are separated in smaller groups to learn their parts* (V s39); *Isabel taught the melody to Juliana and Maria. It's really a good example of cooperative learning* (V s39); *good example of discussion and cooperative work* (V s40); *Catarina working with their colleagues [...] helps Tomás and Mário with the fingerings* (V s40); *several students discuss and contribute to the creation* (V s43) and *Bárbara has difficulties in playing the rhythm but Catarina tries to help her* (V s49)

[85] *the work was led by the usual students* (V s32); *the beginning was not easy and the students took too long to start* (V s33); *Catarina's group is having difficulties to start. It's difficult to understand why, sometimes, students go back to "old" behaviours and show a lot of difficulty to start playing, experimenting and composing [...] Bruno is constantly playing other things... and Marco is extremely passive. They seemed completely absent from the group work* (V s34); *sometimes Jorge and Mário have behaviours that difficult the work, but the group work, although a bit confusing, shows positive results* (V s34); *the piano/percussion group is the most resistant... no one in the group takes the lead* (V s36); *they are taking too much time starting to really create* (V s40)

[86] *there is always someone who takes the initiative in the group [and] it was important to maintain the chain of ideas* (FG 4)

[87] *she says that what is written in the score is not correct* (V s44)

[88] *it seems that she knows what she wants but [she] is not controlling the session* (V s42)

[89] *Catarina and Dina discussing and negotiating the transition from one part to another* (V s42)

[90] *it is clear that [...] Isabel is leading* (V s30) and *conducts all the group [and] maintains a very strong leadership* (V s32)

[91] *"I tell them to experiment but they stay quiet!"* (V s38)

[92] *she is very directive regarding her leading... she takes the drumsticks of the glockenspiel telling Jorge what and how to do it. She does the same with the piano* (V s34); *Isabel is a "born leader"... she assumes completely the leading. She is very dynamic, being on her knees, standing up, going to the piano to experiment and give suggestions [but allowing] the others [to] give suggestions* (V s34); *Isabel teaches the melody to Juliana and Maria. It's really a good example of cooperative learning* (V s39); *Isabel assumes herself as the leader and conducts all her colleagues* (V s39); *Isabel conducts standing up [...] it seems that it is a solo made by Isabel and the others are just accompanying* (V s40); *examples of Isabel scaffolding and leading her colleagues - she teaches every parts individually - plays in the piano (she is not pianist) to teach Débora* (V s40); *Isabel is in complete control* (V s40); *Isabel is very secure of what she wants to do. She starts immediately to work* (V s42); *Isabel leads her colleagues going near them and teaching them what to play* (V s42); *Isabel plays again in the piano to teach her the piano part* (V s42); *Isabel explains that her initial idea was to have all singing together but because "it was too out of tune [she] decided to play the chords in the piano"* (V s42); *the teacher asks Isabel what she suggests - she answers without any hesitation... Isabel rises to conduct the group... Isabel continues to give indications to her colleagues* (V s44); *Isabel explains what to do... and exemplifies... and conducts...* (V s48)

[93] *Catarina is leading in one group [...] she rises several times to improvise in the piano when Débora is playing the harmony* (V s30); *very good example of Catarina conducting the work* (V s30); *Catarina is clearly conducting* (V s30); *Catarina and Dina lead the work* (V s32); *Catarina is conducting in a more traditional way than Isabel. Perhaps this is because the instrument she plays (cello) that doesn't allow so much mobility* (V s34); *Catarina conducts very well her group - giving entrances and leading them in other musical dimensions... she can also play* (V s38).)

[94] *only in this moment Catarina's group starts to work. She asks for ideas* (V s40); ***Catarina tries to engage all in the creation*** *[...] good example of discussion and cooperative work* (V s40); *example of Catarina conducting - Example of development of musical skills - and scaffolding* (V s40); *Catarina discuss with Marco what he should play. They are having some difficulties because the rhythm is difficult* (V s40); *Catarina is always trying to control her colleagues and she maintains a good working environment* (V s40); *Catarina working with their colleagues [...] helps Tomás and Mário with the fingerings [...] conducts the rehearsal for the performance* (V s40); *Catarina conducts while she plays* (V s40); *Maria is not playing well and Catarina corrects it* (V s40); *Catarina corrects the beat of the bass drum... Catarina exemplifies in Vibraphone how Jorge must play... Catarina conducting - giving consecutive entrances* (V s42); *Catarina goes to the piano to teach Débora how to play her part [...] Catarina asks her colleagues what they think about the end of a part* (V s42); *Catarina explaining what she wants... Catarina seems in control and in "flow"... Catarina gives a suggestion regarding instrumentation* (V s42)

[95] *Catarina and Adriana experiment some possibilities to play one part and ask Isabel what she prefers* (V s43); *Isabel and Adriana discuss with Catarina how to play the music* (V s45)

96 *Catarina asks Isabel some information and proposes an accompaniment part* (V s29); *the teacher suggests a melody and only bass accompaniment but Catarina says that it's better "a cappela"* (V s31); *Catarina and Adriana experiment the other voice* (V s31); *Catarina notes that they are making some mistakes in their part* (V s37); *Catarina says that Dina has a lot transitions... The teacher was suggesting that after Dina's part Isabel part could start but the students already suggested that before the teacher could end saying that. They liked a lot the idea!* (V ex.s.); *Adriana plays one part in the piano - Catarina suggests a cut...* (V ex.s.); *Isabel suggests a scheme - Catarina questions her suggestion* (V ex.s.); *Catarina says that she wants to combine two parts but it does not work. She says that they can change the initial material* (V ex.s.); *Isabel gives suggestions... [...] the idea is to start with all orchestra and after reduce gradually* (V ex.s.); *good discussion about musical proposals* (V ex.s.); *Dina tells the teacher what she wants for her part* (V ex.s.); *they remember a different melody that could fit whit the one they are working* (V ex.s.); *Catarina discuss with Marco what he should play* (V s40); *Catarina corrects the beat of the bass drum* (V s42); *Catarina says that she needs Marimba and Vibraphone playing at the same time* (V s42); *Catarina exemplifies in Vibraphone how Jorge must play* (V s42); *Catarina goes to the piano to teach Débora how to play her part* (V s42); *Catarina and Dina discussing and negotiating the transition from one part to another* (V s42); *Catarina gives a suggestion regarding instrumentation* (V s42); *Discussion about what part should be made first* (V s42); *Isabel is very secure of what she wants to do [...] She suggests a very difficult melodic theme* (V s42); *Isabel explains to the teacher what she pretends* (V s42); *Catarina makes a correction... Catarina makes a suggestion...* (V s43); *Isabel makes a correction of the rhythm played by the oboe* (V s43); *Isabel continues to give indications to her colleagues* (V s44); *Isabel and Adriana discuss with Catarina how to play the music* (V s45); *Isabel explains what is requested from the audience* (V s49); *Catarina gives a suggestion for the transition for their group's part* (V s49)

97 *a lot of times they've mentioned enormous enthusiasm and excitement* (RJ e96); *after some time they started to understand the process and seeing results and, from that period on, they engaged with enthusiasm in composition* (RJ e96); *the students had a lot of fun in the final part of the session* (SR s48).

98 *Catarina says: "It will be such a thrill when we hear them playing our music!"* (V ex.s.); *Isabel says: "It's going to be a real cool concert!" [and] Dina agrees* (V ex.s.)

99 *Dina says: "How beautiful!"*; *they say: "It's really beautiful"*; *Isabel says that what they've composed is more beautiful than the music of the priest (a music that they are playing in the orchestra)* (V s35); *the students seem excited with the perspective of the final product*; *after hearing one suggestion played in the computer, they say: "It's cool!"*; *good musical idea... [with enthusiasm!] "It's very nice!"* (V ex.s.); *a lot of times the students seemed extremely enthusiastically with the perspective of the future musical product* (SR ex.s.); *Catarina seems in control and in "flow"*; *students seem very motivated* (V s42); *students and "audience" had fun!* (V s48)

100 *several times [Marco] placed himself 'out of the group' [...] the teacher noticed that absence and worked individually with him* (SA s40).

101 *Marco is very passive* (V s32); *only Marco continues very passive* (V s34); *Jorge and Débora play alone and Marco does nothing* (V s36); *Marco is studying other things in the marimba* (V s36)

102 *The most important aspect I feel the need to address is regarding Marco's behaviour and posture in the last sessions. Although maintaining a low profile in the sessions since the beginning of the project (he is also like this in every other classes where he worked with me and also with other teachers), lately he seems very demotivated and, sometimes, completely absent from the group work. Usually he needs to work alone because he is almost always playing drums – it is a very important instrument, and the students are always fighting to have it in their group but, perhaps for Marco this kind of work is not so motivating because he is, most of the times, just accompanying. Sometimes I tell him to go to the vibraphone or marimba but, many times, these instruments are not available. Today, the session started with Isabel not involving Marco in the group work... when I approached, trying to include him in the group work, Isabel said that, for the work she had planned for today's session, she wouldn't need the drums. For that reason, I changed Marco to another group. During the group work, Catarina sometimes asked him for concrete things but, many times Marco was completely absent from the group work dynamic. One of the times, I just sat with him for a few minutes, creating something that he could play with the group... after that I "forced" the rehearsing of this part. I feel that, at least today, I had a positive intervention regarding Marco but I fear that other sessions I was not aware of this posture and possible demotivation. This is a case I must be attentive...* (RJ e101)

103 *the teacher discusses with Marco what he can do in the different part* (V s37); *once again, Marco is not playing with the group. The Teacher approaches and works with him* [suggesting] that Marco *plays the part they were working with the group* (V s40); *the teacher asks the students to experiment a proposal, involving Marco* (V s40); *Marco is not engaged in the group work and the teacher asks him to change instrument* (V s48)

104 *[to inform the students] what they should achieve in the end of the session, act as a scaffolder when they were feeling lost and without confidence and also writing what they decided in the computer, facilitating their access to their previous musical decisions* (RJ e96).

[105] ***the teacher*** *[...] gives some ideas for improvement and development of the musical material. For example, he tells them that they don't need to play all the time all the instruments* (V s30); *responding to Catarina's question, the teacher says that they can use voice or anything they want. He also suggests that if they want they can think in instruments made by recycled materials* (V s30); *explains how to do the transition to another theme [and] suggests some cuts and changes* (V s31); *explains that in the flashmob it is important to start by a simple thing and gradually creating tension* (V s31); *says that they should think in all the orchestra instruments and compose for them* (V s31); *tells the students that he knows that they had less time to work but they should be more organized in the work they make. They should spend less time before starting* (V s34); *tries to help because the students are getting frustrated. He gives some concrete suggestions. He plays on the cello* (V s35); *seeing that the piano/percussion group is the most resistant, goes back to work to that group* (V s36); *takes an active participation in the work, talking to students about what they are doing and also giving suggestions* (V s36); *remembers the harmony* (V s36); *gives some examples to the cello group about the bass line* (V s36); *plays percussion with Marco and then he helps Jorge* (V s38); *gives an example of what they can do* (V s41).

[106] ***the teacher*** *tries to value the students' efforts by stressing the good things that every groups have made* (V s30); *makes a comment on the good things they've done* (V s35); *highlights the most important and interesting elements of the piece* (V s35); *says that the final result was good* (V s36); *told them that this work can serve as an example how they should do it with the other "raw" materials* (V s36); *says that it is very good but gives some small suggestions* (V s40); *the teacher told the students that they were capable of doing something in two minutes that previously they were not capable of doing in 2 sessions* (V s47)

[107] *Marco, for several times placed himself "out of the group"... sometimes the others forgot about him. For several times, the teacher noticed that absence and worked individually with him* (SA s40); *the teacher selects Juliana [because] she is less participative than Clara* (V s44); *asks each one of the students to create different melodic patterns* (V s44)

[108] *the teacher asks the students concrete questions about the composition, trying to put them discussing and deciding by themselves* (V s31); *asks the students if the theme is good enough to develop or not. The students say "yes"... The teacher asks again if the theme can be developed and create other things* (V s31); *asks the students their opinion regarding the elimination of one of the parts of the composition. It's a part where the students take a decision about composition* (V s31); helps Jorge *"get into the music", trying to put him exploring more the instrument and reach a different level of engagement* (RJ e106); *tells Jorge to create some variations... if not it is monotonous* (V s38); *thinks that there are a lot of parts when the students are singing... he says that in the end they must evaluate if it is not too much* (V s42); *thinks that the idea was good. He then asks the students what comes next* (V s41); *asks if they prefer B flat or B bemol. The opinions are divided and Catarina says that both ways are good* (V s43); *suggests that the students must diverge from their initial pattern and make something different* (V s44); *says that he thinks the students should develop one of the themes... it is too poor... all of them try to work on it* (V s44); *says that the score is not "rigid" and, for that reason, the students can give suggestions for improvements* (V s46)

[109] "*I've made the decision to be more participative, trying to put them experimenting more and have more material to work with"* (RJ e86)

[110] "*today's session was also similar to the last ones. The students worked well in groups, being my intervention almost residual regarding the creation of new material of development of the previous one"* (RJ e101); "*my first temptation was to create some musical pieces to show the students how that material could be developed... but I decided to wait and see if they can do that work themselves"* (RJ e72); *it is important to note that, at least in the last 3 sessions, the teacher has not had any intervention in the musical creation. That was one of the main goals of this project.... It seems that was achieved* (SA s34)

[111] *teacher and students discuss the better way to articulate the parts (for example, mixing the 4 parts). The teacher tells them that it's their decision* (V ex.s.); *the teacher, once again, remembers that they have to think about the structure (1st step) but also about the character of the parts* (V ex.s.); *regarding the development of the existent material, the teacher tells that they can add layers to what already exists or make new sections* (V s34); *the teacher asks the students to decide in which one of the R's the melody should be* (V s35); *the teacher refers to new creations that are very interesting but need more development* (V s39); *the teacher makes an evaluation of the work* (V s42); *the teacher asks a question to Isabel regarding structure* (V s42); *Adriana and the teacher decide the structure of the music* (V s42); *the teacher suggests to play the melody in two different ways and they decide what they want* (V s44)

[112] *the teacher suggests to cut one of the parts* (V s42); *remembers the students that if they have more interesting parts in other voices they should play it and not to be too conditioned by what is in the score [...] everything else can be changed and re-created* (V s43); *suggests they take notes of the ideas they are having* (V ex.s.); *challenges Adriana to create a musical structure in 10 minutes* (V ex.s.); *Dina asks if they have to wait until the next session to hear how the proposals sound. The teacher tells her that they can play on the piano or write in the computer and listen* (V ex.s.)

[113] *responding to a group's solicitation, assuming that they weren't being capable of making anything, the teacher reacted promptly, took his cello and spend the rest of the session as a member of that group, composing collaboratively with them* (SA s35)

[114] *the teacher also makes some proposals [...] being co-participant as instrumentalist* (V s29); *He gives some concrete suggestions. He plays on the cello* (V s35); *the teacher takes an active participation in the work, talking to students about what they are doing and also giving suggestions* (V s36); *the teacher gives some examples to the group, even playing in the piano* (V s36); *the teacher plays percussion with one of the groups* (V s38); *the teacher goes to the drum set* (V s42); *[the teacher] was a member of that group, trying to provoke discussion about some musical aspects, intervening more and leading, in some moments, the session, trying to articulate with the student that was coordinating the work* (RJ e102)

[115] *the teacher leaves Isabel conducting alone* (V s42)

[116] *asks Isabel for her to give the entrance to Marco* (V s44)

[117] *Isabel has some doubts and the teacher takes the lead* (V s42); *difficulties in making the transition... there are still some doubts. The teacher conducts the transition playing on the cello* (V s44)

[118] *Co-leading between teacher and student* (V s42); *teacher and Catarina conducting at the same time* (V s42) *teacher and Isabel conducting at the same time* (V s42)

[119] *the teacher tells them that they can ask also opinions to their colleagues* (V ex.s.); *Isabel asks the teacher how that will be done once the students will be different in each group... the teacher tells her that the coordinators need to spend 2 minutes to teach the others what to do and, if they are from different instruments, adapt what they must play* (V s34) and *the teacher discusses with the students how they should explain the work to their colleagues* (V s49)

[120] *the teacher tells Adriana to remember and rehearse the chords part* (V s42); *sometimes the teacher tells some things to Adriana for her to experiment with her colleagues* (V s42); *the teacher tells Isabel that they are taking too much time to learn the melody (it's difficult) and, for that reason, it's better to write it down and later they will read it* (V s42); *the teacher scaffolds Catarina about the way she must conduct the others - he says that after 20 seconds the others are not listening* (V s42)

[121] *Catarina says that the teacher has to prepare earlier the change* (V s43).

[122] *after all the groups had presented their work, the teacher joined the all group and mixed the material they composed that session with the compositions that were made previously. The teacher also tried to make an anticipation about how these materials could be adapted to an orchestra, giving concrete examples of all the possible voices* (SA s36); *the students will have a few sessions to work together and during the first sessions [the teacher] will only watch their work but, gradually, [he] will start conducting the sessions, trying to make an ensemble class more similar to a traditional classroom, but trying to engage all the students in the creation and performative work* (RJ e93); *[the teacher] assumed a traditional approach but some students of the project (mostly 3 coordinators) assumed themselves like a kind of tutors or intermediate leaders. It was interesting to see the way they assumed "their music", giving suggestions regarding musical and also technical aspects (bowings, fingerings, articulation, etc.)* (RJ e97)

[123] *I've changed my idea regarding the way students will work* (RJ e100); *in the beginning of the session two coordinators were missing and, for that reason, I decided to teach one part of the music to serve as a model of the motivic development* (SR s36); *regarding the structure of the session, I had none... I will tell them what is the goal of the session and [...] we will see how the session goes and I will try to adapt to it* (RJ e95)

[124] "*In this session I exposed myself as a musician a lot more than in previous sessions. Although being a very simple change, I liked this role and I think that this can be interesting so the students fell that, at least in some ways, I'm one of them"* (SR s29)

[125] *the group work [was] getting uncontrolled [leading the teacher] to intervene to ask them to work focused* (V s42)

[126] *"I divided the students in 2 groups: Recycling and Reducing"* (V s34); *the teacher divides the students in 3 groups with 3 tasks: melody, new bass line and harmonic accompaniment* (V s36)

[127] *the teacher says that it will be Marco and Jorge to create the groups... then it was decided to include Clara and Juliana in the decision* (V s30); *In the spot [the teacher] decided to have some students choosing their group colleagues* (RJ e75)

[128] the *teacher joined the all group and mixed the material they composed that session with the compositions that were made previously. The teacher also tried to make an anticipation about how these materials could be adapted to an orchestra, giving concrete examples of all the possible voices. The final result was very positive (the students agreed) and the teacher gave this as an example of how this can be made with all the existent material* (SA s36).

[129] *the teacher makes a musical proposal and asks the students to continue [question/answer structure]* (V s29); *create a musical form that have 3 or 4 musical sections [...] before start composing, they must create the form of the music* (V s30); *think in instruments made by recycled materials* (V s30); *think in all the orchestra instruments and compose for them* (V s31); *the teacher gives them 40 minutes to work: 20 minutes to explore, 10 minutes do decide and 10 minutes to rehearse - The teacher says that they can use the scores from last session but just to remember some things* (V s32); *the teacher remembers that the music section they are working has a lot of different elements. This way, they can make the adaptation to the orchestras* (V s36); *beginning of the work - experimentation* (V s37); *start from the nature sounds (wind, voices, etc.) and increasing different layers until they reach a noise* (V s37); *improvisation by all group* (V s41); *diverge from [the] initial pattern and make something different* (V s44); *to play all the piece* (V s44); *to create different melodic patterns (with 6 notes)* (V s44); *experiment changes from minor to major mode* (V s44); *see the symbols of the chords and play the notes and not read them* (V s44); *to work on the pieces they've composed and create some activities to engage with the audience* (V s48)

[130] *motivic and musical development* (RJ e89); *reconfigure the previous material and suggest new "schemes" and "music structures"* (RJ e93); *create some kind of musical interaction between them and the audience [putting] the audience singing, clapping or making any other kind of sounds* (RJ e112); *make a 1 minute musical product* (RJ e74); *compose a more elaborate piece of music [...] thinking in Form, Harmony, Melody, Contrast, Rhythm, Contrast, Lyrics? (optional)* (SR s30).

[131] *as feared, the students were somewhat constrained by the sheet music and were not free to improvise and experiment* (SR s31); *as it was somehow expected, the students were less free to create and experiment because they had sheet music in front of them* (SR s43)

[132] *music created will also be performed by the partner students [and the] choreography will be done by the Spanish partners and danced by other students from all the countries* (V s31); *these participants would play some rhythmic patterns on instruments made from recycled materials (mainly percussion instruments)* (RJ e92).

[133] *the harmony of the last phrase needs to be re-made* (V s31); *the only aspect that could be better has to do with lack of contrast... everything was similar* (V s32); *the transition for the slower part needs to be rethought* (V s31); *last week they've created several contrasting parts... today they developed only one section, having always the same structure* (V s33); *very simple bass line, always following the Tonic-Dominant notes of the chords. Again, the students were not risking almost anything in their compositions* (V s36)

[134] *it's very obvious the level of naturality and also the level of musical interest and complexity made by Catarina's and Adriana's improvisations* (V s29); *the first group makes and interesting introduction* (V s30); *good balance between instruments - beautiful flute solo followed by a violin solo and then a cello solo* (V s30); *the piece shows several elements: bass line, rhythm (body percussion), harmony, accompaniment, 3 melodies (divided between violins and flute), and singing. Good work* (V s32); *it has different and interesting parts (with contrast) but the transitions were not easy to do it* (V s32); *the new parts created today were varied and the transitions were interesting. Once again, they've created different melodies played simultaneously by different instruments. A musical piece with some structure is already seen... good work* (V s33); *the percussion part was interesting because the drum set was changing the accompaniment* (V s33); *good musical ideas, with good transition between parts* (V s34); *good character and sound* (V s34); *this group made a vocal version of the piece. It's well made* (V s36); *the composition has some new material regarding the initial proposal... the work achieved its goals. Good work!* (V s38); *the work shows some diversity regarding the sounds and contrast. Almost every student play different parts, at least sometimes. Also good work!* (V s38); *good character ("hard sound"... almost violent). Several parts combined... very interesting. Good transition but it needs to be rehearsed. Final part again with great sound* (V s39); *good sound with several different musical elements and layers [...] the transition is interesting* (V s40); *very good transition* (V s41); *very good result* (V s44); *very beautiful sounds* (V s47); *it's interesting and has a lot of good ideas... And the changing of the existent material was also interesting* (V s48)

[135] *the teacher says that the most interesting aspect in the composition was the sonority* (V s35); *the teacher highlights the most important and interesting elements of the piece (different layers)* (V s35)

[136] *as I said to the students, it's perfectly clear that the result would be much better if they had 3 or 4 hours to work continuously instead of 50 minutes weekly sessions* (RJ e81)

[137] *having into consideration the time they had to compose, the result was really good* (RJ e81)

138 *the teacher tells the students that improvisations and composition have to have some musical sense... it's not always random* (V s29)

139 *the main aspect to consider is the fact that the students still show difficulties to present a coherent musical piece of section* (SA s32)

140 *they discuss the character of the pieces* (V ex.s.); *discussion about what part should be made first* (V s42)

141 *Catarina and Bruno are the only students who think in larger musical phrases (8 bars instead of 2 or 4)* (V s29); *good balance between instruments [...] It shows some ideas for a structure* (V s30); *the piece shows several elements: bass line, rhythm (body percussion), harmony, accompaniment, 3 melodies (divided between violins and flute), and singing* (V s32); *Catarina says that she wants to combine two parts but it does not work. She says that they can change the initial material* (V ex.s.); *Catarina says that Dina has a lot of transitions* (V ex.s.); *the work shows some diversity regarding the sounds and contrast* (V s38); *the final products [...] shows a lot more control and musical awareness (SA s38); the students are capable of adapting to a new style and character* (V s41); *Catarina and Dina discussing and negotiating the transition from one part to another* (V s42); *the student's reaction it's much more embodied and relevant than the other repertoire pieces that we have played this year* (RJ e107)

142 *sometimes we're making little melodies here and I'm thinking: -imagine this with a huge symphonic orchestra. Now we have much more this perception of how it would be with a giant orchestra* (Adriana - FG 4)

143 *Isabel extremely secure about what she wants [and Adriana] was also very clear about her musical ideas* (RJ e108)

144 *for the first time in the session Rute played when she was asked [and] plays a riskier pattern* (V s29); *Íris was always quiet and now it›s very different* (V s39)

145 *although [the teacher] told them to decide alone, when [he] was not in the room, Mário suggested the names and all agreed* (RJ e83), taking *only a few seconds* (RJ e84).

146 *And when we heard the play just us, it was beautiful ... we liked it. But in concerts and rehearsals, whenever I heard, I was super proud because it seemed a very different thing [...] we said: - "How beautiful! How great!"... When he heard it with the whole orchestra: "WOW!!!" [...] It's the feeling of creating [...] When we're hearing that melody in the orchestra and with the percussion, the accordions, and the guitars ... Oh, Man!!!* (Catarina); *One of the parts that I liked the most was when ... you know that part where we're just playing the cellos? [...] (Rita sings ...) this part, when I heard ... It seems a very simple thing but when we hear it we think like: "[interjection of surprise]!" We were the ones who did it and it looks great! "And it gives us some pride! And we have another confidence in us ... in our capacity! [...] We liked it immensely!* (Rute); *It was spectacular when we finished and one person said: "Bravo!"* (Isabel)

147 *Catarina seems in control and in "flow"* (V s42); *this was due to the initiative of Ana Sofia and Inês that seemed very motivated to start composing* (RF e83); *A lot of times they've mentioned enormous enthusiasm and excitement* (RJ e96); *it was also very interesting, and rewarding for me, to see the enthusiasm of the students who were present in the orchestra rehearsal* (RJ e107)

148 *the teacher also plays with the students and he seems "in flow"* (V s27)