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**Developing music improvisation workshops for
preschool children through Action Research**

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**PhD Music
University of Edinburgh
2020**

Declaration

I hereby declare that I am the sole author of this thesis; that this thesis is entirely my own work; and that no part of this thesis has been submitted for another degree or qualification.

Signed.....

Una M. MacGlone, January 2020.

ABSTRACT

Improvisation in music is an important skill, which is increasingly valued, and an essential part of curricula at all educational levels. However, understandings of improvisation are conflicting and contradictory approaches exist within improvisation pedagogy. Creative and learning processes from free improvisation are used in Higher Education, and with Secondary and Primary children, but there is scarce research with young children. This is despite potential alignment with preschool curricula, which emphasise creativity and social skills.

The aims of this PhD were to investigate and improve a novel method of delivering music education to preschool children through improvisation, emphasising personal creativity and socio-musical responsiveness. The research questions were as follows: How can children's creativity and engagement in group improvisation be appreciated and evaluated? This question had two further sub questions: What are parents' and teachers' attitudes and beliefs about the children, creativity and music?, and, What are the children's conceptualisations of the workshops? The second research question was: Do the workshop programme, teaching approaches and methods change through two cycles of Action Research?

A Pragmatic theoretical stance supported Mixed Methods within an Action Research design, providing a suitable model for enquiry through action, analysis, and planned change. Workshop materials were designed for two 6-week cycles of Action Research for different groups of preschool children (seven in cycle I, six in Cycle II; aged 4-5) in 2016. Prior to the workshops, two original theoretical constructs were proposed and then refined through the process of analysis: Creative musical agency (CMA) and socio-musical aptitude (S-MA). CMA is instantiated when a child creates and executes novel musical material independently in a group improvisation. S-MA is instantiated when child creates a musical response in relation and with reference to, another child's musical idea in a group improvisation. Video data of the children's improvisations were sampled and analysed using multimodal video analysis, to gain a rich, nuanced picture of social and musical interactions and expressions of creativity during the children's improvisations. This involved coding for instances of CMA and S-MA in different musical parameters. In-depth interviews with the children's parents and teachers and children's talk from the workshops were subjected to Thematic Analysis. Two experts rated 39 clips of the children's improvisations as showing CMA, S-MA or neither and were interviewed to explore their views further.

In parents' and teachers' interviews, the types of strategies they employed were shaped by whether or not they perceived a child as confident and able to share. Their conceptions of children's creativity were through descriptions of their art activities as well as making up stories and role play. In contrast, music was not readily conceptualised as a creative activity and being musical was understood as possessing technical skill on an instrument. All of the adults identified as non-musical, even though they participated in musical activities with the children. In children's talk, their understandings of improvising were mediated in distinct ways: previous musical experiences, expressive descriptions of their improvisations, and

combinations of these with musical terms. Video analysis indicated that for 10/13 children, the number of CMA and S-MA events increased over the workshop programme. The range of musical parameters for improvising increased through the workshop programme. Between the experts' video clip ratings there was a slight agreement for CMA (Kappa 0.21) and moderate agreement for S-MA (Kappa 0.5). They accounted for this by proposing that the teacher mediated some children's CMA events. Video analysis showed children looking at the teacher before 57% of CMA events. The workshop model changed from a linear succession of tasks with a talk section at the end to iterative cycle of playing and talking, as the original model was not effective in facilitating the children's discourse.

This study is the first to use improvisation with a group of this size and age. Two novel constructs of CMA and S-MA offer a promising means to apprehend and evaluate young children's creativity and engagements in group improvisation. Children's perspectives in creative tasks are under reported; the distinct understandings of improvisation that emerged here are important in appreciating conceptual as well as musical development at this age. Parents and teachers value music and creativity but their own musical identities may affect how they create music with children. The refined workshop model offers a flexible and responsive template; by capturing children's understanding of their playing, informed pedagogical choices can be made.

Recommendations for future research include creating more CMA and S-MA based activities, and investigating effective teacher training for future delivery. More qualitative studies could investigate children's cognitive processes in group creativity. Music is a collection of skills, therefore, developing conceptualisations of music education as improving creativity, social skills and critical thinking, presents a powerful argument for teaching and appreciating music in these ways from the start of young children's education.

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ABBREVIATIONS

Action Research	AR
Autistic Spectrum Condition	ASC
Activity Theory	AT
Creative Musical Agency	CMA
Curriculum for Excellence	CfE
English as an Additional Language	EAL
Early Years	EY
Higher Music Education	HME
Mode(s) of Communication	MoC
Mixed Methods Research	MMR
Socio-Musical Aptitude	S-MA

CHAPTER 1 INTRODUCTION TO THE THESIS

1.1 Overview

This thesis investigates preschool children's music improvisation workshops devised and refined for this project using Action Research. A pragmatic theoretical stance supports mixed methods in addressing the complexity of this research. Qualitative data, including interview data from parents and teachers and children's discourse at workshops is gathered. This is to gain insight into the children's experiences of the workshops and explore pertinent beliefs and attitudes of significant adults in their lives. Quantitative data derived from workshop videos is collected to examine specific creative capacities that the children developed through improvising music.

This opening chapter serves to introduce the research dilemma of the study as well as relevant background information. A personal account of my previous playing, teaching, and research work and how they have informed the focus of this PhD is provided. A critical overview follows of the educational context in which the empirical work of this thesis is executed. Then follows an exposition of key issues which inform my position in field of music improvisation education. A brief summary of each chapter is given.

This research is timely and necessary as more work is needed to develop the pedagogy of teaching improvisation in groups. Group creative processes are under researched, yet the curriculum in Scotland has prioritised creativity and group teaching.

1.2 Research dilemma

Interest in improvisation as an artistic practice and in music pedagogy is burgeoning (Johansen *et al.*, 2019). In particular, the expansion of school curricula emphasising creativity, critical reflection and collaboration skills positions musical improvisation as an ideal activity to develop these vital qualities in young children. Historically teaching group improvisation has had distinct areas of activity (for examples see 2.3.1), however it is still characterised as under-resourced and under-researched (Johansen *et al.*, 2019). This may be as approaches are not unified and often based on teacher's own interests and performing backgrounds (Wilson & MacDonald, 2019).

While it is understandable that improvising musicians and teachers draw from their own artistic experiences, it is important to consider beyond what works for one person in a particular situation. A crucial next step is to map discrete elements in improvisation education and study influences on and relationships between these. Some elements of improvisation education have been well researched, such as examining musical outcomes (e.g., children's ability to develop rhythmic patterns, as seen in Whitcomb, 2010); processes (e.g., Monk, 2013; Biasutti, 2017) and teacher position (e.g., Hickey, 2015; MacGlone & MacDonald, 2017). However, studies tend to focus on one or two aspects (see section 2.4) and the role of the improvisation educator should be to 'comprehend the multi-faceted nature of improvisation' (Welch 1999, p.214). In music education contexts, interrelations between the socio-cultural setting; participant's background and disposition; the qualities of pedagogical activities and resulting musical actions are important to appreciate (Welch, 2007).

One area which has potential for adding to understanding improvisation education is to apprehend the child's perspective. There is still a gap in knowledge in understanding views of the participants in improvisation, with children (Burnard, 2002; Kanellopoulos, 2007) and especially young and very young children¹ (Wassrin, 2019). Investigating the views of participants is important; appreciating how young children make sense of activities which are different every time can provide the starting point for creating meaningful activities which accommodate their position. This principle, drawn from socio-cultural approaches to teaching and learning will be further explored in section 2.3.2. Additionally, young children's views are crucial in their own right, but contextualisation from the most significant adults in their lives will add depth to these. Pragmatists propose the construct 'transactional contexts' (Emirbayer 1997, p.287) where individuals are shaped through their transactions with others. Importantly, each transactional context elicits different relationships and way of being (Hodgson, 1994). Young children have many of these, for example, home, nursery, playgrounds and extra-curricular activities. MacGlone and Johansen (2019) propose that in improvisation teaching, different teachers using the same musical activities will have different results because their own beliefs and attitudes mediate the use of these. Continuing this idea, learners bring their own beliefs, attitudes and understanding from different transactional contexts, which can then mediate their experience and also how they understand this experience. Therefore, comprehending these influences offers researchers more depth and nuance in understanding young children's music making and creative decisions.

¹ In this thesis, 'very young children' are 1-3 years old and 'young children' are 3-5 years old

Although I am an experienced improvisation musician and workshop leader, my experience with preschool children is mainly through workshops in *informal* (non-school) settings. Most of these are well funded, with many high-quality instruments, and often with a 1:2 adult to child ratio. Therefore, another part of the research dilemma is investigating how *informal* workshop activities can be realised in a *formal* setting (nursery school) where resources are scarcer and the ratio of adults to children is less (1:10). In addition, the curriculum in Scotland presents possibilities for creative group work with music and critical appraisal of such work, but there are challenges for teachers who lack knowledge or experience in this area (Wilson *et al.*, 2008; Bernhard & Stringham, 2016; Larsson & Georgii-Hemming, 2018). There is therefore a need to develop and test approaches to teaching improvisation in groups with young children.

To consider this complex dilemma, which demands a high level of reflexivity about personal actions and other's responses (and vice versa), Action Research is an appropriate study design as it involves a cyclical process of planning, acting, observing and reflecting (see section 3.5 for outline of this approach and how it will be used in this thesis). Mixed methods are required as multiple aspects of the music improvisation workshops will be examined (section 3.7). The methodological choices are derived from the research questions (see section 2.8), which arise from a combination of the research dilemma and the literature review. Finally, the theoretical stance of pragmatism which rests on the argument that the meaning of an event is situated in human experience, is the most suitable choice in accommodating a mixed methods, Action Research design. Pragmatism in mixed methods research

emphasises researcher inquiry into finding useful points of connection between qualitative and quantitative methods and thus can challenge researcher assumptions (Morgan 2014). For a full overview of how a pragmatic theoretical approach is used in this PhD see section 3.4.

1.3 Personal background to the investigation

This section presents different aspects of my performing, teaching and research work and the ways in which these have combined to provide the motivation and overarching concepts to explore in the improvisation workshops.

1.3.1 My improvising self

As an adult, I can easily cast my mind back to being a child at different ages and remembering how I felt being creative, first through telling stories, and later through writing and music. The feeling of ownership and excitement at making something new provided a space for myself in the midst of a busy childhood (being one of six siblings). At the age of 9, I began cello lessons and was privileged to participate in regional youth orchestras and had many performing opportunities from school to national level while developing as a musician. I was also lucky to benefit from various one-off projects and workshops by national music companies such as the Scottish Chamber Orchestra and Birmingham Electroacoustic Sound Theatre. Both projects involved improvisation as part of a group composition process. I have strong memories of the (to me) unique and thrilling feeling I had when improvising with my peers and consequently being encouraged and complimented by professional musicians. My interest in improvisation continued in parallel with my formal music

studies, taking the form of jamming with friends at school and at summer residential orchestral courses.

These parallel paths of improvisation and instrumental lessons did not continue through my formal undergraduate classical music training at the Royal Scottish Academy of Music and Drama (now Royal Conservatoire of Scotland) as I became focused on gaining the technical skills and experience necessary for my envisaged future career as an orchestral musician. As well as this, improvisation was not part of the curriculum at the time (1994-1999). However, soon after I graduated, I took advantage of opportunities to play with musicians from pop, jazz and experimental backgrounds. I gained new skills in playing by ear, with chord charts and improvising within different genres. In 2002, Glasgow Improvisers Orchestra (GIO) was formed and as a founder member I learned about free improvisation and other forms and ways of using improvisation, for example in graphic scores and conduction. This learning has been facilitated by other, more experienced guest musicians collaborating with the orchestra and through the process of discussion with my fellow musicians in GIO. This way of learning in an informal context aligns with sociocultural views on learning and development (e.g., Rogoff's (1995) ideas about interpersonal interactions in a collaborative group), and will be further explored in Chapters 2, 7 and 9.

A crucial aim for this thesis is to investigate ways of facilitating creative music education activities for children that emphasise *their* ownership (or agency). This was personally important as demonstrated in my own feelings about being creative as

a child but increasingly, psychological and educational research indicates the importance of children developing agency (Valentine, 2011).

1.3.2 My teaching self

I have taught music in many contexts over the last 19 years, including one-to one lessons on the double bass, in schools and then for the Junior department at the Royal Conservatoire of Scotland (RCS). Since 2008, as part of GIO's education and outreach work, I have designed and delivered many projects using improvisation. These can involve either one-off workshops or week-long courses, and facilitate improvisation using various stimuli, for example, film, art and dance. These projects have been with all ages but mainly focused on work with Early Years. One reason for this is that I found that children of this age (3-5) rarely have barriers to overcome when improvising in my workshops. Contrastingly, in projects with older children and adults, there is often a sense of them having to overcome a fear of being wrong. This fear could relate to a common belief reported in the literature on teaching improvisation, which is that musicians have to reach a certain level of technical skill before they can improvise and consequently teach improvisation (Koutsoupidou & Hargreaves, 2009; Whitcomb, 2013). This contrasts with research that asserts that everybody can improvise (MacDonald, Wilson & Miell, 2012). These positions will be examined in relation to improvisation education literature in section 2.3.2 A common factor in GIO education projects, regardless of age range is that the generative strategies and pedagogical approaches are informed by the artistic strategies and learning processes of the group itself.

Since 2013, I have taught various modules on free improvisation at the RCS. This development of my role as a teacher of free improvisation reflects the growing interest in improvisation in Higher Music Education (HME) level (Johansson, 2012; Gaunt & Westerlund, 2016) The teaching of improvisation as an institutionalised subject in Europe and North America has, until recently, been dominated by jazz curricula (Whyton, 2014). However, musicians across many genres are increasingly expected to be able to improvise (MacGlone & MacDonald, 2017). In classical and/or contemporary music contexts, this can be seen in the growth of festivals and the production of works which utilise non-traditional and graphic forms of notation with improvisation (Johansen, Larsson & MacGlone, 2017).

However (see section 2.5.8 for full discussion), the role of the teacher in improvisation is contested as it is linked to plural understandings of and educational purposes in improvisation pedagogy. This has been acknowledged as complex, yet more work is needed in examining the separate facets of the teacher's role. This is an important issue and my study will expand understanding of the possibilities and challenges in teaching improvisation.

1.3.3 My research self

My interest in improvisation pedagogy led me first to consider the educational and life processes through which professional improvising musicians gained their skills and experience. In 2008 I undertook an MPhil to investigate this topic by interviewing eight professional improvisers. The results of the study indicated that improvising musicians learned through three distinct pathways (MacGlone & MacDonald, 2017). The first, autodidacticism, was exemplified by musicians

exercising agency in incorporating philosophies or influences that were important to them into their approaches to learning or artistic choices. Mentors provided the second pathway, and interestingly often provided their mentees with suggestions of books to read or records to listen to, rather than advice about developing their instrumental skills. Finally, the larger community of improvising musicians facilitated learning through shared social practices (cf. Born, 2017; Lewis, 2008). These findings highlight the extra-musical aspects of learning and for this thesis, provided impetus to look at improvisation education through different analytical lenses. Examining improvisation pedagogy in plural ways can investigate what happens musically but also which communicative mechanisms are involved in teaching. This is particularly important with investigating improvisation pedagogy with young children, as much of their learning is multimodal in nature (Flewitt, 2006).

Almost concurrently with this PhD, I have been part of a group of researchers whose aim is to critically discuss improvisation education and pedagogy. Named IMPRES (IMProvisation RESearch), we published a book titled 'Expanding the Space for Improvisation Pedagogy in Music: A Transdisciplinary Approach' with Routledge in 2019. Authors from Europe, North America and Asia contributed chapters which addressed the following questions:

Who defines the artistic expectations of improvisation activities? Who decides on the aesthetic criteria at play? Who are the gatekeepers of improvisation activity? How much freedom is involved? And for whom -who has creative agency, teacher or students? What professional ethical standards do teachers have? (2019, p2)

Chapter 7 of this thesis is published in our book as well as various other sections (see Appendix 1.1 for a full list of the sections of this thesis which have been published and presented).

The next section turns to the Scottish educational context, to provide key information about the setting in which the empirical work of this thesis took place.

1.4 Scottish educational context

1.4.1 Curriculum for Excellence

In Scotland there has been recent educational reform with the Curriculum for Excellence (henceforth referred to as CfE) being implemented in most Scottish schools from 2010. The curriculum aims ‘to help children and young people gain the knowledge, skills and attributes needed for life in the 21st century, including skills for learning, life and work.’ Scottish Government, (2016). It was developed after a National Debate to address the lack of coherence in different educational stages (from ages 3-18), to prepare pupils effectively for modern life, and to give more choice to pupils (Scottish Government, 2004). Four capacities were proposed to frame children’s personal development and prepare them to manage a changing and challenging world. These are: confident individuals, successful learners, effective contributors and responsible citizens (Scottish Government, 2010).

CfE has been seen positively with potential for experiential, child centred methods of teaching following from progressive educationalists such as John Dewey (Priestley & Biesta, 2013). The philosophy underpinning CfE is based on socio-constructivist principles (Priestley & Biesta, 2013), key attributes of which will be explored in

section 2.3.2. For the teacher, this has a consequence of having to create the curriculum content to meet the specific needs of the classroom (Biesta, Priestley & Robinson, 2015).

Criticism of CfE has focused on the lack of knowledge content (i.e., facts and figures), and the perceived vagueness of prescribed experiences and outcomes (Yates & Young, 2010; Biesta, Priestley & Robinson, 2015). As well as this, there is a greater burden on teachers than in the previous curriculum, as they have to tailor lessons to the specific educational requirements of each class, resulting in fewer opportunities for replicating previous lessons' content. In addition, some writers have questioned the values that underpin the four capacities, and the overarching purpose behind those values. One such argument is to criticise the four capacities for not benefitting individuals as much as they do governments, in developing these attributes in a future workforce (Watson, 2010).

1.4.2 Music curriculum for Early Years

While academics and policy makers wrestle with these tensions and contradictions, teachers still have to provide certain experiences and outcomes in music for children in between the ages of 3-5. The following experiences and outcomes are prescribed for all preschool children in Scotland (Scottish Government, 2016 p.67).

1. I enjoy singing and playing along to music of different styles and cultures.
2. I have the freedom to use my voice, musical instruments and music technology to discover and enjoy playing with sound and rhythm.
3. Inspired by a range of stimuli, and working on my own and/or with others, I can express and communicate my ideas, thoughts and feelings through musical activities.

4. I can respond to music by describing my thoughts and feelings about my own and others' work.

In addition to the experiences and outcomes which are specific to music, there is a broader aim for all expressive arts (ibid. p.60): 'I have experienced the energy and excitement of presenting/performing for audiences and being part of an audience for other people's presentations/performances.'

It is difficult to appreciate how teachers may deliver this music curriculum. Scholarly work which investigates Scottish music teachers' perceptions of music and creativity is a very small field, whose focus tends to start at primary school (Wilson *et al.*, 2008). This may be because the curriculum previous to CfE was sectioned in to three age groups of 3-5, 5-14 and 15-18. Although there is difficulty in drawing conclusions from such limited research, over the past 15 years there has been a growing interest music in the Early Years (henceforth referred to as EY) music. EY concerns preschool children from 0-5.

National music companies (i.e., orchestras such as Scottish Opera, RSNO, SCO), as a requirement of their funding, run education programmes which include work specifically designed for EY participants. The National Youth Choirs of Scotland provide workshops and training for teachers to deliver music workshops mainly using Kodaly methodology. There are also charities such as Enterprise Music Scotland and Starcatchers who provide training for musicians who would like to specialise in EY work with an emphasis on creativity and cross-disciplinary work. Both individuals and Local Authority initiatives can apply for funding from Creative Scotland, which has EY music as a specific funding priority (Creative Scotland, 2017a). An example of this is in West Lothian, where a composer was employed to

create activities that corresponded to the Experiences and Outcomes of the Curriculum, and also train all nursery teachers in the Local Authority to deliver these activities (Creative Scotland, 2017b).

In conclusion, although research is scarce, the rapid growth of education work in this area demonstrates that this part of the curriculum is outsourced to experts at times. A potential reason is that music is seen to be an expert activity, which teachers feel they do not have the skills to teach. This would align with findings from Wilson *et al.* (2008). The performative aspect from the Expressive Arts in the CfE could also act as a barrier to teachers, as the additional aspect of performing in public creates tension in prioritising a performance (product) over quality of participation (process). Consequently, this may contribute to music becoming a narrow and goal-oriented activity in contrast to the exploratory approach outlined in the curriculum. Another challenge is facilitating the development of the children's critical thinking skills in relation to music (experience four). Arguably this is more effectively realised in process-based activities with exploration and discussion, and this is not a commonly used approach when teaching through methods used in EY such as Kodaly. There are exceptions to this, where there is opportunity for children to have creative input (e.g., Whitcomb, 2013), and this will be described further in section 2.5.4.

Therefore, there is a gap in preschool music education for a programme which meets the requirements of the curriculum: freedom (which can be construed as agency) creativity, self-expression, responsiveness to others and critical thinking skills. With interest in developing these growing from national music companies and the government (through its arts funding body Creative Scotland, and Education

Scotland) this can be seen as an important priority for school-age children in Scotland. There is a need for scholarly research as well as developing practice in the area of early creative music education. While the work of national companies is valuable, it has potentially problematic implications such as commodification and commercialisation of teaching musical creativity. This may contribute to static positions on who gets to be musical and creative and who gets to teach these subjects, an issue problematised by Wassrin (2016) and Young (2016).

1.5 Defining terms and my position

The following section will consider various terms which are important to define as they can be interpreted in different ways in the fields of music psychology and music education.

1.5.1 Music education and music pedagogy

Pedagogy, defined by Sæverot (2017) as the scientific study and knowledge development of education practices, has traditionally been fundamentally reliant on knowledge developed in other sciences, such as psychology, philosophy, sociology, and ethnography (Johansen *et al.*, 2019). Music pedagogy is informed by a spectrum of research areas that may help researchers understand music education (teaching and learning) in all its facets and contexts (Johansen *et al.* 2019). In this PhD, the data gathering and analytical methods to examine the teaching and learning (i.e., pedagogical approach) are drawn from the relevant psychological disciplines which best address gaps in knowledge arising from the research dilemma and literature review.

In this thesis, the music practice field, (i.e., the improvisation *education*) is the programme of improvisation workshops. The critical examination of teaching and the learning in the improvisation workshops contributes to improvisation *pedagogy*.

1.5.2 Improvisation lessons or workshops?

Over recent years, pedagogical research has expanded from examining formal education and intentional learning as a result of deliberate instruction (Jorgensen, 2008), to encompass situated and peer-directed learning (Lave & Wenger, 1991; Green, 2002) in communities formed around a particular practice (Wenger, 1998), and informal learning arenas (Green, 2002; Folkestad, 2006; Wright, 2016). This development has the implication for researchers to examine how positions, roles and relations between teacher and participants in a learning activity are both realised and described (Holdus, 2019).

My choice to call the improvisation sessions with the children ‘workshops’ rather than ‘lessons’ is a deliberate positioning for the following reasons:

1. I do not have a nursery teaching qualification and have not been formally trained or assessed as a preschool teacher and am not registered with the GTC (General Teaching Council of Scotland) However, I have extensive experience in informal workshop settings with preschool-aged children (see section 1.3.2).
2. The content of the workshops is devised based on synthesising previous workshop experience, also informed by the research dilemma and gaps in the literature, rather than following an existing method. The aims of this PhD are to investigate and improve a novel method of delivering music education to

preschool children through improvisation, emphasising personal creativity and socio-musical responsiveness.

Therefore, my role in the empirical work in this PhD is as a workshop leader, since the learning and teaching that happen are not accountable to a national examining body and are drawn from informal artistic and educational practices.

Within the Action Research framework and time constraints for the empirical work of this PhD, it was possible to design and deliver two six-week, twice-weekly workshop programmes in 2015/2016; a full description of this process will be given in section 4.5.

1.6 Structure of thesis

In this chapter, the background and personal motivation for this thesis was given through an account of my experiences as improvising musician, workshop leader and researcher. An overview of CfE in Scotland was provided, giving relevant information with which to contextualise the empirical work of this thesis. CfE's specified experiences and outcomes in preschool music were considered as well as the ways in which this and thesis can address these. The choice of position as a workshop leader was described. This chapter concludes with a thesis outline.

Chapter 2 will provide a review of relevant literature in four areas: 1. Definitions and understandings of improvisation; 2. Improvisation in schools; 3. Frames for preschool children's improvising and 4. Teaching improvisation: educational

approach, purposes and role of teacher. This review uncovers and explores the main tensions in the field, highlighting challenges facing researchers due to plural understandings of, and values and purposes attached to, improvisation and improvisation pedagogy. Conclusions from the review of literature are given and the research questions (with sub questions) for this thesis are presented.

Chapter 3 outlines the theoretical underpinnings of this investigation. It begins by providing an overview of qualitative and quantitative approaches in psychological research and then focuses on how music education has been viewed. A pragmatic epistemological stance is proposed as the most suitable approach in investigating the PhD project. It then considers the growing role of Action Research in the field of educational research and justifies this choice of study design. A background to mixed methods approaches is given and the choice of methods for each research question and sub question is outlined. Following this, specific analytical techniques are discussed and a justification for choosing Multimodal Video Analysis and Thematic Analysis is given. Finally, Activity Theory is explored as an effective meta-analytical method for reviewing key aspects of the research project. Chapter 4 details the research methods that are used in this thesis. An account is given of a pilot project to deliver improvisation workshops to preschool children and the ways in which it informs the two following cycles of Action Research. Then follows an explanation of the main study design, recruitment procedure and participants. A complete description is given of data gathering methods and analysis of the four data sources used in this thesis: 1) video data of improvisation workshops with preschool children; 2) semi-structured interviews with their parents and teachers and music

education experts; 3) children's talk data during the workshops; 4) video rating test with the experts.

Chapters 5 and 6 each present an overarching theme arising from Thematic Analysis of interviews with parents and teachers. Chapter 5 presents their attitudes and beliefs about the children and teaching, and how these shaped their interactions with the children. Chapter 6 examines parents' and teachers' beliefs about their own and their children's creativity and music skills.

Chapter 7 outlines the children's development of the conceptual tools that facilitated their understanding of improvisation and the workshops, as well as an exploration of hierarchical and musical roles. Chapter 8 presents and discusses the results from analysis of sampled video data of the children's improvisations over both cycles of workshops. The reliability of the newly defined constructs is further contextualised with an expert rating of video clips as well as an analysis of a post-ratings discussion with the experts.

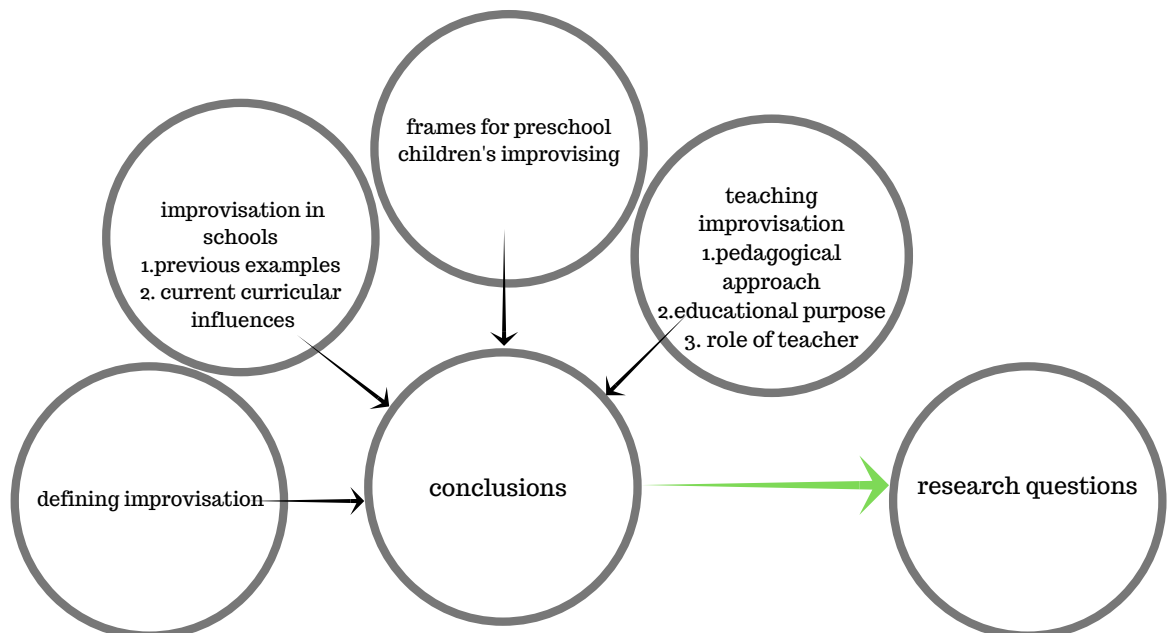
Chapter 9 discusses the empirical findings of this thesis with reference to relevant literature and gives further detailed insight into the workshops. Finally, Chapter 10 concludes this thesis by exploring implications from this research and proposing recommendations for future work.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

Chapter 2 places this thesis in an historical context through critical evaluation of pertinent academic literature. In recent years, there has been growing interest in and research on improvisation (Lewis & Piekut, 2016). This is also seen in improvisation education (e.g., Heble & Laver, 2016) and improvisation pedagogy (e.g., Johansen *et al.*, 2019). Each of these areas has distinct and conflicting epistemological positions which are related to elements such as genre or views of creativity (Johansen *et al.*, 2019). As seen in section 1.2, both educational and improvisational settings are ‘multi-faceted’ (Welch, 1999). Four broad topics (see Fig. 2.1) are explored in this chapter to ensure a nuanced understanding of aspects relevant to this research.

Figure 2.1 Main topics of Chapter 2



Defining improvisation considers different ways of understanding improvisation and exemplifies these in various musical practices. *Improvisation in schools* gives a critical overview of previous approaches to teaching creative music. This topic also examines key ideas from Dewey and Vygotsky which influence CfE and thus provides valuable information about theoretical influences on the setting for this PhD. *Frames for preschool children's improvising* investigates ways of understanding young children's improvisation through different definitions and factors which mediate this activity. *Teaching improvisation* is a narrative literature review of peer reviewed journal articles and relevant books and chapters on this topic.

2.2 Definitions and understandings of improvisation

2.2.1 Locating the field

As teaching activities in this thesis have been influenced by an artistic practice (see section 1.3.1), key issues in this field will now be problematised. Writing on improvisation in music has been described as 'shrouded in mystery' (Ashley 2009, p.67). There is no commonly used definition (MacDonald, Wilson & Miell, 2012) and writing on free improvisation has garnered scholarly interest mostly within the last 25 years (Rose, 2012). Traditionally, leading musicians who also wrote about their work such as Braxton (1985) were published by small, hard to find companies (Rose, 2012; Alperson, 2016). In text about improvisation, Bailey (1992) mostly avoided definitions, instead describing a variety of improvisation contexts (Lewis & Piekut, 2016). A contributing factor to this ambiguity may be that improvisation

happens in almost all types of music to some degree, yet can have a different function in each (MacDonald, Wilson & Miell, 2012).

Free improvisation occupies a discrete position in the contemporary musical landscape but also intersects with many other forms, including contemporary classical music, free jazz, experimental music and experimental art (Rose & MacDonald, 2015). Bailey's (1992, p.xi) description of free improvisation as 'non-idiomatic' has been widely adopted, perhaps in an attempt to develop understanding of free improvisation (Hickey, 2009). Musicians can be said to be playing non-idiomatically if they do not reference musical genres or customs (MacGlone & MacDonald, 2017). However, the non-idiomatic nature of free improvisation has been questioned (Lewis, 1996; Lewis & Piekut, 2017; MacGlone & MacDonald, 2017) with more recent explorations arguing that performers often reference their shared musical backgrounds, and that this constraint shapes improvisations (Born, 2017; Linson & Clarke, 2017; MacGlone & MacDonald, 2017).

One concern from some authors is that the term 'free improvisation' has been appropriated by other musical traditions and practices (Lewis, 1996; Rose, 2017) reporting them as 'happenings' or 'intuition' (Lewis & Piekut, 2016). For example, 'Intuitive music' is a term the composer Karlheinz Stockhausen used to describe a series of text-based pieces he devised (Stockhausen, 1968; 1970) which involved giving the performers choice over most of the musical parameters in their performance. He described these pieces as distinct from improvisation, in fact as a completely novel way of ensemble playing, emphasising the importance of attentive listening, not playing all the time and avoiding clichéd material, perhaps in an

attempt to distinguish his pieces from jazz. Stockhausen also directed performers in these text pieces to create sound together in a space outside themselves, rather than each interacting with each other person. This approach also aligns with American avant-garde composers such as Christian Wolff who gave performers freedom in what they played in terms of choice over some musical parameters, but not in the ways they could interact with other musicians. An example of this is in 'Ordinary Matter' (2001) where at a particular point in the piece, traditional notation is replaced with a variety of boxes containing different notes and rhythms. Musicians in the orchestra have to choose their own path through these boxes until the conductor gives a signal to move to the next section of the piece.

Approaches to improvisation have been conceptualised as: 1. Eurological, where musicians working in improvisation create a sound object using their instruments which then intersects with others and is without performer intent; and 2. Afrological, where players express their identity and emotions and seek to make a connection to the others in the group through the musical choices they make (Lewis, 1996). As an example of the latter, bassist William Parker (quoted in Such, 1993) positions successful free improvisation as involving musicians appreciably relating to each other, rather than solely musical or conceptual devices. He also identifies a spiritual dimension to free improvisation, which requires the performer to feel connected to music created by others during the performance. In later writing, Lewis (2004) proposes that his two categories are still necessary as they expose a hegemonic system wherein Eurological approaches are privileged by the establishment. Afrological approaches are downplayed, and those practising the latter are denied opportunities and equivalent recognition. However, musicians are increasingly

interested in shifting between traditions and genres, creating a post-genre creative arena (Lewis, 2004).

An example of another binary is that improvisation can be understood as both a musical product and process (Bailey, 1992). A process-based concept, ‘musicking’ (Small, 2011) attempts to be inclusive of non-western musics, by emphasising participation, prioritising an alternative to more traditional experiences and outputs of notated music:

to music is to take part in any capacity in a musical performance, whether by performing, listening, rehearsing or practising, by providing material for performance (what is called composing) or by dancing (ibid, p.9)

His definition does not mention improvisation; however he later expresses that the meaning in the act of musicking is drawn from the relationships in the group – a concept that Lewis, (2000) has argued is characteristic of collaborative free improvisation where the meaning is constructed by the group’s socio-musical location (Lewis, 1996). This mediating construct will be further explored in the next section. Nevertheless, writers, especially those in education such as Burnard and Younker (2004) and Wassrin (2016; 2019), have chosen to conceptualise creative music making as musicking, as their pedagogical methods emphasise participatory and social processes.

Finally, naming free improvisation as ‘free’ (in the UK) is said to have been influenced by the left-wing political leanings of the first generation of such improvisers as Evan Parker, Eddie Prevost and Maggie Nicols, and their desire to create a new egalitarian aesthetic (Rose, 2012). This term is therefore strongly

related to an artistic field with its own philosophies and customs and this affects player's choices (see Born, 2017). Examining mediating factors in improvisation (e.g., genre and social influences), provides a way of understanding its function. This forms the focus of the next section.

2.2.2 What can mediate improvisation?

Mediation is a sociocultural concept, first developed by Vygotsky (1978/1930) from Marx and Engel's understanding that humans' use of mechanical tools changes nature, and through this action, their understanding of the world is changed (Cole & Scribner, 1978). Daniels (2008) proposes that tools (sometimes known as mediating artifacts), are central to understanding the ways in which 'the individual acts on and is acted upon by the social, cultural and historical factors in the course of ongoing human activity' (p.4). Tools can be physical, for example a musical instrument or symbolic (Daniels, 2008), for example, a player's choice to create music in response to another musician. I first consider genre specific tools, and then move to conceptualisations of tools used in more open forms of improvisation.

In jazz, musicians can improvise with groove (Monson, 1996), harmonic structure and/or melodic material (Berliner, 1994) within a piece. However, some authors also highlight the importance of shared social practices in jazz groups influencing musical interactions (Berliner, 1994; Wilson & MacDonald, 2016). This implies that these group dynamics can also function as a mediating tool. Similar manipulation of musical parameters can be found in Iranian classical music: musicians must memorise hundreds of short musical patterns, known as the *radif*, which form the basis of all of their improvisations (Nooshin, 2017). However, Iranian musicians also

utilise previously conceived structure (Nooshin, 2014) and emphasise performance and interpretation over generating new musical material (Nooshin, 2017). Musical, structural and cultural-historical tools are combined during the creation of music in this setting. A study of improvising organists found that they reported their improvisations as being influenced by the narrative of the church service (Johansson, 2012). In other words, their improvisations were mediated by the nature of the task: for the organist to create music that supported a pre-defined and jointly understood sequence of events. For example, in an improvisation occurring after the sermon, the organist could play slow moving, quiet and tonally stable music to support a reflective atmosphere.

In group collaborative improvisation, another musician or their actions can function as a mediating tool (Sawyer, 2003; Lewis, 2008; Linson, 2015, 2017; Wilson & MacDonald, 2016; Born, 2017). An example of socially mediated improvisation is given in a study by Wilson and MacDonald (2016), which analysed decision making processes in free improvisation trios and categorised the primary decision as whether to maintain or change the texture/direction of the music. If the decision was to change the music, it could be understood in terms of initiating a new music action or responding to another person. This study is important as it investigates the ways in which improvisation is understood not only in musical terms, but also in terms of interaction, or socio-communicative terms (in line with Clarke (2012) and Linson's (2014) wishes to understand improvisation in more than solely musical terms).

In groups which employed improvisation as a key process in both creating structured pieces and in performing free improvisation such as the Association for

Advancement of Creative Musicians (AACM) and Feminist Improvising Group (FIG), a social aesthetic has been described as an important creative influence on the musicians (Born, 2017). This is described as a bi-directional mediation between the musical and the social on four planes: 1. microsocialities in music performance, for example, where musicians recognisably reference other's music; 2. imagined communities, which may comprise an appreciation of other improvising musicians across the world and how practices are similar; 3. wider social relations (race, gender, sexuality), for example, where marginalised musicians create all female or all black spaces to be creative in; 4. broader institutional forces that facilitate production, reproduction or transformation such as radio and music festivals (Lewis, 2008; Born, 2017). Other conceptualisations of groups explore how shared categories act as structuring devices (Sawyer, 2003). Similarly, Linson's statement that 'positively defined commonalities... function as aesthetic criteria' (2014, p4), positions shared ideals about music as driving individual musical choices in group improvisations.

Therefore, improvisation can be mediated by musical parameters (genre-based or not), historical customs and rules, social interactions, concepts and ideals.

2.2.3 My definition

As seen in the previous two sections, improvisation has many functions, and therefore needs fine-grained discrimination in description and conceptualisation (Nettl, 2009; Clarke & Doffman, 2017). Therefore, to ensure transparency, the following sentence describes my working definition of group improvisation within this thesis. Group improvisation is a musical episode where some or all of the

material is spontaneously created through the course of the performance, and a significant part of the music is negotiated by the participants in real time. This definition is situated in an artistic and pedagogical area drawn from Lewis, (2014) MacDonald, Wilson and Miell (2012) and Sawyer (2003). Improvisation has been theorised as having a 'pedagogical dimension' (Lewis 2014, p.35), which unfolds through a process of listening to and interpreting other's playing, importantly appreciating features which may be unique to that person. Following this, there can be learning about oneself through perceiving the ways in which one's playing can be heard in other musicians' responses. It is important to emphasise that this aspect is not generalisable to all improvisational contexts but provides an example where artistic, social and educational influences meet. These social aspects are shared with MacDonald, Wilson and Miell (2012, p.246) who define improvisation as creative, ambiguous, spontaneous, social and accessible. The authors' addition of 'accessible' differentiates from many other, mostly genre-specific accounts of improvisation where technical expertise is a requirement. Their understanding allows for a wide range of contributions to be meaningful and appreciated. These could manifest as unconventional ways of playing instruments, or in musicians using their voice to create sound, rather than their instrument. This is interesting in relation to children's improvising as it has potential to recognise creative agency unique to each child and the situation, rather than teaching towards a particular paradigm of creativity (examples of these are Webster 1987; 1994; McPherson, 1995).

Sawyer (2003) defines key features of improvisation as: 1. Having an unpredictable outcome, 2. Having moment-to-moment contingency, the next action dependent on the one just before, 3. Being open to collaboration, 4. Being embedded in the social

context. Sawyer's first point implies a context where there is a wide range of choices for participants; most genre-based improvisation involves manipulation of agreed musical or structural parameters (MacGlone & MacDonald, 2017). His second point aligns with Lewis (2014), who describes the structure in improvised music as unfolding in real time, in a socially-negotiated interaction rather than following a prescribed form.

Improvisation in groups is a creative, collaborative and mediated process. Mediating tools can be musical, historical, social, genre-based or constitute other modes of communication, (e.g., gestural, visual). Players can prioritise any of the tools in a particular combination, or their interactions can unfold through a series of choices made by group members.

2.3 Improvisation in schools

2.3.1 Previous examples

Improvisation in some music education contexts was introduced in the late 60s and early 70s. This was seen in different countries, for example England (Paynter & Aston, 1970) and in North America (Schafer, 1965; 1975). This has been understood as developing in these countries partly as an adverse reaction from music educators to curricula which emphasised development of measurable musical skills (Kanellopoulos, 2007). Other music classroom activities such as teacher-directed, music appreciation sessions listening to the Western Classical Music canon were seen as a passive way of learning and in need of rethinking (Paynter & Aston, 1970; Paynter 1992). Improvisation was seen by composers who taught music as an

important process in composition (Paynter & Aston, 1970; Pitts 2000; 2012) but rarely facilitated as a stand-alone activity (Kanellopoulos 2007). Children were set composition tasks through deriving and adapting compositional strategies from avant-garde composers of the time (Pitts 2012), which were later contextualised by playing the original works (Paynter & Aston, 1970).

Another reason for including creative music making and teaching different ways of thinking about music was to expose children to contemporary practices in music. This also aligned with approaches which referenced and built on contemporary professional creative writing and art making practices in school subjects of English and Art (Pitts, 2000). The Schools Council Project for Music in England was a government curriculum development initiative led by Paynter which developed materials for and approaches to teaching creative music through the 70s. In Scotland, substantial change was proposed in Curriculum Paper 16, *Music in Scottish Schools* (1978). It aimed to build on work of Paynter and Aston (1972) and Witkin (1974) as well as approaches developed in the USA, namely Comprehensive Musicianship (CM) (Sherriden & Byrne, 2003). A CM approach to music education focused on developing three elements: Performance; Analysis and Composition; again improvisation was included as a process in composition (Woods, 1986). Interestingly, a CM approach was inclusive of a wide age range, from preschool to university students (Woods, 1986). This integrated approach was uncommon; at the time, music activity for preschool children was generally not included in the critical discussion of the music education field, either by educators or researchers (Campbell, 1998).

As strategies from artistic practices informed formal education, it is useful to view an example of a strategy for group composition. The following task was based on Paynter's own thinking and work as a composer (Finney, 2011). He describes a classroom task based on a recent compositional process of his own:

Here is an idea; talk about possibilities for music; choose instruments (or use your voices); make some sounds; talk together about the sounds and how you can combine them; where is the piece 'going'? Remember that you are making music, not sound effects! (Paynter quoted in Finney, 2011)

In this example, the role of talk is foregrounded as it is important for the participants to create and negotiate meaning in their creative music making. The children have choice in their actions but also are bound by cultural or classroom understandings of what music should be. Experimentation is encouraged through moving sounds around and comparing combinations and aggregates of ideas, however, there is an implication that there has to be a structure: 'where is the piece going?'. In this task, the children's actions are mediated by the capabilities of the instruments they choose but also internalised 'rules' from an adult creative practice. However, as they work in a group, their collaborative mechanisms will also function in mediating their choices, which makes it distinct from most composers' practices. Paynter and Aston (1970) specified such creative tasks to be for children of eight and up. This could be to accommodate the complexity of group work or a conceptualisation that younger children may not be developmentally ready to work in such a way. This may originate in a belief that particular composition techniques need to be learned before creativity is possible (Paynter, 2008).

As seen above, a key process was for teachers to use iterative critical cycles of playing music and talking and comparing pupil's work (Pitts 2000). An important aim was to gain literacy with music, that is to be able to abstract, discuss and evaluate musical processes and use a variety of materials (e.g., with sounds originating from different sources). This emphasis on teaching music creatively had the aim of contributing to children's overall education and accommodating individual needs through the philosophy that music should be for everyone (Paynter 1992).

Enacting these particular values created demands on teachers, especially as these approaches were very different to how they were taught and how they may have thought about music (Byrne & Sheridan, 1998; Finney, 2011). Music teachers often bring their own beliefs into their classrooms about their own creative and musical capacities which can then affect how they teach (Wilson *et al.*, 2008). Additionally, researchers such as Swanwick (1979) and Gebbie (1984) proposed that teachers' poor understanding of Paynter's ideas combined with no clear personal rationale for doing creative work, created an unsatisfactory experience for both teachers and pupils. Also, some approaches were unfamiliar, such as working with graphic scores, even after reading about possible implementation strategies, many teachers still felt unsure about how best to help their pupils with these (Rainbow, 1996; Laycock, 2005; Devaney, 2018). Another reason for teachers' attitudes is that many classroom music teachers' musical backgrounds have been based in performing Western Classical Music and not composition or improvisation (Odam, 2000; Sheridan and Byrne, 2002; Devaney, 2018).

This overview presents some important points for consideration in this thesis. As discussed earlier in this section, children have been a very small part of an overall discourse in music education (Campbell, 1998; Young, 2016). This could be due to curricula which do not include them. For example, in Scotland CfE is from 3-18, however its predecessor was split into three age groups (i.e 3-5; 5-14 and 15-18). Principles from the work of educators in the 70s, such as accommodating children's needs and preferences or encouraging self-directed learning, are accepted as relevant for teaching young children today (Education Scotland, 2006). Recognising young children's needs can be complex. Authors such as Dalli and Te One (2012) as well as Willumsen, Hugaas and Studsrød (2014) have called for more educational research that includes the child's voice, to understand fully their needs and preferences and so address a gap in research.

The values expressed above are also key features of contemporary writing about improvisation pedagogy across all age ranges (Johansen *et al.*, 2019). Paynter's 'back-engineering' Thorpe, 2015 (p.164) approach in taking creative processes from an existing adult creative practice and repurposing for educational contexts, has also been seen in the work of Green (2002; 2008), Stevens (2007) and Thorpe (2015). All of these methods are designed for secondary school pupils (Green and Thorpe) or teenagers and adults in a community music setting (Stevens). Difficulties for both generalist and specialist teachers in realising creative tasks in music has been investigated, for example, with generalist primary and specialist secondary music teachers in Scotland (Wilson, *et al.*, 2008), and with specialist music teachers in England (Odena & Welch, 2012). Neither of these studies included preschool

teachers' beliefs about teaching creative tasks in music, so there is a gap in knowledge which is important to explore. There is potential for music teachers to improve their practice in teaching creative tasks, but the required cycle of planning, acting, observing and reflecting is time consuming and requires dedication (Odena & Welch, 2012).

The following section focuses on current trends and values in Scottish education which have the potential to inform approaches in teaching improvisation.

2.3.2 Current curricular influences

This section begins by considering potential reasons for why improvisation is currently of interest to educators. Subsequently an overview of key ideas from educational theorists which have influenced CfE is given. Increasing numbers of researchers, practitioners and institutions ranging from orchestras to educational establishments are interested in improvisation as a creative practice and in developing methods for and approaches to teaching improvisation (Heble & Laver, 2016; MacGlone & MacDonald, 2017; Johansen *et al.*, 2019). This could be a result of new curricula (within the last fifteen years) which emphasise creativity, student-centred teaching and process-based learning, for example in Scotland, (Scottish Government, 2006) and Finland (The Finnish National Board for Education, 2010). As well as this, the music aspect of the curriculum in the U.S.A. was revised in 1994, to include improvisation as part of general music classes, albeit within a constrained framework, see (Hickey, 2009).

These curricula have been designed with the aim of preparing children to participate fully in a changing world (Scottish Government, 2006) and to encourage 21st century skills. These skills include ‘creativity, critical thinking and problem solving, collaborative skills, information technology skills, and new forms of literacy, and social, cultural, and metacognitive awareness’ (Griffin & Care 2014, p.11). As well as prescribing these skills, the Curriculum for Excellence (CfE) has a theoretical basis in the work of John Dewey’s (1916/2005) progressive educational philosophy, and socio-cultural approaches and methods from the work of Vygotsky (1978/1930) in particular (Scottish Government, 2006). These will now be summarised, as an important basis for considering how music and improvisation should be delivered in schools according to CfE.

John Dewey was a pragmatic philosopher, psychologist and educational reformer whose work is hugely influential in curricula all over the world (Biesta, 2009). Dewey questioned rote-learning traditions (i.e., the memorisation of information by repetition), and criticised these as not providing children with a deep learning experience (Dewey, 1916). He championed more democratic and child-centred forms of educating children, moving away from hierarchical forms of education. He problematised rote learning, claiming that in this process children were passive receivers in the transmission of fragmented and decontextualised facts (Dewey, 1916). This influence is tangible in Scotland where there is a strong emphasis on topic-based learning in Early Years (Education Scotland, 2006) and in the Finnish curriculum which has topic-based learning at the heart of education for all stages from preschool up to the age of 16 (Finnish Board for Education, 2014). Topic-based learning uses a theme such as the environment, to explore a range of curricular areas.

Dewey's consideration of what constitutes an educational experience can be summarised into four points as follows:

1. It is based on the children's interests and grows out of their existing knowledge and experience.
2. It helps the children develop new skills.
3. It adds to the children's understanding of their world.
4. It prepares the children to live more fully.

Current educational policy in Scotland has been influenced by socio-cultural theorists (Scottish Government, 2006; Priestley & Biesta, 2013). For example, Vygotsky, (1978/1930, p.47) proposed, 'Learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in co-operation with his peers'. Likewise, situated views of learning position what Lave & Wenger (1991) call communities of practice, at the heart of learning. Situated learning takes influence from theories such as Vygotsky's (1978) understanding of social processes as originators of cognitive processes, as well as Dewey (1916) who wrote of learning *in doing*. Vygotsky's (1978) idea of the Zone of Proximal Development (ZPD) offers a conceptualisation of the point in a child's learning where they are in between not being able to do a task, and being able to do it independently. The teacher's role is to help the child with the task, with the aim of helping them understand the process of achieving it, as well as the outcome. This also forms the basis for peer learning, where more a experienced or knowledgeable child can help another. The conceptualisation of how a child may cross over the ZPD, influenced the pedagogical construct of

‘scaffolding’ (Bruner 1966, p.90) where a teacher offers support to help the child in learning, and withdraws this over time as they are able to do the task more independently. This strategy is in common use in education in Scotland, especially in EY education as a basis for teachers to understand and facilitate the learning of children (Priestley & Biesta, 2013).

Yrjö Engeström builds on socio-cultural theories of learning with the concept of expansive learning (Engeström, 2001). Expansive learning occurs when participants have the capacity to interpret and expand the definition of the learning outcomes in an educational activity, and respond to it in their own ways. This can be demonstrated in HE with the example from Johansen (2019) where a drum student in a music conservatoire performed his final exam on electronics, contrary to the expectations of one of the examiners. This challenges two assumptions: firstly that learning outcomes are stable and well defined, secondly that learning and development are individual, vertical movements from one explicit level to the next (Engeström, 2001). Consequently, this theory has potential for improvisation education as it acknowledges that learning content may not be known or defined, and affirms the crucial role of the participants in creating this knowledge (Johansson, 2012).

Considerations for practical applications which accommodate these ideas in teaching improvisation now follow. Topic-based learning has an implication for connecting music to other subject areas. Potentially, the framing and discussion of improvisation tasks could relate to other subjects. Finding out children’s interests and experiences involves the teacher talking to them, but also allowing and listening to children’s

discussion with each other. This is important for facilitating children's learning from each other at the time of the activity, but also in developing learning activities in a way which accommodates children's own understanding of improvisation. Teachers being scaffolders of children's knowledge also requires that they apprehend children's own preferences. In a musical context with young children, this may happen through different MoC, for example, music, talk, or gesture. If people are able to define the task they are involved in, this potentially deepens their learning experience (Engeström, 2001). In an improvisation workshop this could mean children being able to suggest strategies, and teachers giving children the opportunity to create their own meaning about the music they produce.

2.4 Frames for preschool children's improvising

This section is concerned with gaining an understanding of how researchers conceptualise preschool children's improvisational musical activity and what can mediate it. One reason for this is that there have been many calls to respond to and extend children's *own* music-making activity as a starting point for teaching improvisation and music (De Vries, 2005; Barrett, 2006; Custodero, 2008; Wassrin, 2019). Another reason for considering children's own musical contributions acknowledges contemporary views in Psychology and Education, that preschool children are capable of executing their own choices through their musical contributions (Wassrin, 2016; Young, 2003a; 2003b). This has important implications for approaches and methods to working with young children.

Importantly, for this chapter, improvisation is a key process shared across many contexts and conceptualisations of preschool children's musical activities.

2.4.1 Power of definition

As stated earlier, there are conflicting epistemologies and consequently many ways of conceptualising improvisational activity. In relation to preschool children, it can be appreciated in who has the *power of definition* (Johansen *et al.*, 2019) where:

teachers or caregivers have a precedence of interpretation in Kindergarten. They define what counts as a music activity, and thus which ways of expression the children are allowed to use. (ibid, p.2)

This may be because the child/adult power relationship is rarely considered in society, with the consequence of researchers in music education failing to address how this may affect what actions are reported in children's improvisations (Wassrin, 2019). Authors such as Young (2003a; 2009) propose that evaluating children's music-making through the lens of background of adult Western art music, 'may not allow for versions that lie outside the predetermined norms it implies' (2003a, p.46). A particular concern is that children combine actions (e.g., movement, story-telling, singing) in a way that does not correspond with adult-led ritualised circle time approaches to music (Young, 2006; Wassrin, 2019). Both Young (2006) and Wassrin (2019) have criticised aspects of circle time music as restrictive because children have to sit still during the activity. This may not be appropriate to particular children in terms of their development or because they may have a condition which makes sitting still for long times difficult.

Terms such as 'musicking' (Wassrin, 2016; 2019); 'spontaneous music' (Adachi, 2012) and 'invented-song making' (Barrett, 2006) can be understood as related

processes as each has the child as the main generative agent. Researchers, for example, Alcock (2008), have offered other definitions that fit their research interests and multimodal nature of young children's interactions. Alcock (ibid) used the ancient Greek word for music 'musike' in her observational studies of preschool children's meaning making across different MoC in their unstructured play. In its original sense, 'musike' encapsulated music, but may also combine actions of 'rhythm, movement, poetry, dance, drama and all the temporal arts' (ibid, p.1). In her study, the children combined musical utterances with gesture, movement and story-telling. A broad understanding of literacy was used to frame and examine how children created multimodal narratives with each other (Alcock, 2008; Alcock *et al.*, 2008) The framework for examining how the children's literacy developed was adapted from Martello (2002) and comprised five literacy symbol systems: linguistic meaning, visual meaning, audio meaning, gestural meaning and spatial meaning (ibid, p.22).

Defining children's 'self-initiated, playful activity on instruments' as music-making rather than labelling with adult terms of composition or improvisation, Young (2003a, p47) presents a definition that accommodates a different purpose. For example, if a child uses their body in a way that makes sound (e.g., stamping in a rhythmic pattern), defining this as composition or improvisation implies a musical intent rather than repetition of a physical action which is engaging for the child. Wassrin (2016; 2019) also comments on children appropriating music for many different functions and situations. The multimodality and different functions of children's improvisations can involve a completely separate experience for young children, when compared to music that they undertake in school. These distinct

characteristics demand scrutinising to alter the concept of music and musical improvisation in relation to young children (Kanellopoulos, 2007; Wasrrin, 2016; 2019). Context-bound definitions are useful insofar as they give a more representative picture, but the resulting plurality of terms can obscure when practices overlap. In the next section, I refer to children's musical creative spontaneous activities as improvising, and this term accommodates all of the definitions in this section.

2.4.2 What can mediate preschool children's improvisations?

Different combinations of 1. *external materials* (e.g., instruments and surrounding space) 2. *internal processes* (e.g., expression of ideas or feelings); 3. *children's own bodies*; 4. *musical material* and 5. *others* (e.g., parents, teachers and other children) can mediate preschool children's improvisations. For example, Moorhead & Pond's (1941/78) observations of preschool children improvising noted that they shared music play and ideas; synchronised their rhythmic movements with others and imitated each other's simple melodic fragments. As well as child-to-child collaboration, Pond (a composer as well as one of the researchers) responded to children's improvisations by engaging in a call and response activity where the child led. This also featured in Young (2003b) and Wassrin (2016; 2019) where adults responded to children's musical propositions and reflected back similar rhythms. In these cases, a combination of *musical material* and *others* mediated the children's improvising.

Children's vocal improvisations have been of interest to many researchers (e.g., Campbell, 1998; Bjørkvold, 1989/92; Barrett, 2006; Young, 2006). Different

approaches to examining children's improvised song include investigating musical structures and function. Barrett (2006) proposed that the content of children's spontaneous songs were influenced by a combination of process and context. Context was defined as a child's background in both home life as well as the nursery surroundings. For Bjørkvold (1989), children's vocal improvisations can be viewed as a means of expressing self, giving information conveying, and arousing emotion. In combining *internal processes* and *others* the children used their songs to communicate in different ways, such as 'protest, plead, command, tell stories, annoy and tease' (1989, p.216). Campbell (1998; 2009) proposes that children use improvised song to communicate with others and to make sense of the world. Her work investigated children appropriating pop culture and other cultural references from their home lives, with the purpose of experimenting with different identities; this was also a research focus for Barrett (2011).

In Young's (2003a) study of young children improvising on Xylophones, the shape and physicality of the instrument presented a factor which mediated children's movement when making sound. The ways in which the children's bodies operated with and on the instrument and the types of movement that were possible and comfortable for them when playing, show a combination of *external materials* and *children's own bodies*. In Wassrin (2019) children's improvisations were 'taken up' (i.e., responded to) by their teachers through non-verbal MoC such as gaze, gesture and movement. Therefore, *others* mediated children's improvisations through different MoC. This joint negotiation could be repeated and internalised to create meaningful signals between the teachers and children- an *internal process*.

As well as children's musical actions being mediated by *others* through different MoC, different social contexts mediate children's experiences and consequently understandings of music (Barrett, 2006; Spychiger, 2017). Parents have a crucial role in providing access to musical experiences within and without the home (Borthwick, 2002), and their aesthetic criteria may accord particular values to improvised and non-improvised music (or to music and creativity). Teacher's beliefs about creativity and music directly affect expectations of what children are able to produce (Cheung & Leung, 2013). It is important to understand the aesthetic values and internalised theories about creativity of these influential adults as they can offer insight into the types of activities and guidance offered to pre-schoolers and how those children's creative identities are shaped.

In addition, there is little work which develops Welch's (2007) wish to appreciate interrelations between the socio- cultural setting; participant's background and disposition and how this may influence a child's participation in musical activities (as outlined in the Research dilemma in 1.2). For example if a child is shy, taking part in group musical activities may be difficult for them. Understanding these distinct influences can contextualise children's musical actions and talk about what they play.

In this section, adults are not teaching in a deliberate manner so much as responding to children's musical and social cues. The following section is a review of papers where the adults had to accommodate particular curricular demands, predetermined values or educational goals and therefore have had a specific purpose when teaching improvisation.

2.5 Teaching improvisation

The ERIC and PsycInfo databases were searched for peer-reviewed journal articles in English with all of the search terms music*, improvis*, education and group with the limiter, not jazz, in the abstract, returning 45 articles. The limiter was in place as the focus was for more open forms of improvisation. As an aim was to identify common elements or approaches in the teaching of improvisation, there was no limiter on age or stage of education. This is because the mechanisms of spontaneous improvisation are fundamentally similar at different stages of development (MacDonald, Wilson & Miell, 2012). Previously known works were also reviewed, and reference lists of all texts were checked for additional relevant articles. When evaluating the literature, the heterogeneity of participants and intended outcomes made meaningful comparison complex. To enable useful comparison of these diverse materials, the analytical focus in examining the literature was in three areas: examining the reported pedagogical approach; assessing educational purpose; and role of the teacher.

2.5.1 Pedagogical approaches

Teachers' beliefs about improvisation may affect how and what they teach; for example, that children have to reach a certain level of technical skill before they can improvise (Kratus, 1991; Whitcomb, 2013; Ilari *et al.*, 2017). A contrasting view is that children are natural improvisers (Barrett 2006; Hickey, 2009). Two broad categories were identified from the literature, which reflected these beliefs: model-based approaches (e.g., Kratus, 1991; Beegle, 2010; Whitcomb, 2010) and process-

based approaches (e.g., Burnard, 2002; Kanellopoulos, 2007; Larsson & Öhman, 2018; Larsson 2019). These will be examined in turn below.

Model-based approaches are drawn from specific genres or music education methods (such as Orff or Kodaly), which in turn inform the creative choices available to the participants. For example, models that use Orff-designed instruments limit pitch choice, as they are pentatonic instruments. A reason for utilising this type of instrument is that pentatonic instruments playing together sound consonant and so produce a pleasant-sounding product, as seen in Beegle (2010). The progression through model-based approaches is often clearly delineated and sequential, for example, Kratus (1991). Every step has to be mastered before moving to the next: 1.Exploration; 2.Process-oriented improvising; 3.Product-oriented improvising; 4.Fluid improvising; 5.Structural improvising; 6.Stylistic improvising; 7.Personal improvising. One reason for creating a learning path such as this is to cope with curricula that demand substantive assessments; another reason could be to aid teachers who are unsure about their own improvising skills by providing a clearly defined path. Models such as Kratus (1991) and Pressing (1988) were developed through examining improvisational behaviours of children and considering theoretical models of improvisation. However, criticism of such models suggests the link between children's improvisational behaviours and the nature of preceding pedagogical tasks has not been sufficiently explored (Barrett, 1996). In other words, how the children improvised depended on what they had been asked or instructed to do.

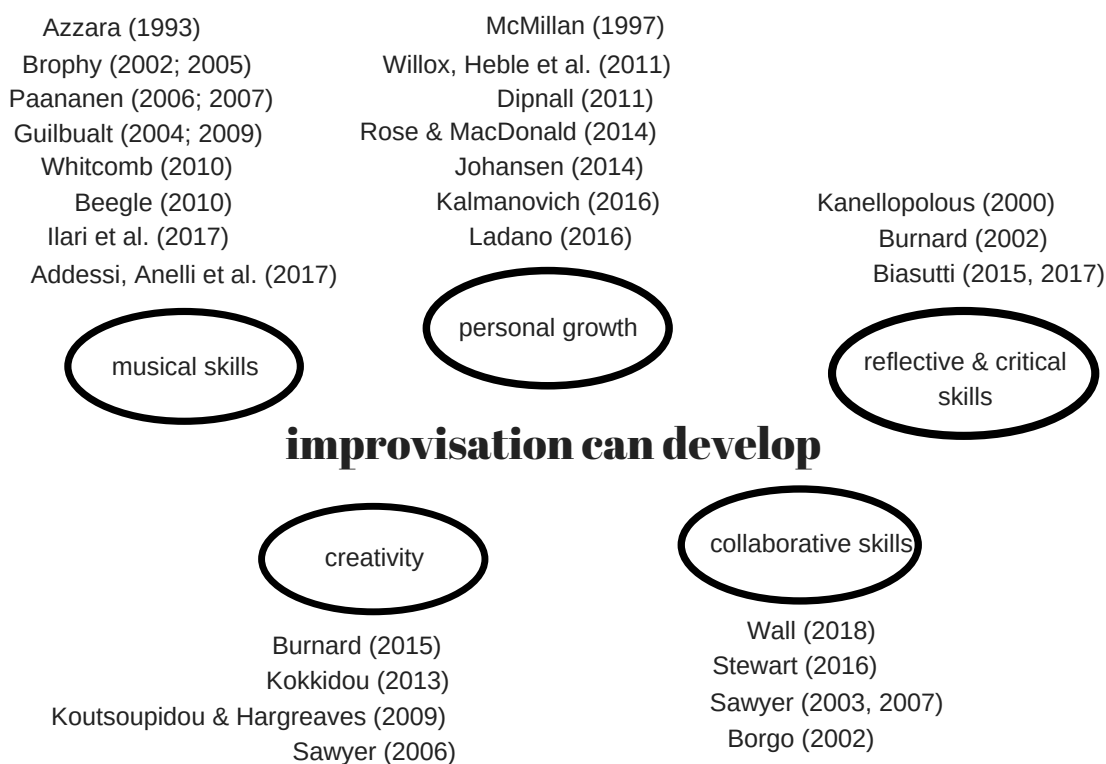
Process-based approaches to teaching improvisation focus on developing the musical material that the participants create themselves. The teacher can then scaffold the contribution of the child while attempting to preserve their creativity. Good examples of this are in the work of de Vries (2005), who took his son's improvising as a 'point of departure' Nettl (1998, p.54) to guide development of vocal skills and through this, understanding of musical concepts. In a study with nine and ten-year-old children in Sweden, Larsson and Öhman (2018) and Larsson (2019) describe teachers providing 'frames' (2018, p.146) within which the children could create music. An example of this was the instruction to make up a story and play it with improvised music. Another instruction which teachers reinforced through this project was for the children to 'affirm each other's initiatives and not be judgemental' (ibid, p.146). This addition of an ethical stance for the children is interesting and can be viewed either as constricting children's musical and verbal expressions or as a necessary limiter to create a safe space for children to generate creative music. In a study with children of a similar age, Kanellopoulos (2007) argues for children being able to form their own values and thoughts about their improvisations as an outcome of a process-based approach. This may be problematic if, as in Larsson and Öhman (2018), disallowing certain verbal expressions may hinder critical examination of improvisations. This issue illustrates challenges in realising creative open-ended tasks in groups. One solution is for the teacher to be involved in creating music; Kanellopoulos (2007, p.114) suggests that teachers 'make a promise' to be open and guided by the child with the consequence that both have responsibility for the improvisation which unfolds.

Recent reviews of improvisation literature (e.g., Larsson & Georgii-Hemming, 2018; Rebne and Sætre, 2019; Siljamäki & Kanellopoulos, 2019) have categorised pedagogical approaches to teaching improvisation in a similar way. For example, Rebne and Sætre, (2019) reviewed 21 papers, conceptualising approaches to teaching improvisation as either originating from ‘musical structure [or] personal freedom’ (p.132) and suggested an alternative based on Gadamer’s (2004) concept of play. A key feature of this alternative is to encourage experimentation and for all in the group to contribute to decision making. Larsson and Georgii-Hemming (2018) categorised methods as either ‘structured’, teacher-directed improvisation or ‘free’, child-directed improvisation” (p. 49). Siljamäki and Kanellopoulos, (2019) describe these as *model-bound* and *open form* approaches (p.17, italics in original).

2.5.2 Educational purpose

Another factor affecting methods of teaching improvisation is the teacher’s intended educational purpose. Improvisation is frequently used as a tool to develop other skills and personal attributes rather than for its own sake (Kanellopoulos, 2007; Wright, Stefanou & Lang, 2016). Varied purposes were found in the literature; a diagram of these follows and an exploration of each purpose comprises the next section. Some studies had potential to fit into more than one category. Consequently, I have placed each study in what I felt was the strongest, most representative category and indicated in any overlaps in the subsequent explanation in Figure 2.2.

Figure 2.2 Educational purposes of improvisation diagram



2.5.3 Purpose: personal growth

Improvisation can be seen as a means for strengthening independence and the sense of having an individual, important voice (McMillan, 1997; Johansen, 2013; Kalmanovitch, 2016). Children can develop musical ownership and a personal voice as a result of being empowered by having creative choice Dipnall (2011). Although there is scarce work specifically to develop agency through improvisation, it has been proposed as a possible outcome in interventions using free improvisation (Rose & MacDonald, 2015).

In a pilot project with disadvantaged teenagers in Canada by Willox *et al.* (2011), the desired outcomes were to utilise improvisation as a ‘crucial model for political,

cultural and ethical dialogue and action' (p.32) through developing the personal voice of the participants within a group. This informed the purpose which prioritised the teenagers' own creativity but also how they listened and interacted with others. The teachers in this intervention were also researchers who conducted interviews with the participants. The rationale for this was to capitalise on trust built up in music sessions and consequently elicit a greater level of disclosure in interviews. Students reported they felt a stronger bond with their group as well as greater focus in their ability to listen to each other, both musically and in discussion. However, some students gave an account of feeling unsure of what to play at times, resulting in feelings of embarrassment and anxiety. This is noteworthy as there are very few articles that attempt to capture the student's voice; most work explores the teacher's perspective. Although the study captured diverse views, it would have benefitted from a greater exploration of the methodological issues in insider interviews, such as bracketing previous assumptions about the intervention or the participants (Asselin, 2003). Another consideration could be to show awareness that the participants may present a situational identity by answering questions in the way they think the teacher/researcher would like, as they are in a position of lesser power (Angrosino, 2005).

Another interview-based study, with both HME teachers and music students investigated potential ameliorative effects of free improvisation classes on performance and social anxiety (Ladano, 2016). Students accounted for participation as inducing a release from anxiety or helping achieve a meditative state, which distracted them from their performance anxiety. One reason for this effect could be the shift of the participants' perceived locus of control. Crafts and Rotter (1955) refer

to the extent that individuals feel they can control events that are affecting them. External locus of control is the belief that external factors (environmental, chance or fate) are controlling, or more influential on their decisions and life choices than personal agency. If participants feel they have an internal locus of control, they believe they can influence events. In an improvisation context, this can manifest as participants feeling able to make creative choices that audibly change the path of the music in a desirable direction. The self-perception of having an internal locus of control is linked to greater self-esteem and increasing self-efficacy (Judge & Bono, 2001). Therefore improvisation has potential to effect health and wellbeing positively (see MacDonald & Wilson 2014, for a review of music improvisation and health). While the possibilities of investigating improvisation as a vehicle for increasing wellbeing through a music education lens are worthwhile and need further investigation, it is not within the scope of this thesis to examine them fully.

2.5.4 Purpose: to develop musical skills

This category's focus is on improvisation developing specific and assessable musical skills, for example, rhythm (Brophy, 2002; 2005; Paananen, 2006; Whitcomb, 2010), or improvisation within a tonal centre (Paananen, 2007; Guilbault, 2004; 2009).

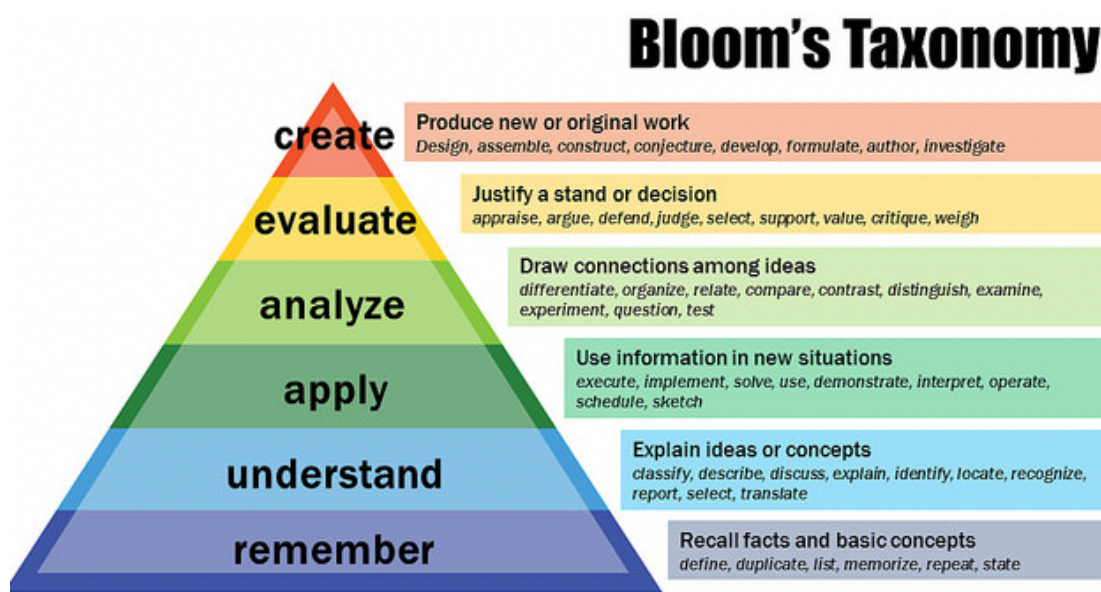
Some studies (Brophy, 2002; 2005; Paananen, 2006) sought to exemplify sequential developmental stages in improvising, for example children increasingly combining features such as accents and more complex rhythms, that improved either with age or experience. The nature of musical activities are often model-based and teacher-directed, for example as described in Whitcomb (2013), putting improvisation as the final step in Kodaly method chain of action: prepare, present, practice (improvise).

This has the purpose of testing children's knowledge, by ascertaining how well they

can create new melodic patterns from the original melodic shapes they had learned (Wall, 2018). Using improvisation in this way can help build musical skills, such as learning solfege, in a way that gives the children some input. This is similar to approaches developed by Dalcroze, who saw improvising as a key method of synthesising children's learning so as to gain a measure of their musical understanding (Farber, 1991).

Model-based approaches were exclusively used when the purpose of the study was to improve musical skills. All of the cited studies were with classes of children, which may account for this approach over a process-based method. The fear of loud chaotic noise and a losing control of a classroom have been identified as reasons for teachers avoiding a freer approach when using improvisation (Hickey, 2009). Another feature of the interventions to improve specific musical skills was the language used to describe the models: planned improvisation (Adachi & Chino, 2004), structured improvisation (Beegle, 2010). A reason for this constraining of the term 'improvisation' could be to align with commonly held epistemological positions about creativity only being possible when the individual has internalised contextual rules (or processes) of the relevant domain (Csikszentmihalyi, 1997). It also aligns with models of learning informing Scottish 3-18 education for example, Bloom's taxonomy (1956) (Education Scotland, 2006). Figure 2.3 demonstrates the hierarchical taxonomy going from bottom to top, and each step has to be mastered before moving to the next (Tíjaro-Rojas *et al.*, 2016).

Figure 2.3 Bloom's taxonomy²



Recent studies have begun to examine children's skill in improvising, where improvising was conceptualised as a discrete musical skill. Improvising in these contexts is defined in relation to specific musical tasks, for example, Ilari *et al.* (2017) examined 6- and 7-year-old children's skill in providing an improvised phrase to end their teachers' opening musical statement. In Adessi *et al.* (2017), the task was for 6 and 7-year-old children to improvise with a computer which reflected aspects of their initial statement back to them. Both of these studies used mixed methods, gathering quantitative data on musical parameters used and qualitative data to provide information about the children's musical backgrounds. Both studies used rating tests as the evaluative method for the children's improvising.

² Image from Vanderbilt University Centre for Teaching <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>

Ilari *et al.* (2017, p.6) considered ‘inclusion of a sequence of spontaneously organised melodic elements in an improvised solo: rhythm, motives, and attractive note choices, that form an aesthetic whole’. Addressi *et al.* (2017) used a scale adapted from McPherson (1995) to accommodate lower age and musical experience and rated the children’s improvisations with another child on the following dimensions: Instrumental Fluency (ease and a feeling of spontaneity), Creativity (number of new ideas or unique material) Musical Organisation (ability to use structuring devices such as question/answer), and Musical Quality (a global impression of secure musicianship), Quality of Musical Dialogue (level of sophistication of response), Reflexive Interaction (to create a response that is clearly influenced by the other) and finally, Attention (to the other improviser).

Two points in the evaluative criteria used are of interest. Firstly, that an acknowledgement is given to the whole musical picture; both studies attempt to see improvisation in more than one musical parameter. Secondly, the social aspect of improvising is recognised; in Addressi *et al.* (2017), three categories are concerned with how the child responds to another, so even though the improvisations are in pairs, the child’s accommodation of another’s musical input implies that the authors value skills such as listening and musical interaction.

2.5.5 Purpose: to develop collaborative skills

Free improvisation has been claimed to be particularly suited for facilitating musical collaboration (MacDonald, Wilson & Miell, 2012). In instrumental learning and development, improvisation can be a powerful experience of personal achievement (Ashley, 2009), in stretching one’s abilities to act within the constraints of real time

music making while adjusting and tuning in to other participants simultaneously.

Collaborative skills in improvisation are described by Borgo (2002) as the ability to synchronise with others in both intent and/or musical actions, while maintaining a connection to the overall ever-changing experience. How one may become better at collaboration is illustrated as gaining greater awareness of the emergent music and being able to coordinate with others on an increasing range of musical parameters (Borgo, 2002).

Sawyer (2007) makes a perhaps radical claim in his essay *Improvisation and teaching*, that improvisation should be regarded as the core in music education, for both musical as wider pedagogical reasons. He highlights four learning outcomes, 1. deep conceptual understanding of music; 2. integration of knowledge through the act of creating music in real time; 3. expertise in adapting to immediate changes; and 4. collaborative skills. Sawyer argues that improvisation is characterised by unpredictable outcomes and indeed outcomes which depend on the last perceived action, this aligns with expansive learning (see section 2.3) which describes concepts being ‘learned as they are being created’ (Engeström 2008, p43).

Improvisation activities are often expected to take place in music education to develop real-time creative decision-making where musical ideas and aesthetic conventions are negotiated between the personalities involved (Rose & MacDonald, 2015). For example, a qualitative study by Wall (2018) investigated what children learned when the main activity in a music programme was improvisation. The researcher was also the teacher of the class. The children (a group of six boys aged 10-11) were judged by their teacher to be displaying collaborative emergence when

the group appeared to be communicating with each other to build a cohesive musical section (for example either through a shared rhythmic framework or pentatonic scale).

2.5.6 Purpose: to develop creativity

Another pedagogical aim of improvisation can be to develop creativity through teachers encouraging a critical mind and an exploring attitude when improvising (Kokkidou, 2013). Through creative musical experiences, students can perceive themselves as lifelong musical creators, thinkers and improvisers (Burnard & Dragovic, 2014). Ways of conceptualising and measuring creativity in music can be approached in different ways, firstly with deductive approaches, which are often quantitative, experimental and map musical creativity on to a paradigm (see Brophy, 2005; Koutsoupidou & Hargreaves, 2009). Inductive approaches arise from interpreting and categorising musical creative actions which are generated by participants (see Barrett, 2006; Sawyer, 2006).

An inductive approach has been used to theorise group collaborative creativity by Sawyer (2006). By drawing on empirical research from group improvisation in both theatre and music, he defines group creativity as: 1. improvised, as it happens in the moment; 2. collaborative, since creativity cannot be attributed to one person and 3. emergent, because each action depends on a previous one, making it unpredictable. Sawyer's work develops conceptualisations of group creativity, but the effects of group dynamics and participants' relationships on the creative process in improvisation need further investigating (Wilson & MacDonald, 2017). It is important to note that Sawyer's work is rare; most research on creative process in

improvisation is concerned with how an individual's own creativity may develop rather than the group's (Wilson & MacDonald, 2017).

A good example of a deductive approach is in a study by Koutsoupidou and Hargreaves (2009), where the main aim was to increase children's creative thinking in music, measured in comparison to a paradigm: Webster's Measure of Creative Thinking in Music (Webster, 1987; 1994). This model rates the following dimensions of creative thinking: musical extensiveness, flexibility, originality, and syntax. The aim of selecting these dimensions is not to measure the product, but the different aspects of what may constitute the cognitive processes involved in creativity. Two groups of six-year-old children (n= 12 in experimental group and 13 in the control group) were assigned to groups that had improvisation as part of their music classes (experimental group) or not (control group). The experimental group participated in improvisation activities, including free improvisation, teacher directed improvisation and improvisation following a story. The control group followed a structured programme of music activities which did not allow any improvisation. Results showed that the children in the experimental group showed significant improvements in musical flexibility, originality, and syntax, whereas the control group demonstrated a small improvement (Koutsoupidou & Hargreaves, 2009). While these results are encouraging and a potentially useful tool, it has been proposed that creative products may not fully represent the creative development or thought in a child (Amabile & Gitomer, 1984; Amabile, 1996). Therefore, such measures may not fully apprehend a child's creativity, only how close they are to the paradigm used.

Another point to consider for the purpose of this thesis is the age range for this creative test; it has been found as valid with children from the age of six upwards. At present there is no measure of creativity which is judged as valid for children below this age. Most studies of musical creativity in young children are focused on spontaneous musical play in naturalistic settings, concentrating on individuals or pairs of children (Barrett, 2006).

2.5.7 Purpose: to develop reflective and critical skills

Teachers who are interested in developing reflective and critical skills, often use process-based methods of teaching combined with an iterative cycle of playing and then talking about the playing with participants. Research investigating children's attitudes and experiences in workshops designed to develop these skills have been undertaken with children aged 9-10 (Kanellopoulos, 2000; Burnard, 2002) and proposed for music students in HME (Biasutti, 2015; Biasutti, 2017). For example, Kanellopoulos (2000) adopted multiple roles: informal interviewer, sympathetic listener and co-musician as well as researcher. This meant he was able to focus on facilitating critical thinking skills in relation to improvising. While improvising, the children in this study considered what they played in relation to others as well as situational features such as their instrument. Working in this way can build and sustain a shared recollection of previous improvisations for the group, which then form a knowledge base for future improvisations and discourse (Kanellopoulos, 2000). This research is unusual because 'children's musical and reflective voices actively shaped the process of inquiry' Kanellopoulos (2000, p.3). This also indicates a particular research ethos, to create research *with* participants rather than *on* or *for* them. This shares a similar position with Young (2003a; 2008), Barrett

(2006) and Wassrin (2016) who have all sought to engage with children on their terms where possible, by being guided by various modes of communication (e.g., movement, gaze, verbal and combinations of these).

2.5.8 Role of the teacher

Some authors recognise that there is not a consistent model for teaching improvisation, due to different conceptions of improvisation (Borgo 2002; Kalmanovitch, 2016; Wall, 2018). In the previously mentioned study, Willox *et al.* (2011), report the workshop leader as being aware of inherent power dynamics as a teacher, and with negotiating his position as an expert while attempting to be a co-musician. In discerning three functions of improvisation in music education (namely, learning music, learning to improvise and improvising to learn about self and others), Campbell (2009) presents three possible ways of teaching or three important aspects that should be facilitated concurrently. Teaching free improvisation in groups in HME has been described as having ‘significant risks’ by Oded and Salazar (2014, p.283), because of difficulties for students to create an appreciable, structured piece rather than playing and experimenting with no purpose (Mudd, 2012). Another contributing factor was identified as the complexity and unpredictability of the teacher’s task in giving students guidance (Oded & Salazar, 2014). A contrasting approach in bringing informal authentic practices specifically drawn from or influenced by an existing artistic practice into formal settings may be motivated by different reasons. First is the wish to keep ways of learning and consequently, the artistic practice itself from becoming crystallised, inflexible and so inauthentic, a process Lewis (2000, p.81) calls ‘academicization’. Another reason is that professional improvisers who teach may want to include informal ways of teaching

and learning in their formal educational setting as an effective strategy, for example in HME (Lewis, 2000; Hickey, 2009; Heble & Laver, 2016) or high school (Willox *et al.*, 2011). Empirical studies focusing on this approach in EY and Primary education have been scarce.

In their anthology *Improvisation- Beyond the Classroom*, Heble and Laver (2016) present a range of best practice – mainly from teachers with an artistic background playing improvised music. Common themes from the chapters were the importance of attentive listening, using improvisation as a space for democracy and developing interactional possibilities with a range of instruments and skills. Utilising informal methods in more formal educational setting has been described by (Lewis, 2000; Borgo, 2004; Lewis, 2008) who acknowledge the influence of their own professional playing experience in creating curricula which align with the process-based approaches described earlier. Researchers from other genres such as Green (2002), compare informal methods of learning utilised by pop musicians with more formal ways of teaching (in this case instrumental lessons from the Western classical tradition) to show how these two systems can operate as parallel paths of learning. She categorises these informal learning practices into enculturation, listening, copying and working with peers.

The complexity of the teacher's role has been described as from a student's perspective by Maggie Nicols:

usually the teacher's outside the process and they observe, whereas John (Stevens) led by embodying and sharing his musicality with you by playing, so of course, that was my role model. (quoted in MacGlone & MacDonald 2017, p.285)

In this situation acting as a mentor and fellow musician, Stevens continues to teach while playing, mentoring in his playing decisions. This could manifest in reflecting aspects of a player's musical contribution back to them to affirm their choice.

'Search and Reflect' was Stevens' (1985) book, where many of his pieces and exercises required an inclusive approach from the teacher. This mentoring process also appears as a recommendation for teachers in Kanellopoulos (2007, p.21) who advises teachers to engage as a 'co-musician' from the beginning of the process. This difficulty in assuming a different role from that of a teacher and the limited space for this different role within the demands of the curriculum the teacher has to follow, could be factors in why some teachers may follow model-based methods.

A growing view of improvisation in music education advocates for placing the meaning making of group improvisation with the children (Burnard, 2002; Campbell, 1998; Custodero, 2010; Elliot, 1995; Kanellopoulos, 2000; 2007). Problems can arise with older participants as seen in Stewart (2016) who described difficulties in HME, such as more confident students dominating discussions. To counteract this issue, assessment on the development of the students' critical thinking skills were examined through reflective journals and not classroom discussion. The outcome also informed the teacher to be aware of this issue and to take an active part in mediating classroom discussions if needed.

Thus, the complexity of playing in group improvisation can mean a teacher or workshop leader has to take on several different roles. *Musical Futures* (Green, 2008) offers some guidance for classroom teachers: 'the role of the teachers was to stand back, observe, diagnose, guide, suggest and model, attempt to take on pupils'

perspective, and help pupils to achieve the objectives that they had set for themselves' (p.89). This seems to share elements with approaches to teaching used by improvisers, but with key differences. Firstly, this programme is rooted in pop music which provides robust structural elements in chord patterns and the orchestration of instruments: therefore, the pupils have to be creative in a well-defined musical and cultural context. Secondly, the teacher models as a method of knowledge transmission rather than acting as a co-musician. Thus, teaching in and through a process model relies on teacher judgement rather than a predetermined teacher direction, and is far more demanding on teachers and difficult to implement in practice (Stenhouse, 1975).

2.5.9 Summary

Section 2.5 examined pedagogical approach, educational purpose and role of the teacher in improvisation pedagogy. Two broad categories of pedagogical approach were identified: model-based, where teachers followed a genre or method's specific rules and customs and process-based, where teachers based musical responses and activities on the participants' contributions. Five discrete educational purposes were found: personal growth, musical skills, collaborative skills, creativity and critical and reflexive skills. Teacher roles were complex in process-based approaches both in negotiating hierarchical positions and assessing progress. Links were apparent between sections of this review; process-based workshops were exclusively used in workshops with the purpose of developing personal growth, collaborative skills and critical and reflexive skills. Model-based approaches were used only in interventions to develop musical skills. Interventions with the purpose of developing creativity used both pedagogical approaches; model-based approaches were used in

interventions that measured creativity with an existing paradigm. Research in developing creativity in groups is rare, most is concerned with the development of the individual. Consideration of the role of the teacher was only found in research on process-based interventions.

2.6 Conclusions

This chapter has provided an overview of key issues with defining improvisation, how and why improvisation is taught and some challenges involved in teaching. It can be appreciated that educational contexts of improvisation are as diverse as artistic contexts with varied and conflicting ideologies. Improvisation is a complex activity. It can be apprehended through the range of musical parameters that are manipulated by the individual improviser, as well as through interactions with others. Less is known about how interactions in a larger group ($n=6$) may influence individual's creative decisions. It is important to appreciate that teachers can act as gatekeepers to creativity, or in model-based interventions, the model itself has this function. As seen in section 2.5.1 models constrain the range of creative choices possible to the participants. Teachers' roles are diverse and challenging, and need to be looked at in a systematic way to develop understanding of the skills involved in teaching improvisation. There is some empirical work on scaffolding young children's learning in open-ended creative tasks (Young 2003b, 2008) as well as useful suggestions for improvisational activities and pedagogical approaches (Custodero, 2008). However, there is a gap in knowledge in effective pedagogical approaches to teaching improvisation for young children in groups bigger than three.

Understanding teachers' beliefs about teaching creative tasks is necessary, as seen in section 2.3.1, attempts at introducing creative approaches in music education were problematic. This was partly due to music teacher's beliefs about creativity and music and consequently their abilities to facilitate it. In research with young children in their nurseries, it can be a complex process to appreciate more than a small part of the children's lives and engagement with music and improvisation. Knowing more about the children's 'social and cultural contexts of musical imagination' Hargreaves, MacDonald and Miell (2012, p2) can be investigated by gathering the views of their parents and teachers about their children.

For the purpose of this thesis, whose research context is pre-school learning and considering Dewey's argument for building on existing skills of young children, it is perhaps useful to appreciate what skills four-year-old children already have. Children at that age may not be able to read or write, but have developed other sophisticated skills, as seen in Trevarthen's (2002) concept of Communicative Musicality, where young children create music with their parents (through singing) as a means of developing communication and speech. As seen in section 2.4.2 children's processes in improvisation were complex, with combinations of *external materials; internal processes; own bodies; musical material* and *others* all mediating preschool children's improvisations. Therefore, there is a strong case for early music education to build on some of the first skills that humans develop - interactive and creative skills through music - which characterise the activity of group collaborative improvisation. Finally, the voice of participants in improvisation education, especially children, is under-researched; therefore, apprehending children's views is timely and necessary.

2.7 Constructs

Following from the need to address the gaps shown in this review and to address the research dilemma in section 1.2, I developed two novel constructs to inform a programme of improvisation workshop activities and to categorise children's musical actions within a group improvisation. Creative Musical Agency (CMA) and Socio-Musical Aptitude (S-MA) are two new theoretical categories 'back-engineered' (Thorpe 2015, p.164) from my own practice as a teacher (see section 1.2.2) and synthesis of reading. Work which particularly influenced these categories was Wilson and MacDonald (2016) conceptualisation of musicians' actions in group improvisation as either *initiating* new musical material or *responding* to others through their choice of musical material.

Creative musical agency (CMA) is the capacity to invent new music and contribute to an improvisatory context. Through this, the child is able to execute their personal musical aesthetic in an effective contribution to an overall group piece.

Socio-musical aptitude (S-MA) is the capacity to apprehend others' skills and personal qualities within a group that is improvising and to accommodate these in an appropriate musical response. The improvisers' action is musical and also contributes to an interpersonal position within the group improvisation.

2.8 Research questions

The final section presents the research questions and aims of this thesis. The research questions and sub-questions are:

1) How can children's creativity and engagement in group improvisation be appreciated and evaluated?

Sub question 1) What are parents' and teachers' attitudes and beliefs about the children, creativity and music?

Sub question 2) What are the children's conceptualisations of the workshops?

2) Does the workshop programme, teaching approaches and methods change through two cycles of Action Research?

The main aim of research question one is to evaluate the utility of the constructs of CMA and S-MA as tools for both appreciating and evaluating children's improvisations. The two sub questions have the purpose to provide contextualisation of the children's musical actions and experiences in the workshops. As seen in the research dilemma, interrelations between the socio-cultural setting; participant's background and disposition; the qualities of pedagogical activities and resulting musical actions are important to appreciate. The aims of research question two are exploratory; to create and refine workshop materials, to examine what happens in a workshop programme in fine detail, so as to understand processes in learning and teaching improvisation and to improve these as necessary.

The next two chapters will present the theoretical framework and research methods used in this thesis.

CHAPTER 3 METHODOLOGY

3.1 Overview

The focus of Chapter 3 is to outline the theoretical framework used in this thesis and justify methodological choices. An overview is given of qualitative and quantitative approaches in Psychological research and then exemplified in music education research. Pragmatism is proposed as an alternative theoretical approach and the most appropriate for this mixed methods PhD. The most suitable methods for gathering data to address my research questions are considered and Action Research is proposed to provide an effective overarching structure for the research design. Thematic Analysis and Multimodal Video Analysis are justified as analytical approaches. Finally, Activity Theory is outlined as an effective tool for personal reflexivity through considering relationships between different elements of the research.

3.2 Historical perspectives

Psychology research has a long tradition of positivist and (later post-positivist) quantitative paradigms, which test theories through applying statistics and mathematical models to behaviour (Little, 2013). The unit of analysis can be reduced to a number which differs from qualitative approaches that usually have text as the unit of analysis (Biesta, 2010). In quantitative approaches, it is important for researchers to maintain objectivity avoiding any personal impacts of the object of study, and therefore avoiding bias (Neuman, 2014). Another key aim is to measure

selected variables in a research setting and demonstrate the likelihood of causal relationships between them, thus providing generalisable outcomes (Collier, 2005).

Qualitative approaches to psychological research can be defined as a family of analytical methods, which seek to understand motivations and experiences of individuals from *their* perspective (Elliott *et al.*, 1999). This can be achieved by examining participants' subjective understandings of, and interactions with their environment (Heidegger, 1927; Smith *et al.*, 2009). Therefore, a qualitative approach seeks to understand and contextualise complexities arising from individuals' varied life experiences through interpreting 'meaning, implication and communicative actions' (Morgan 2015, p.75).

Many methodological accounts focus on the divide and differences between these two approaches as a way of justifying choosing one approach over the other (Tashakkori & Teddlie, 1998). However, researchers working with mixed methods, often with a pragmatic position express concern at maintaining this dichotomy. For example, Biesta (2010) argues that qualitative researchers can deploy the label 'positivist' as:

a rhetorical strategy that simply brands positivists as bad...rather than trying to understand when and where and why it might matter to think of, say, the knower and the known as dependent and when and where and why it might matter to think of them as independent. (p.99)

It may be useful to consider the tools of measurement themselves as a form of interpretation. Analytical choices have to be made about what to assess in any research situation. Mixed methods offers researchers a combination of tools to consider how different features of their research can be illuminated (Hesse-Biber &

Johnson, 2016). Mixed methods are the most appropriate choice for my study because the research questions (see section 2.8) are concerned with multiple aspects of one research context.

3.3 How is music education viewed?

A similar ontological divide can be appreciated in historical views of teaching and learning. For example, one position is that children learn through play and that teachers pay attention to the child's play to gain insight into their capacities and preferences (Plato, 1993/1961). A child-centred approach is now an important principle in EY education in Scotland (The Scottish Government, 2006, 2016). However, a contrasting view can be exemplified in Aristotle's (1961) concept of an infant's mind as *tabula rasa* (a blank slate), empty until it is filled with knowledge. This view has influenced approaches to learning and teaching which prioritise a sequential learning hierarchy; for example, this is a key feature of the instructivist approach (Amory, 2012). This approach requires task-specific facts to be memorised before moving to the next task and have influenced models of learning such as Bloom's taxonomy (see Fig. 2.2) (Tijaro-Rojas *et al.*, 2016).

These contrasting positions reflect teachers' beliefs about how knowledge is formed which can then influence their teaching strategies (MacGlone & Johansen, 2019). For example, as seen in section 2.5.1, in improvisation education, teachers' pedagogical approaches can be appreciated in the following contrasting positions: *improvisation is an inherent capacity* (Barrett, 2006; Hickey, 2009), opposed to *improvisation is possible after internalising genre or context-specific rules*

(Koutsoupidou, 2008; Whitcomb, 2010). These positions have many implications such as what pedagogical approach is undertaken (see section 2.5.1 for model-based and process-based approaches) and consequently what progress is measured or evaluated and how.

Researchers such as Bresler (1996) argue that in line with mainstream psychology research, music education research was focused on quantitative approaches until the 1960s. A reason for the subsequent shift may have been widespread curriculum reform across many Western countries in the 60s, which presented new values that aligned with a qualitative paradigm, such as prioritising the child's frame of reference (Bresler & Stake, 1992). However, despite this shift, other studies highlight an ongoing growth in experimental approaches in music education with methods drawn from psychology, which empirically test philosophical assertions (Jorgensen & Ward-Steinman, 2015; Knobe, 2012). Evaluations of improvisation education include qualitative studies which sought to develop theory, for example, common aesthetic qualities of children's experiences when improvising (Larsson & Öhman, 2018; Larsson 2019). Quantitative studies sought to test theory, for example, assessing growth of creativity through established psychometric tools (Koutsoupidou & Hargreaves, 2009), and musicological analysis of rhythmic development (Whitcomb, 2010).

The studies described above adopted methods from either qualitative or quantitative disciplines. Using mixed methods for improvisation education research is relatively uncommon, however during the last three years, more work in this area has been published (e.g., see 2.5.4 for Adessi *et al.*, 2017 and Ilari *et al.*, 2017).

3.4 Pragmatism

Pragmatism is the most frequent philosophical stance in mixed methods research (Tashakkori & Teddlie, 1998). It combines the inductive logic of qualitative exploration, the deductive reasoning of quantitative confirmation and further, the creative problem-solving emphasis of abduction (Johnson & Onwuegbuzie 2004). Knowledge gained through pragmatic inquiry can be ‘both contextual and generalisable by analysing ... for transferability to another situation’ (Creswell 2009, p.4).

The pragmatist philosophy has consequences for the way in which scientific inquiry is understood (Creswell *et al.*, 2003) For example, from a pragmatic perspective, scientific inquiry is not considered superior to everyday knowledge, but is considered one form of inquiry, with possibilities for different problems or experiences (Biesta & Burbules, 2003). Furthermore, a pragmatic approach rejects the idea that science and practice are distinct in an epistemological sense in which ‘science is purely concerned with knowledge and practice is purely concerned with action’ (Biesta and Burbules 2003, p.86). However, some researchers express concern that ‘MMR has emphasised the practical aspect of research methods in ways that ...introduced pragmatism as a paradigm for social research, largely avoiding serious contact with the philosophical foundations of pragmatism’ Morgan (2014, p.1045).

3.4.1 Pragmatic views of knowledge

Pragmatism emerged in North America at the end of the nineteenth century, initially from the work of Charles Sanders Pierce (philosophy) and William James (psychology) (Morgan 2014). Another key figure, John Dewey, developed

pragmatism in the fields of education and philosophy (Morgan, 2014). Pragmatism rests on the argument that the meaning of an event cannot be given in advance of experience, which draws on Dewey’s concern to situate philosophy in human experience (Moshe, Ansell & Boin, 2015). This contrasts with the positivist and post-positivist epistemological position; that science can obtain a ‘clear and unmediated representation of the object of study’ (Parker 1994, p.2). Perhaps the most distinct difference to both quantitative and qualitative positions is that ‘in contrast to philosophies that emphasise the nature of reality, pragmatists emphasise the nature of experience’ Morgan (2014, p.28).

Table 3.1 from Morgan (2007) compares qualitative, quantitative and pragmatic approaches to key research issues.

Table 3.1 A Pragmatic Alternative to the Key Issues in Social Science Research Methodology from Morgan (2007, p.71)

A Pragmatic Alternative to the Key Issues in Social Science Research Methodology			
	Qualitative Approach	Quantitative Approach	Pragmatic Approach
Connection of theory and data	Induction	Deduction	Abduction
Relationship to research process	Subjectivity	Objectivity	Intersubjectivity
Inference from data	Context	Generality	Transferability

According to Morgan (2007), in a pragmatic approach the connection between theory and data is created by alternating between induction and deduction. Induction begins with specific observations and from these, logical patterns are created that lead to broad generalisations; deduction begins with a hypothesis and tests possibilities to

reach a specific conclusion. The process of abduction can ‘convert observations into theories and then assess those theories through action’ (Tran 2016, p.10). In other words, researchers can sequence qualitative and quantitative methods, where the inductive goals of a qualitative approach are based on the deductive results from a quantitative approach, and vice versa (Ivankova, Creswell, & Stick, 2006; Morgan, 2007). It offers researchers the opportunity to search for useful points of connection between these two types of data or to challenge their own assumptions (Morgan 2014).

In relation to both qualitative and quantitative approaches, pragmatists argue that total objectivity or complete subjectivity in conducting and analysing research is unattainable (Tran 2016). However, there is agreement with constructivists in that researchers values and politics are inseparable from their beliefs and actions. The researcher ‘make the choices about what is important and what is appropriate, and those choices inevitably involve aspects of our personal history, social background, and cultural assumptions’ (Morgan 2007, p.69). In this manner, a pragmatic approach has much to offer educational research where the teacher is part of the research field which is investigated, as long as their assumptions are challenged and reflected upon throughout the process (Biesta, 2009). Challenging assumptions could involve having aspects of the researcher’s analysis rated by others as well as employing a systematic method of reflection which scrutinises multiple aspects of the research setting.

In other words, rather than aiming for results which are either context-bound or generalisable, pragmatists assert that theories can be both contextual and

generalisable. The primary aim therefore, is to investigate the factors that influence what knowledge can be transferred to other settings (Morgan, 2007; Shannon- Baker, 2015; Tran, 2016). This reasoning promotes an iterative relationship between research and practice rather than a linear relationship where research simply informs practice, and is therefore an important reason for choosing this approach. Another reason is the position shared between pragmatism and action research, where there is an understanding that knowledge is produced through cycles of examining and refining actions.

3.4.2 Summary

The pragmatic stance has no set methodological requirements for inquiry but rather has a consequential action-knowledge framework to guide inquiry. Pragmatic researchers may select any method based on its appropriateness to the situation at hand (Creswell & Plano Clark, 2018; Tashakkori & Teddlie 1998). Through the inquiry process, a researcher should consider utilising information from a range of sources to provide practical solutions (Johnson & Onwuegbuzie, 2004). That is, the pragmatic stance advocates mixing multiple sources of evidence to attain and modify knowledge, which in turn is used to inform various potential solutions or lines of action and to consider their consequences. From a pragmatic stance, this requires inquirers to cycle between the specific results and their potential implications in a research setting (Johnson & Onwuegbuzie, 2004) Therefore, mixed methods inquiry with a pragmatic stance is an active and iterative process of establishing ‘warranted assertions’ (Dewey 1920/2008, p.54).

The following section gives an overview of Action Research, which was chosen as the overarching research design for this thesis. Two crucial reasons for this choice are that its key principles align with a pragmatic epistemological stance, and that it has flexibility to accommodate mixed methods.

3.5 Action Research

Lewin first wrote about making change in a research situation through planned action through the cyclical process of planning, acting, observing and reflecting. (Lewin, 1946). Since then, Action Research (AR) has developed distinct theoretical orientations and practical applications (Adelman, 1993). AR has been used by professional groups or communities of practice to develop their own professional practice (Townsend, 2013) and in education to solve problems and provide guidelines for best practice (Denscombe, 2010).

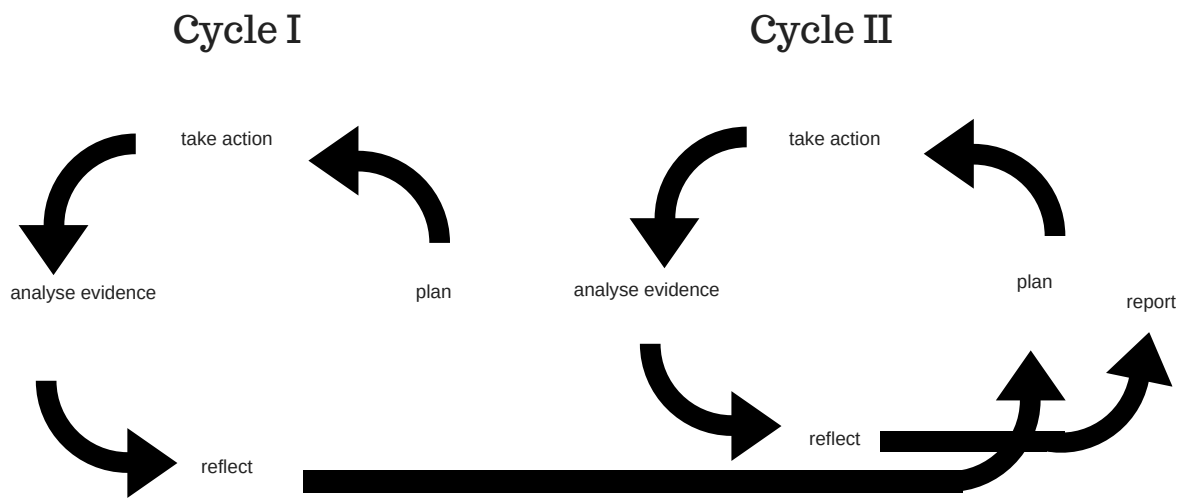
A central principle of Action Research is that it is *expected* that the investigation will change the system, community or practice that is the object of study, through the (inter)action of the researcher and the studied (Townsend, 2013). In education, AR can begin by practitioners considering how they would improve their practice; on this basis, interventions are planned and carried out. Intended and unintended consequences of these interventions are evaluated; this interrogation of the data is in order to ground assertions in evidence (Cain, 2008). Reflection happens at each stage in order to generate new plans, thus starting the cycle again (McNiff & Whitehead, 2002). This is a relevant process for this PhD as an aim is to improve the researcher's workshop design and activities rather than compare different approaches.

Klein (2012, p.3) outlines two principles underpinning AR in education: that ‘practitioners are in the best position to engage in inquiry about their practice’ and that AR is usually carried out in natural settings. These two points are important for this research: the first point recognises the teacher’s expertise and the second point acknowledges the ethical dimension of working with young participants. This research, in alignment with AR principles, is *with* rather than *on* young children (Christensen & James, 2008).

In music education, AR has been used in a small number of studies, mainly undertaken by practitioners (Rideout & Feldman, 2002). In a literature review of AR studies in music education Cain (2008) concluded that few AR projects were truly cyclical (i.e., had more than one cycle of action) with most presenting one study with reflection. Another criticism from Cain (2008) was a lack of transparency and systematic description of the methods and analytical process in many articles.

Another persuasive reason for choosing AR is to address research question two, which is specifically concerned with improving a workshop programme, approaches and methods. AR provides a framework of Plan; Take action; Analyse Evidence; Reflect (Townsend, 2013). Within the scope of this PhD, two research cycles were possible which allowed for a detailed level and development of reflexivity not possible in one cycle. Figure 3.1 shows the different stages of the AR cycle which were gone through during this research.

Figure 3.1 Action research model for the PhD



A crucial concern in both AR and qualitative methods is for the researcher to practice reflexivity (Coghlan, 2001; Wolfinger, 2002). This can be achieved in different ways; however, taking and reflecting on field notes is a standard method in AR (McNiff & Whitehead, 2002; Townsend, 2013). Coghlan's (2001) approach to gathering field notes is described in four stages: 1. noting experiences; 2. considering feelings about these experiences; 3. considering how practice and research could be carried out differently and 4. combining these steps to reconceptualise understanding of the aspect under focus. The approach to gathering field notes was chosen in this study for its systematic procedure.

3.5.1 Researcher position

Historically, both pragmatism and AR have a strong aspect of advocating for social justice and equality (Biesta, 2010; Morgan, 2007). This position can be criticised if

researchers in these situations do not offer adequate contextualisation for their choices and reflection on their position in the research. One such strategy to address this is for researchers to choose methods with the purpose of challenging their own assumptions (Creswell & Plano Clark, 2007; Tashakkori & Teddlie, 1998). Dewey's following questions offer a potential starting point for such challenge (Morgan, 2007). 'What are the sources of our beliefs?' and 'what are the meanings of our actions?' (Dewey 1938/2015, p.67). The answers to these two questions are linked in a cycle, in which the origins of our beliefs arise from our prior actions and the outcomes of our actions are found in our beliefs (Morgan 2007). Experiences create meaning by bringing beliefs and actions in contact with each other.

In Chapter 1, I presented the life and research experiences which influenced the concepts explored in the empirical work in this thesis, (see section 1.3). Reflexivity is a crucial process through this entire PhD and section 3.11 presents Activity Theory as an analytical tool for investigating my position as a researcher/practitioner, as it considers how many elements of a research setting interact.

The next section will consider the choice of methods for this thesis.

3.6 Mixed methods

Mixed methods were first used in psychology in the combined method matrix of Campbell and Fiske (1959). Interest grew in converging or triangulating different quantitative and qualitative data sources (Jick, 1979), finally becoming a distinct methodology of inquiry (see Creswell & Plano Clark, 2018; Tashakkori & Teddlie, 1998). Mixed methods can follow designs that prioritise qualitative methods or quantitative methods, and the order in which data are collected is an important part of the design. There are various design strategies available, which have different *timing*, where qualitative work can inform a quantitative study; *weighting*, studies can be driven by prioritising one approach over the other and *mixing*, qualitative and quantitative approaches can inform empirical work, a theoretical discussion or both (Creswell et al. 2003).

According to Johnson, Onwuegbuzie & Turner (2007), there are three classes of research studies which use mixed methods: 1. Qualitatively driven studies; 2. Quantitatively driven studies; 3. Interactive or equal status designs. With the first two options, the study privileges its main method, in that it may be exploring and systematising a field or testing a hypothesis, and the additional method provides a deeper or lateral perspective in answering research questions. An example of this is in a randomised clinical trial which prioritises the quantitative element but which interviews participants to explore possible influences on results. With interactive or equal status designs, researchers often work in teams and draw on expertise from both fields. In this area, multiple paradigms and measures of validity have to be negotiated and resolved (Onwuegbuzie & Johnson, 2006).

The three most common mixed method research designs according to Creswell (2009) are:

- 1) Concurrent design: the qualitative and quantitative elements are implemented simultaneously and their results are compared.
- 2) Exploratory sequential design: the qualitative study goes first and is the main one. From it, hypotheses are generated or instruments are developed. The second phase is the deployment of the quantitative component.
- 3) Confirmatory sequence design: The quantitative study unfolds first and is the main one. Subsequently the qualitative study is performed to better understand the quantitative results obtained.

However, complex research demands more flexible designs (Morgan, 2014). The following notation system in Table 3.2, from Morgan (2014, p.65), describes qualitative and quantitative approaches with different weightings and relationships in mixed methods design. The researcher can combine these in the most appropriate way to meet their research questions.

Table 3.2 A Notation System for Combining Different Methods

qual or quant	Supplementary Methods add to an overall project but their results may not be able to stand on their own. Supplementary methods are marked with the use of all small letters
QUAL or QUANT	Core Methods are strong enough to stand on their own, and they may drive the use of supplementary methods within a project. Core Methods are marked with the use of all capital letters.
=	Convergence investigates the same question with multiple methods, to determine whether they produce similar results. Convergence is shown with an equal sign.
+	Addition assigns different methods to different purposes, so that each makes a distinct contribution to the overall results. Addition is shown with an addition sign.
→	Sequencing links the results from separate methods, so that what is learned from one method influences how another is used. Sequence is shown with an arrow sign.

An important point is that the addition sign refers to how data are analysed rather than when they are collected. Different types of data may be collected at the same time but subsequently analysed separately, one following another.

The following section considers the most suitable methodological approach for each research question.

3.7 Methods for data gathering

The following section considers each research question in turn, proposing the most appropriate method or combination of methods to address them. These will be summarised using Morgan's (2014) notation system to describe the proposed weighting and mixing of methods for each research question.

3.7.1 Research question one

The first research question is: *How can children's creativity and engagement in group improvisation be appreciated and evaluated?* As seen in section 2.4.1, children's communicative actions in creative music workshops have been characterised as multimodal (Wassrin 2016, 2019). Also, in section 2.5, a gap was identified in understanding how interactions with others may affect an individual's creative musical decisions. Video analysis was chosen as the most effective approach to capture interactions across different modes of communication in a group. Video data can be part of either quantitative or qualitative approaches. The goal of a quantitative approach is to transform the data into objective and verifiable information (Jacobs, Kawanaka & Stigler, 1999). Gaining objective data through video analysis (for example knowing the number of times a child made eye-contact with the teacher) is valuable as it obtains particular knowledge of an event that cannot be accessed through qualitative data gathering methods (Sandelowski, Voils & Knafel, 2009). This allows the researcher to make claims about the object of study in terms of quantities.

Another reason for using video analysis to examine one's own practice is that in a teaching situation, actions and reactions happen very quickly and often unconsciously, particularly in educational contexts which involve improvisation (Holdhus *et al.*, 2016). Video analysis can offer a way to appreciate these smaller, often multimodal, actions and reactions between the teacher and participants. It has potential to clarify what the teacher may assume or misremember when writing up field notes after the workshop.

As seen in section 2.6, two new theoretical constructs, Creative Musical Agency and Socio-Musical Aptitude were developed, with the purpose of categorising children's musical actions within a group improvisation. In addition to the video analysis, another method of checking if these categories could reliably discriminate between different types of musical action was considered necessary as a form of triangulation (Hesse-Biber & Johnson, 2016). Convergence between the researcher view and that of an outside expert has potential to enhance the credibility and reliability of the findings (Jick, 1979). A rating test by two music education experts was designed to be held after the video analysis to support triangulation and reflexivity. In addition to the rating test, an interview was chosen as an effective way to investigate any reasons for disagreement between raters. This can also be seen as using a 'critical friend' whose purpose is to give their professional judgement to comment on validity and authenticity of a situation (McNiff & Whitehead 2002, p.42)

Research question one can be notated as QUANT → quant → qual as the initial study gives necessary information to design the rating test which then can inform the researcher's own analysis.

3.7.2 Sub questions

Two sub questions to research question one follow: 1) *What are parents' and teachers' attitudes and beliefs about the children, creativity and music?* 2) *What are the children's conceptualisations of the workshops?* Although these sub questions are in respect of different groups of participants, qualitative methods were chosen for both as the most suitable approach as they seek to 'explore, elaborate and

systematise' (Bannister *et al.*, 1994 p.48). Qualitative methods are concerned with how people understand themselves and the inductive nature of enquiry is suited to examining how parents, teachers and children understand musicality and the workshops as they have no specific assumptions (i.e., a hypothesis to test).

The semi-structured interview was chosen as the most suitable method of gathering data from parents and teachers for the following reasons. Firstly, the semi-structured interview has a list of topics to be explored, but no restrictions on when they occur during the interview (Braun & Clarke, 2013). Another benefit is that interviewer and interviewee take turns in directing the course of semi-structured interviews, allowing the participant's own frame of reference to be considered and interesting tangents to be explored (Willig, 2001).

Although a qualitative approach was suitable for both adults and children, semi-structured interview was not the best option for children, as there are specific issues when interviewing children of this age by themselves. For example, children under five have a tendency to say anything rather than nothing in response to questions they are unsure of, in an interview setting (Lewis, 1992). Therefore, creating an interview situation where the child feels comfortable and secure and so able to express their opinion has led to studies where children of this age are interviewed in a group, for example by Clark and Moss, (2001) and Greig, McKay and Taylor (2007). Another key consideration is that children are able to discuss and contextualise ideas far more easily straight after an experience, rather than asking them on a separate occasion (Lewis, 1992). For these reasons, gathering the

children's talk through the course of each workshop was chosen as the most appropriate data gathering strategy to address the second sub question.

The first sub question can be notated as QUAL as it does not need other methods to supplement it. The second sub question can be notated as QUAL+ qual; gathering the children's talk is the main method used but the parents' and teachers' interviews can give additional information to contextualise the children's discourse.

3.7.3 Research question two

The second research question is: *Do the workshop programme and teaching approaches and methods change through two cycles of Action Research?* The selection of Action Research has been outlined in section 3.5. The three aspects of this question are as follows: the *workshop programme* comprises how workshop activities are organised, number of children and how they are involved, and any practical considerations such as room size. *Teaching approaches* are understood as the way in which a combination of ideas and values of the teacher (in this case the researcher) inform communications with the children. *Methods* are the nature and content of the workshop's activities. Research question two will be considered using a combination of reflection on all qualitative methods (i.e., analysis from parents' and teachers' interviews, children's talk data and researcher field notes) and all quantitative data (video analysis and ratings test). This can be notated as QUALx4 = QUANTx2 as information will converge to address this question. All methods are given equal weighting at this stage in keeping with a pragmatic theoretical position.

3.7.4 MMR in the AR cycle

In the 2-cycle AR process described in section 3.5, mixing of qualitative and quantitative methods should happen at the *reflect* section of the diagram to inform the next cycle of research after Cycle I and again in the *reflect* section after Cycle II.

3.7.5 Pilot study

A final methodological choice was to include a pilot study. This had the purpose of refining methods, specifically video recording a group of children and assessing new workshop materials. Pilot studies are used to examine feasibility of methods (Borg, 1989) and so provide a valuable check before the commitment of the time and resources needed for a larger scale study (Van Teijlingen & Hundley, 2002).

The following sections in this chapter will consider the methods of data analysis best suited for each approach.

3.8 Qualitative methods of analysis

There are epistemological differences between various qualitative analytical methods, however, they all share similar concerns about meaning and contexts in which meaning takes place (Willig, 2001). This section offers an overview of different analytical methods within the qualitative approach. Forrester (2010) identifies Interpretative Phenomenological Analysis (IPA), Discourse Analysis (DA), Grounded Theory (GT) and Thematic Analysis (TA) understanding each method to have a particular orientation to the data.

IPA, a relatively new method of approach to analysing data, is 'committed to the examination of how people make sense of the world' (Smith, Larkin & Flowers, 2009). IPA takes inspiration from phenomenological and hermeneutical theory and therefore focuses on the individual level of a person's experience and demands a close relationship between the researcher and data, keeping note of their own connections and interpretations at every stage in the analysis. A key feature of this approach is to use small homogenised samples to make it possible to examine the data in very close detail. For this reason, IPA could not be considered for this thesis, as the necessary exclusion criteria for participants were considered too restrictive.

Discourse Analysis has two branches (Discursive Psychology and Foucauldian Discourse Analysis, FDA): the former only examines the use of language in constructing a social reality unique to the individual (Willig, 2001). In FDA, influenced by the work of Foucault (1989), discourse is understood as constructing both the objects and subjects they seek to explain. Discourse analysts accept that people may alter what they say depending on the social situation they find themselves in, driven by desire to communicate a particular self at the time (Potter & Edwards, 1996). For the purposes of this exploratory thesis, DA, ultimately did not provide the flexibility required. Sub questions one and two are purposefully broad with the aim of identifying overarching themes, rather than how a participant's talk may facilitate their understanding. However, DA may be useful in follow up studies to apprehend the role of talk in parents' and teachers' conceptualisations of their children.

Grounded Theory (GT), originally developed by Glaser and Strauss (1967), seeks to arrive at a theoretical comprehension of phenomena grounded in the experiential context of the participants' lives. GT is an inductive process that generates new theoretical claims through employing a rigorous procedure, cycling back through the whole research process until no new or relevant data are identified (Charmaz, 2006). This method is often misunderstood as a solely analytical method; however, GT is not simply a method for analysing qualitative data, it informs all aspects of the design and implementation of the research (Charmaz, 2015). As it uses open-ended sampling of participants, it was not practical within the timescale of this research.

Thematic analysis fitted the design and questions of this research in the most persuasive way for reasons given below.

3.9 Thematic Analysis

Thematic analysis, a qualitative method employed widely in Psychology, shares traits with methods described earlier. Holloway and Todres (2003, p.347) identify 'thematising meanings' as one of the few skills common to all forms of qualitative analysis. In essence, thematic analysis seeks to identify, analyse, and report patterns (themes) within data (Braun & Clarke, 2006). Organising analysis into themes seeks to illuminate aspects of the participants' world, so as to help understand their experiences. Thematic analysis can be approached in an inductive (data driven) or deductive (analyst driven) way (Braun & Clarke, 2013).

Research questions can evolve through the coding process (which maps inductive approaches) or follow specific research questions (which maps on to deductive approaches) (Fereday & Muir-Cochrane, 2006). Unlike other forms of qualitative analysis, Thematic Analysis has no ties to any particular philosophy, affording the researcher the most flexibility in approaching the data (Braun & Clarke, 2006). However, this flexibility can be a problematic feature of the method: if researchers do not make their theoretical assumptions clear, then evaluating results and trustworthiness becomes difficult (Nowell *et al.*, 2017). Therefore, I will outline my theoretical approach when using TA in the following section. This has an important purpose of demonstrating transparency in analytical decisions, which underpin theoretical claims made in later chapters (Holloway & Todres, 2003).

Thematic Analysis can be used within different epistemological assumptions, for example, with a positivist/post-positivist, contextualist or constructivist orientation (Braun & Clarke 2013). Each of these orientations will produce a different interpretation of qualitative data based on how the understanding of truth is conceptualised (Braun & Clarke 2006). For example, positivist researchers report experiences and the reality expressed by participants with an assumption that this reflects a true index of the world (Sandelowski, 2010). Post-positivism developed from an acknowledgement that the research situation can be influenced by either theoretical assumptions or the research setting (Guba & Lincoln, 2017). However, both positivist and post-positivist approaches search for a singular truth. In sharp contrast, a constructivist orientation examines the ways in which people apprehend events and how these may be affected by a range of discourses working in society (Berger & Luckmann, 1967). There is no one truth to be found in constructivist

research, rather access to different knowledges which can be shaped by social, cultural and moral influences (Braun & Clarke, 2013). Sitting between these two ontological poles, the contextualist method recognises the ways the individual makes sense of their world, as a truth which is valid in certain contexts (Tebes, 2005). This is because wider communities and society can affect these personal constructs (Braun & Clarke, 2006). Therefore, a contextualist orientation seeks to uncover what a participant's truth or understanding is, but also considers how outside influences (e.g., social and cultural) may shape this.

For this PhD, I have chosen a contextualist orientation to TA to gain a deep understanding of parents' and teachers' reported views but also take into account how factors, such as the curriculum, the school environment, and cultural influences may shape their views.

3.10 Multimodal video analysis

Using video in social sciences and educational research has been a valuable methodological tool as it focuses on (the)

description of the structures of interaction order, the social and behavioural mechanisms and regularities that people use to coordinate and organise their activities with others: to make sense of and to reveal the structures at work (Jewitt 2014, p.54).

Multimodal approaches to video data are based on the social semiotic ideas of (Halliday, 1978). They embrace the notion that there are various distinct modes of communication which combine to produce a semiotic event that is articulated and then interpreted or used (Kress, 2001). The categorisation of these modes is not

universally agreed, but, for example, could include: linguistic (written and spoken); visual; music; gesture; gaze. Although an emerging approach (Jewitt, 2006), multimodality has been employed by educational researchers to apprehend how different modes of communication can function in teaching contexts (Norris, 2004). For example, it has been used to investigate teacher/student interactions in English and science classrooms (Kress, 2001) and aspects of young children's understanding of their experiences in music lessons (Pramling & Wallerstedt, 2009).

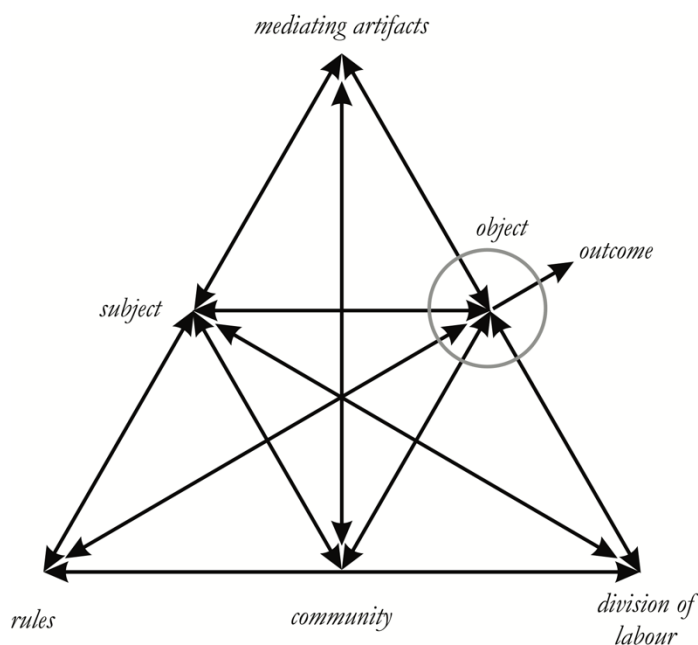
Multimodal video analysis examines multiple real-time sequential and simultaneous communication processes, to understand and describe a given interaction. This approach seeks to 'analyse what individuals express and react to in specific situations, in which the ongoing interaction is always co-constructed' (Norris 2004, p.16), which has utility for examining group interaction. For the purposes of this PhD project, which has an aim of evaluating children's engagement in the group activities (which includes the workshop leader), Norris's multimodal video analysis method provides a useful starting point. Norris (2004) proposed that six key MoC in dyadic interactions are: verbal, proxemics, posture, gaze, gesture, head movement. Together with analysing the music the children created, these key MoC were selected as being most useful to quantify and analyse in investigating the first research question.

3.11 A tool for reflexivity: Activity Theory

As explored earlier in this chapter, using mixed methods provides many perspectives which can to deepen understanding of a research question, but also challenges in negotiating and resolving multiple paradigms and measures of validity

(Onwuegbuzie & Johnson 2006). Using Activity Theory (AT) as a tool for reflexivity provides a way of gaining many perspectives on complex situations by considering how different elements of an activity affect each other (Engeström, 2014). Activity Theory, also known as cultural-historical activity theory, (CHAT) originated from the work of three Russian researchers (Vygotsky, Leont'ev and Luria) and is a theoretical framework that can be used to analyse how activities within a practice, an activity system, are shaped by its cultural context (Bakhurst, 2009). This can be conceptualised through considering relationships between elements of the practice: subject, object, mediating artifacts, rules, community and division of labour (Engeström,1987). Figure 3.2 shows Engeström's visual representation of these separate elements creating an emerging activity system.

Figure 3.2 Activity Theory diagram from Engeström (2001, p136)



AT has been used to analyse many work settings such as businesses and hospitals (Engeström, 2008). The elements of Engeström's (2001) AT diagram (above) will be described with reference to pedagogical orientations adapted from Hardman (2007) and Sundberg *et al.*, (2016).

Subject: The subject is the individual or group who acts in the system and whose perspective shapes the activity (Engeström, 1987). In Hardman's (2007) exploration of the AT elements, she refers to the teacher having 'epistemic assumptions' (p.78) about how knowledge is transmitted and gained and that these assumptions affect how the tools are used.

For example, if a teacher believes that children learn through first experiencing and then discussing with a more experienced other, as described in Vygotsky's (1978/1930) concept of Zone of Proximal Development, they will use tools in a different way than a teacher who believes children learn by rote.

Object: There is uncertainty about a clear definition of this element due to historical theoretical divergences, a description of these can be found in Kaptelinin (2006). In this thesis, the *object* is the target of the activity; in education this can be the content of a learning activity or 'problem space' as described by Hardman (2007). This becomes transformed into outcomes through a range of tools, which can be physical or symbolic (Engeström, 1987).

Mediating artifacts (also known as *tools*): This element can take the form of physical objects such as musical instruments or symbolic tools such as an image or verbal instruction. In educational settings, symbolic tools have taken the form of guiding

questions designed to develop the children's understanding of their learning experience (Sundberg *et al.*, 2016).

Rules: This element is concerned with the norms, conventions and guidelines for interaction in the activity system (Engeström, 1987). In Sundberg *et al.* (2016), rules were the guiding principles by which the teachers created the desired ethos for learning preschool science. Similarly, Hardman (2007) interprets rules as the 'norms, conventions and social interactions which drive the subject's actions in the activity' (p.77). In this way rules can be specific to the task and/or the teacher.

Community: A community comprises the wider circles which influence the object and has its own divisions of labour and responsibilities (Cole & Engeström, 1993). This element considers the immediate community of the participants of the activity (the teacher and the group of children) but, in a pedagogical setting, can also encompass wider communities such as the whole school and both local and national education systems (Hardman, 2007).

Division of labour: This can refer to a horizontal distribution of tasks or vertical divisions in hierarchies or power relationships (Engeström, 1987). In Hardman (2007), power relationships between teacher and pupils are described either as symmetrical or asymmetrical with children having agency to direct aspects of the activities in the symmetrical relationships, and very little or no agency in asymmetrical relationships.

AT has been used by researchers in pedagogy to analyse how separate elements are realised in educational activities, for example, in Sundberg *et al.*'s (2016) study, the

tools which were used to teach scientific concepts to preschool children were investigated. The teacher's use of these tools also revealed personal beliefs and cultural influences. In music pedagogy, AT was used in a study by Johansen, (2013) to explore instrumental practising and dimensions of student values within the activity and the larger cultural and historical contexts of jazz, and a formalised HE curriculum. In a study which compared children's social processes in either composing or arranging tasks, Burnard and Younker (2008) used AT as a way of investigating and categorising the children's interactions. Welch (2007) conceptualised tensions and change in the 'introduction, impact and development of female choristers in UK cathedrals' (p.28). This study investigated a radical change in a centuries-old practice of male-only cathedral choirs.

Placing the teacher in the *subject* position creates a possibility for reflection on how they may influence or be influenced by all of the elements in the activity system in Figure 3.2. My full analysis, using AT, of the workshops and my position in them will be given in Chapter 9. AT will also be used in the discussion section of Chapter 5 to conceptualise the teachers' interactions and strategies with the children in this study.

3.12 Summary

Chapter 3 provided an overview of qualitative and quantitative approaches and gave examples of how these had been applied in music education. Justification for a pragmatic epistemological stance was based on the orientation of this approach to understanding the nature of experience and the flexibility afforded to choose the

most suitable methods for investigation. Action Research was proposed as the overarching research framework. This was to improve the delivery of improvisation workshops based on a rigorous investigation and of factors which may influence children's engagement. Specific qualitative and quantitative methods and combinations of these were proposed to answer each research question and sub question. Various analytical techniques were discussed and justification for Thematic Analysis, Multimodal Video Analysis and Activity Theory was given.

Chapter 4 will describe the methods used in this research in full detail.

CHAPTER 4 METHODS

4.1 Chapter overview

Chapter 4 gives a detailed account of methods used in this study. It begins with a research overview in section 4.2. A description of the pilot workshop and key outcomes that informed Cycle I comprise section 4.3. The study design follows in section 4.4 with a full description of the Action Research study design, recruitment criteria and procedure, and ethics. Section 4.5 gives an overview of the workshop delivery. A detailed presentation of every stage in gathering and analysing each corpus of data described in chapter 3 follows: section 4.6, video data; section 4.7, interview data; section 4.8, children's talk data and finally, section 4.9, experts' data. Section 4.10 gives a chapter summary.

4.2 Research overview

As seen in 3.5 and 3.7, evidence was given to support the methodological choice for this study: two cycles of Action Research with a pilot study. Each cycle of Action Research comprised a series of workshops with a group (n= 6 or 7) of children aged four and five in their preschool year. Workshop materials were designed to develop two novel constructs of CMA and S-MA (see section 2.6). Data to be gathered were: video data of the workshops; parents' and teachers' interview data; video rating test with music education experts; talk data from the children participating through all of the workshops and field notes. A research timeline showing all phases and types of data collection and analysis can be found in Appendix 4.1.

4.3 Pilot workshop

4.3.1 Pilot workshop aims

A pilot workshop was delivered prior to the Action Research cycles with the purpose of assessing new workshop activities and refining important methodological procedures, i.e., ‘the specific testing of a research instrument’, (Van Teijlingen & Hundley 2002, p.53). The aims of the pilot workshop were as follows:

1. To trial and evaluate effectiveness of new activities designed to foster CMA and S-MA, specifically developed for the PhD and not carried out in a previous workshop.
2. To assess the camera angle and position (with the help of a professional filmmaker) which would best capture the following Modes of Communication (hereafter to be referred to as ‘MoC’) based on a framework from Norris (2004): gaze, gesture, music, verbal utterances, proxemics, posture, head movement.

4.3.2 Pilot workshop procedure

The design of the pilot workshop was for a 30-minute workshop with six children. They were recruited through an advertisement distributed to parents in a Glasgow nursery parents’ group. Informed consent forms signed by the children’s parents can be found in Appendix 4.2. All parents were present during the workshop and it was made clear at the start of the workshop that the parent could withdraw their child or a child could withdraw themselves from the workshop with no consequence. This was in addition to a written explanation of this in the invitation. The workshop took place in Garnethill Community Centre, Glasgow on the 9th of October 2015 at 2.00pm.

Workshop activities which either emphasised personal creativity (CMA) or responsiveness to others (S-MA) had been developed prior to the pilot workshop (see appendix 4.10 for full description). For example, conduction signs were used as a strategy for facilitating personal creativity as the whole group has to follow the hand signs of one child. Through these hand signs, a child can direct the rest of the group to play in a particular way, for example, long or short notes, as well as starting and stopping. To foster responsiveness to others, instructions were given to the children to accompany (play or sing complementary material), copy (play or sing as closely to the original material as possible) or play differently (play or sing contrasting material) to the teacher.

Before the workshop, a professional filmmaker was consulted to advise on the best camera position and angles to address research question one, bearing in mind that the camera had to be in a fixed position. An important reason for a fixed position is to ensure consistency in both gathering and analysing the data (Jewitt, 2014).

After the workshop I immediately wrote up field notes. Key conclusions from these were that the children seemed to understand and enjoy the activities in which they were instructed to explore their own ideas (CMA). The children were enthusiastic participants, some children wishing to have their turn more quickly. They found the activities which prioritised listening and relating their own playing to previous ideas (S-MA) more demanding, therefore, their engagement in activities designed to improve S-MA was less than in CMA activities. This was based the observation that in S-MA activities children primarily looked in to the middle distance or at the floor and in CMA activities, children primarily looked at me. As well as this, the children

were more restless in S- MA activities than CMA activities. Therefore, consideration was given to introducing S-MA activities before CMA, and having the more challenging activity earlier in the workshop. Based on these findings, the workshop model was altered slightly, to swap the order of SMA and CMA activities (see Appendices 4.3 and 4.4).

Subsequently, a meeting was held with the filmmaker to check that the video data showed the MoC which were of interest. Following this meeting, principles were distilled for setting up a camera to capture a group of eight children and one workshop leader. As each AR cycle would be in different schools, it was not possible to predict exact distance from the group and best angle in advance. Therefore, the principles informed by the pilot were 1) to have the camera as far away from the group as possible, bearing in mind the workshops would be in small rooms 2) To have the camera at a height and angle which would capture me at standing height, so that my MoC with the children could be seen. Another important observation from the pilot workshop was to position the group in a semicircle where possible, i.e., by setting instruments up in this configuration so as to apprehend gaze communications in particular.

4.4 Study design

4.4.1 Action Research study design

Two separate nurseries were required, each with eight children in their preschool year recruited to participate in the workshop programme. The nurseries had to have a separate room for the workshops to be held in. As an aim of the study was to provide

relevant and potentially useful knowledge for practitioners, a decision was made to use the schools' existing percussion instruments. Since two AR cycles of workshops could be accommodated within the school year, an Early Years team leader was consulted about the best timing for a workshop programme. The team leader expressed the view that it would be best to avoid the start of the school year (i.e., up to the October holiday) as new children are being settled into the nursery. Although the children in this study were in their preschool year (second year of nursery education), the staff's priority would be settling the younger children into the nursery environment. The fortnight before the Christmas holiday and the last week of Spring and Summer terms were highlighted as less suitable for staff interviews, as end of term shows and parties are prioritised. The plan for workshops to be twice weekly over six weeks was agreed with the team leader. One reason was that in nurseries, visiting specialists often come in six-week blocks so this would be a familiar pattern for the children.

4.4.2 Recruitment criteria for nurseries

As mentioned in the previous section, required criteria were for nurseries to have sufficient potential participants and for the children to be in their preschool year. Informed consent also was required from parents both for their child's participation and for the workshops to be filmed. Informed consent was also required for the parents' own participation in interviews after the workshop programme. Informed consent was required from two teachers from each nursery who were to be interviewed after the workshop programme. Both nurseries had to agree in advance

to this and then provide signatures for a PVG (Protecting Vulnerable Groups) form³, for the researcher before each cycle could commence.

PVG certificates for Cycles I and II can be found in Appendix 4.5.

4.4.3 Nursery recruitment procedure

A list of potential nurseries in central Scotland was gathered, based on my own personal contacts and through seeking recommendations from researchers. Of eight nursery head teachers that were initially contacted, two replied straight away positively, three replied negatively and three did not respond. The nurseries who responded positively were based in Glasgow and Edinburgh. Meetings were held with both head teachers in their schools to have a detailed conversation about what the workshops would involve, and to make sure the workshop space was as required (see section 4.4.1). Following this, a timetable for data collection was agreed with the nurseries. In January 2016 the original second nursery (in Edinburgh) pulled out due to staffing issues, which they felt left them too busy to support the project. Therefore, other nurseries were approached, based on the previous recommendations from other researchers. At the end of February 2016, another nursery in Glasgow agreed to participate in the research.

³ A PVG form is necessary legal requirement for person working in ‘regulated work’ such as teaching, which is with children and/or protected adults in Scotland. It involves a background check to ensure potential workers in this area do not have a criminal record. <https://www.mygov.scot/pvg-guidance-form/>

4.4.4 Ethics

Full ethical approval for this project was granted by Edinburgh College of Art Ethics committee on the 9th October 2015. The research proposal can be found in Appendix 4.6 and ethics form that the committee approved can be found in Appendix 4.7. The form covers issues of risk to researcher or participants; data protection and management; informed consent; children's assent in research; participant right to withdraw; and research design.

The next sections give a detailed outline of the how different corpuses of data were gathered and analysed.

4.5 Workshop delivery

4.5.1 Participants

In both nurseries, the children participating were in their preschool year of Nursery education, aged between four years one month and five years three months. In the Cycle I nursery, eight children were randomly selected from the available pre-schoolers (girls and boys were separated so there were four from each gender). In Cycle I there were ten eligible girls and twelve eligible boys; the head teacher and myself pulled names from a hat to create an order in which children would be invited to participate. If a child or parent declined, then the next child on the list would be asked. In Cycle II, six children were selected using the same procedure from four eligible girls and seven eligible boys. Two sets of eligible girls' parents declined so another boy was asked and agreed to participate, therefore, Cycle II had four boys and two girls participating.

The parents who agreed to their children's participation were invited to their respective nurseries for an information session two weeks before the start of each programme. The aims of the workshops were explained as well as video recording and that they or their child could withdraw during the project. One parent per child came to the meeting, as well as the head teachers of each nursery. In the Cycle I nursery, six of the eight parents had English as a second language; an interpreter was required and present for three Mandarin-speaking parents who needed extra support. During the sessions for each nursery, I talked about the kind of activities the children would be doing in the workshops and informed parents about the nature of participation in a research project. At three separate points during my presentations, it was emphasised that participation was voluntary for both parent and child and that either parent or child could withdraw from the research at any stage without consequence. It was also explained that their child's participation was contingent on their assent before each workshop. Questions were invited at the end of both information sessions but none were asked. Parents took information and consent forms away to read and sign in their own time and returned them to the nurseries when they were signed (see Appendices 4.8 and 4.9 respectively).

Cycle I began with four boys and four girls. One male participant withdrew after two workshops. He was continually disruptive, bit another child and said he did not want to come to the workshops. After first speaking to the child with his key worker present, his parents and the head teacher were consulted. After considering all of the views, I supported his decision to withdraw. Throughout the workshop programme I adhered to the principle of seeking assent before each workshop, this principle recognises that even young children are capable of making decisions for their own

benefit (Dockett, Einarsdottir & Perry, 2009). Before every workshop each child was asked: ‘do you want to come to music?’. In Cycle I, on three occasions, different children declined to participate in a workshop, but happily attended the following one.

The total number of child participants in the project was thirteen (seven in Cycle I and six in Cycle II).

4.5.2 Workshop procedure

12 workshops were delivered in both Cycle I and Cycle II. It was intended that these last 30 minutes, however the shortest lasted 19 and longest lasted 31 minutes. The shortest workshop (Cycle I W5) was due to a decision to curtail the session because one of the children felt unwell and the other children were distracted by this. In this workshop, no improvisations were executed. In longest workshop (Cycle I W8) the three children present were very chatty and engaged. The workshop programme content involved bespoke materials designed to foster CMA and S-MA as detailed in appendix 4.10. Common nursery songs were sung (e.g., ‘Incy Wincy Spider’ and ‘Twinkle Twinkle Little Star’) if a child requested or spontaneously began singing one. At various points in both cycles, a nursery teacher was present, this was to let them see the content of the workshops; these observations provided a basis for them answer children’s questions and add to their discussions outside of the workshops.

4.6 Video data

4.6.1 Video data collection

The workshops were captured by a Sony HandyCam DCR-PC1000E, which was in a single position for the duration of the workshops. The film (captured on mini-DV tape) was then converted to a digital format using Elgato Video Capture⁴, an interface which enables conversion between DV to digital format able to be read and edited on a MacBook Pro computer. The files were then saved in iMovie, an application that allows viewers to view and edit digital film. All twelve workshops in Cycle I and II were video recorded: Cycle I totalled 6 hours and 30 minutes of video footage and Cycle II totalled 6 hours and 2 minutes of video footage.

4.6.2 Method of analysis

A variety of musical activities took place during the workshops (see Appendix 4.10), not all of which were improvised. Only improvised sections were required to address the first research question: *How can children's creativity and engagement in group improvisation be appreciated and evaluated?* Improvised sections were identified as being: a musical episode where some or all of the material is spontaneously created through the course of the performance, and a significant part of the music is negotiated by the participants in real time. This definition accommodates improvisations which followed descriptive instructions from both workshop leader and children. Video data of all group improvisations were sampled: in Cycle I this totalled 53 minutes and in Cycle II, 1 hour 24 minutes. The sampled improvisation sections ranged from 9s to 1m 35s.

⁴ <https://www.elgato.com>

A systematic approach to coding the video clips was undertaken with the aim of describing both the children's and workshop leader's behaviour quantitatively. The seven-stage procedure for framework coding from Gale *et al.*, (2013) was followed: 1) transcription, 2) familiarisation with data, 3) coding, 4) developing a working analytical framework, 5) applying the analytical framework, 6) charting data into the framework matrix 7) interpreting the data.

Working with coding systems in video analysis first requires making decisions such as defining the unit of analysis and choosing relevant MoC for the research question(s) (Almeida, 2015). For this study, the unit of analysis was defined as an 'event' where in the course of an improvised section, child made a change in their playing on one or more musical parameters such as tempo, dynamics or pitch. The other focus of the research question concerns the children's engagement, which can be appreciated as a series of interactions where one person's action is constructed in response to a previous action (Heath, Hindmarsh & Luff, 2010; Korkiakangas *et al.*, 2014). For this reason, MoC two seconds before and two seconds after a music 'event' were transcribed.

Step 1 involved transcribing six MoC in the improvisation video clips around the music 'events': verbal, proxemics, posture, gaze, gesture, head movement. These were identified as being most relevant to the research question, as they have been identified as key MoC in dyadic interactions (Norris, 2004). Applying this approach required 30 minutes to code one second of video data. 40 seconds of data were coded in this manner. However, it became apparent that looking at the data in such detail was not an efficient or appropriate approach to address this research question as very

few changes in some of the MoC (head movement, proxemics and posture) were noted. Another reason for the unsuitability of this approach was the size of the group (largest size was seven children and workshop leader). Norris's (2004) analysis primarily considers interactions between two people or one person and their environment. However, this initial work viewing the video data in such close detail helped refine and focus the approach (Robson, 2016).

Korkiakangas, Weldon, Bezemer and Kneebone (2014) provide a useful reference, as their work examined interactions between members of a surgical team (n=6).

Researchers had to make analytical choices about which modes to transcribe, as not all modes of communication are equally important in a goal-directed work or learning situation (ibid, 2014). Therefore there was a similarity between this research and theirs, as they had to evaluate the most important interactions within a mid-sized group of participants. The most frequently occurring modes from the first transcription (of six modes) were noted and the three most frequently occurring MoC were transcribed in relation to music events (gaze gesture and verbal, see Appendix 4.11 for an example). This completed step one of the framework analysis procedure. Repeated viewing of the clips with the transcriptions fulfilled step three.

The following step was coding, and as the unit of analysis was defined by change in the music MoC, this was examined first. Children's musical actions were coded as representing an instance of either CMA or S-MA; actions coded in this way are henceforth known as CMA or S-MA events.

CMA events were those in which a child initiated a new musical idea which was qualitatively different from the ongoing musical texture. The CMA event and musical parameter(s) on which this occurred were noted. An example of an event coded as CMA follows: Workshop 1, Cycle 2: All of the children were playing a rhythmically entrained piece of music (for 30s) until Christine⁵ started playing substantially slower and louder than the others. Christine's action of playing both slower and louder was noted as a CMA event on two musical parameters: tempo and dynamics.

An event was coded as an S-MA event if a child was observed to change their playing or singing to match another child's on one or more musical parameters, for example: Workshop 6, Cycle 2: Tess had a big drum for this particular section of the workshop. The teacher invited the children to play using the 'just play' instruction and the improvisation began with another child, Jane stroking a cimbalom (a small string instrument similar to a dulcimer) very quietly. Tess then began playing her drum by scratching the surface very gently with a circular motion. Tess moderated her dynamic level (quiet) to Jane's dynamic level and played her instrument in a way that achieved this (i.e., by scratching it rather than hitting it). This event was coded as S-MA on the musical parameter of dynamic.

Coding the music MoC as either in a CMA and S-MA category provided the analytical framework (steps four and five) within which to chart data (step six). Considering additional guidelines from Heath *et al.*, (2010), if a MoC could not be apprehended due to the children's position in relation to the video camera position,

⁵ All children's names are pseudonyms

this was also noted. For the purposes of this research which examines pedagogical processes in improvisation, I decided to focus solely on the gaze interactions between a child and workshop leader as these were far more common than child-child gaze. Another reason is the emphasis in this PhD on improving pedagogical approaches to teaching improvisation (see research question two in section 2.8). Verbal utterances were transcribed verbatim and gestures were noted by describing the type of gesture (e.g., moving a hand up and down), the gesturing person, and to whom it was directed. For the same reasons as with the gaze interactions, an analytical decision was made to focus on the child-workshop leader interactions as they were more common than child-child interactions. These data were transferred to Excel spreadsheets and will be presented in Chapter 8 in bar graphs.

Chapter 8 reports the details of the musical parameters in the children's improvisations, the numbers of CMA and S-MA events through both cycles of workshops and the ways in which the gaze, gesture and verbal MoC related to these events.

4.7 Interview data

4.7.1 Interview participants

One parent of each participating child was invited to be interviewed at the end of the cycle. In Cycle I, five out of seven parents were interviewed. The remaining two parents cancelled three separate, previously agreed opportunities for interview, sometimes at the last minute. In Cycle II all of six parents were interviewed. Two

teachers per cycle were interviewed, the team leader of the nursery and the teacher who was responsible for the expressive arts part of the curriculum.

In total, eleven parents and four teachers were interviewed.

4.7.2 Interview design

For both Cycle I and Cycle II the interviews were held in a quiet office space in the respective nurseries after the workshop programme was complete. The main reason for this was to provide a familiar setting for the parents, which is considered an important factor in creating a comfortable environment for participants (Braun & Clarke, 2013). The interviews were all arranged at a time either soon after drop-off time or soon before pick-up time, to accommodate parents' preference.

Interviews with the parents and teachers were semi-structured individual interviews following protocol from Willig (2001). This method of data gathering was chosen as it has flexibility in that initial questions can be modified in light of participant responses (see section 3.6). Another benefit is that allows participant frames of reference to be prioritised over the researchers' (Willig, 2001). The aim of interviewing the children's parents and teachers was to learn more about the children, so the strengths of this semi-structured interview are particularly relevant.

A list of topics was prepared to discuss with the participants with prompts, (see Appendix 4.12). Prompts are considered useful in semi-structured interviewing as the interviewer may blank or the participant may need another framing of the question to understand or answer it more fully (Braun & Clarke, 2006). The topics were intended to gain a general picture of the child (e.g., in terms of likes, dislikes, whether they

were confident or shy), and to establish how the child engaged with music and the workshops.

For two of the interviews in Cycle I, a Cantonese translator was present to translate for the parents. Following guidelines for conducting interviews with a translator from Squires, (2009), the translator (Aya) was a known and trusted individual who worked within in the larger Chinese community as well as in the nursery. We also talked through the questions before the interview to make sure that both specific concepts and broader contextual information was understood by Aya, as these types of information can easily be changed through interpretation (Squires, 2009).

4.7.3 Interview data collection

Five interviews in Cycle 1 and six interviews in Cycle II were recorded using a TASCAM DR-40 portable digital recorder. The voice memo function on an iPhone 5 was also used to provide a back-up recording. Recordings were transferred to a password protected hard drive within 24 hours of gathering and then deleted from the original device. The interviews were between 23 and 49 minutes long.

4.7.4 Method of analysis

The interviews were transcribed verbatim following a notation system from Braun and Clarke (2013) which was an adaptation from Jefferson (2004). The transcription notation system can be found in Appendix 4.13. After the transcription was completed, participants were anonymised by replacing names with pseudonyms. As well as this, any features which could identify the schools were removed from the transcripts. The interviews were then uploaded to NVivo 10 (QSR, 2014), a software

programme which assists data management in qualitative and mixed methods research.

The next steps in analysing the data followed guidelines from Braun and Clarke (2006), who describe Thematic Analysis as comprising six phases: 1. Familiarising yourself with your data; 2. Generating initial codes; 3. Searching for themes; 4. Reviewing themes; 5. Defining and naming themes; 6. Producing the report.

After the process of anonymisation, the transcripts were read and re-read and initial notes made. In Thematic Analysis, the coding hierarchy begins with codes and progresses to subthemes, then themes and finally overarching themes (Braun & Clarke, 2013). Codes capture a single idea, and subthemes (created from codes) capture a particular aspect of a theme. Themes must encapsulate an important pattern in the data (Braun & Clarke, 2006).

Table 4.1 shows the initial notes made in NVivo and the codes created from them.

Table 4.1 Table of transcript with initial notes and codes

Transcript	Initial notes	Code
Sandra: so ehm...you know so I think she did, I think she enjoyed it and the kids do love music you know they do love music	The kids love music and the teachers can appreciate this	<i>Children love music</i>
UM: mmmhmm		
Sandra: none of your, none of the staff in here are at all musical	The kids are musical but the staff aren't! Does she mean that none of the staff can play any instruments? They don't feel like they are confident singers?	<i>Teacher non-musical identity</i>
UM: (laughs)		
Sandra: so actually, it was actually that's probably why Julia grabbed you!	The staff feel they could use some support with music activities perhaps – but they sing many times every day with the kids. If I was to design the project again it may be useful to do two cycles in the same school as the staff would really get into what I was doing.	<i>Perceived gap in provision/skills Teacher reflective practice</i>

From initial notes, codes were synthesised. The notes also served to capture personally reflective moments as well as generating codes, for example: ‘If I was to design the project again it may be useful to do two cycles in the same school as the staff would really get into what I was doing.’ My own reflexive journey through this research will be fully discussed in section 9.6. The function of the codes is to capture the essence of the transcript or something important about the transcript Braun and Clark (2013). An example of a code is: ‘the kids are musical but the staff aren't!’ which was coded as *teacher musical identity*. This is also an example of a researcher-driven code rather than a data-driven code (see Braun and Clarke, 2013). Data driven or *semantic* codes report the explicit content of a section of text, they do not go

beyond the level of a summary. Researcher-driven codes or *latent* codes invoke the researcher’s ‘conceptual and theoretical frameworks’ (Braun and Clarke 2013, p.207), and so the application of these theoretical frameworks is another facet to Thematic Analysis.

The next step was to group the codes into themes, an example of which is shown below in Table 4.2.

Table 4.2 Codes into subthemes

Codes	Subtheme
Importance of boundaries	Strategies for teaching and learning
Importance of good behaviour	
Importance of clear instructions	

The analytical process continued with a consideration of the subthemes and searching for ways they related to each other and a potentially more expansive theme. For example, ‘strategies for teaching and learning’ was linked to ‘strategies for the person’ as these were both concerned with the ways in which the teachers approached and interacted with the children. They are separate subthemes, because ‘strategies for teaching and learning’ is solely concerned with the ways in which teachers structured and controlled both nursery tasks and environments with the aim of providing consistent contexts for learning, and the focus of ‘strategies for the person’ is on tailoring the teacher’s communications with children who they perceived as shy or disruptive.

Themes were not mutually exclusive; at times there was an overlap. When this occurred, the most suitable theme to answer the research question was chosen. A further description is given when reporting relevant results.

The thematic outline of the interview data chapters follows in Table 4.3 and Table 4.4:

Table 4.3 Thematic outline of Chapter 5

Overarching theme	Approaches to interacting with the children	
Themes	Adults' perceptions of the children	Adults' strategies for the children
Subthemes	<ul style="list-style-type: none"> • Confidence • Ability to share 	<ul style="list-style-type: none"> • Strategies for teaching and learning • Strategies for the person

Table 4.4 Thematic outline of Chapter 6

Overarching theme	Beliefs about creativity and music	
Theme	Conceptualising creativity	Conceptualising music
Subthemes	<ul style="list-style-type: none"> • Creativity through objects and documents • Creativity through narratives • Framing and reframing creativity 	<ul style="list-style-type: none"> • Music is innate • Music is important • I'm not musical

4.8 Children's talk data

The talk section of the intervention, as seen in Workshop model 1 and Workshop model 2, (Appendices 4.3 and 4.4) was designed to capture the children's talk about the workshop and its activities, so as to gain an understanding of their thoughts and identify any patterns that were present in their discourse. The children's views were sought in a group as a part of the workshop as this is close to a normal nursery activity (Lewis, 1992; Clark & Moss, 2001; Greig, MacKay et al., 2007). After examining the data from Cycle I, gathered from the workshop talk section, the sampling strategy was changed to incorporate the children's talk from the whole workshop. The reason for this is that the children would ask questions throughout the workshop, not just at the specified time in the workshop model. Also, at times, the children did not ask questions or want to talk at this point.

4.8.1 Talk data collection

The talk data were gathered and transcribed from the audio track of the video recording. In Cycle I there was 29 minutes of talk data and Cycle II had 33 min of talk data.

4.8.2 Talk data analysis

The talk data were analysed using the same process of Thematic Analysis as described in section 4.7.4. The thematic structure is presented in Table 4.5 and the presentation of these themes, and their analysis and discussion, form Chapter 7.

Table 4.5 Thematic outline of Chapter 7

Overarching theme	Children’s constructions of improvising	
Theme	Conceptual tools	Exploring roles
Subthemes	<ul style="list-style-type: none"> • Existing references • Descriptive phrases • Combined tools 	<ul style="list-style-type: none"> • Workshop roles • Musical roles

4.9 Experts’ data

Two experts carried out a rating test of the video data coding and were interviewed about this process, in November 2016. Firstly, a rating test was devised to check whether two experienced music education researchers could apply the CMA and S-MA categories to samples of video data and in doing so could discriminate between them consistently with my original coding. This additional perspective was sought to assess the utility of constructs as a means to categorise children’s creative and interactive processes. Secondly, the experts were interviewed after the rating test to investigate any reasons for difficulty or ambiguity in using the constructs, and to investigate if they agreed or disagreed with each other’s categorisation and why. This was another form of check, with the purpose of refining the constructs through my reflection on their views (see section 8.7).

4.9.1 Rating test method

The experts’ rating session lasted 1 hour and 40 minutes. The first part was a short introduction to my study and explanation of the rating test. The second part was their observation and rating of children’s improvisations as showing CMA, S-MA or

neither. The third part was the interview with both experts to explore their views about the constructs in more detail.

4.9.2 Experts

Expert 1 has a classical conservatoire training and over 20 years of classroom teaching experience. She has a PhD in Music Psychology and lectures in Music Education in HME. She has little experience improvising. Expert 2 also has a classical conservatoire training but has played in funk and jazz bands and is an experienced community musician. She has a PhD in Music Psychology, whose focus is children aged 7, and lectures in Music Education in HE. She is an experienced improviser in some performing but mainly community music settings.

4.9.3 Materials

Before the test, 39 separate video clips of children improvising were created from the sampled improvisation material. These clips were chosen by the researcher as the clearest instances of CMA, S-MA or neither. All of the sampled video clips were rated as 'A', 'B' or 'C', with 'A' being the clearest and best examples; the test used all of the 'A' examples. The clips ranged from 10 seconds to 24 seconds. An information sheet was given to the experts prior to the test (see Appendix 4.14) to read. A rating sheet (see Appendix 4.15) was provided in order for the experts to place a tick in the column (CMA, S-MA or neither) they chose for each particular clip.

4.9.4 Procedures

The research setting was a quiet office, with video clips viewed on a 15-inch MacBook Pro. The video clips (MPEG-4 format) were watched in QuickTime. Before the test began, the experts were shown an example of each category. Each expert completed the task independently and there was no verbal communication after the test began. I started the clips and waited for both experts to indicate (by looking at me and nodding) when they were ready to view the next clip. After the experts viewed all of the clips, there was a five-minute break where the room was reorganised for holding and recording the interview. This followed the same protocol, methods in data gathering and analysis as seen in section 4.6. Two themes were synthesised from the interview data: *questioning constructs* and *workshop leader as mediator*. These will be presented and discussed in section 8.7

4.9.5 Statistical measure

Cohen's kappa (1960) was considered to be the most appropriate statistical measure of concordance to estimate inter-rater reliability, as it takes into account the amount of agreement that could be expected to occur through chance (Siegel & Castellan, 1988). The resulting statistics were interpreted using values from Landis & Koch (1977) as follows: < 0 as showing poor agreement, 0-0.20 as slight, 0.21-0.40 as fair, 0.41-0.60 as moderate, 0.61-0.80 as substantial and 0.81-0.99 as an almost perfect agreement and 1 as perfect agreement.

Results can be found in section 8.6.

4.10 Chapter Summary

This chapter gave a detailed account of the mixed methods used in investigating the workshops in this PhD study. A detailed explanation and justification of all of the stages in the data collection and analysis was given. The next chapter in this thesis will present the results, analysis and discussion of the first overarching theme derived from the interview data with the parents and teachers: *Approaches to interacting with the children*.

CHAPTER 5 APPROACHES TO INTERACTING WITH THE CHILDREN

5.1 Introduction

This chapter presents the first overarching theme from the analysis of interviews with parents and teachers of the children in the workshops, outlined in Chapter 4.

Approaches to interacting with the children, is split into two themes: *adults' perceptions of the children* and *adults' strategies for the children*. These are linked, as the adults' reflection on children's personal qualities informed a range of their interactions, for example in tailoring their teaching strategies or attempting to support personal growth. Understanding parents and teachers' attitudes contextualises the children's words and actions within larger cultural and educational settings in later chapters.

The following table illustrates the thematic outline of the chapter:

Table 4.3 Thematic outline of Chapter 5

Overarching theme	Approaches to interacting with the children	
Themes	Adults' perceptions of the children	Adults' strategies for the children
Subthemes	<ul style="list-style-type: none">• Confidence• Ability to share	<ul style="list-style-type: none">• Strategies for teaching and learning• Strategies for the person

Throughout this thesis, names of interviewees are all pseudonyms and are as follows⁶ in Table 5.1:

Table 5.1 Interviewees' names

	Cycle I	Cycle II
Teachers	Mrs J Mrs S	Mrs N Mrs T
Parents	Ali's mum, Ben's mum Dan's mum Katie's mum Tess's mum	Betty's mum Charlie's mum Fiona's mum Lachie's mum Lem's mum Tim's mum

5.2 Adults' perceptions of the children

The first theme, *adults' perceptions of the children*, gathers two key aspects of parents' and teachers' descriptions of the children: confidence and ability to share.

The adults' accounts of the children also reveal ways in which these qualities are understood as *inherent* or *lacking*. If either was described as *lacking*, further coding in this category refined this as either: *lacking with potential to change* or *inherently lacking*. Confidence and ability to share were the qualities most reported in the children, mentioned by all of the adults during their interviews. This theme gives insight into the ways in which teachers' professional values are enacted, and into cultural discourses that influence parents when making decisions about their children.

⁶ Not all parents were interviewed from Cycle I, Jane and Christine's parents were unable to attend. Ben and Dan's mum's interviews were with the help of a Cantonese interpreter. Ali and Lem's mothers both had English as a second language

5.2.1 Confidence

This subtheme concerns teachers' and parents' plural and at times inconsistent descriptions of children's confidence. The first question in all of the parent and teacher interviews was 'How would you describe (child's name)?'. Parents' initial descriptions always focused on how they saw their children on a continuum of confident to unconfident, for example, 'he's shy' (Ali's mum) or 'really outgoing...she is, she's the extrovert one' (Tess' mum). Interestingly, teachers' initial descriptions could be construed in terms of how they found working with the child, for example, 'he's challenging'; (Mrs S) or 'she's a joy' (Mrs J). Mrs N explained confidence as important because it allowed children to 'take advantage of all of the learning, the opportunities possible in the nursery'.

Confidence was cast in different ways. It could be described as an inherent or fixed quality of the child, for example, 'she's always very extrovert' (Katie's mum) and 'she's very lively and talkative... and she's kinda...been the non-shy one' (Tess' mum). These quotes both reflect an attitude that confidence can be appreciated in their children's successful social interactions. The description of Tess offers further exemplification of her confidence as being enacted through many conversations or interactions and a high level of energy. Also, both extracts imply this personal quality is a stable and enduring feature of both girls, and so creates a lens which the child's actions are viewed through.

If a child was described as lacking confidence, parents and teachers developed their assertion, for example, 'she's not got much confidence, ehm, quite clingy you know'

(Mrs T about Betty). A practical consequence of her lack of confidence is that she needs an adult to provide emotional support in her day-to-day nursery activities.

Later in the interview, Mrs T said:

Mrs T: Betty clung to Louise because Louise is her key worker kind of thing...ehm but no - her maturity has naturally progressed over the last few months you know sort of her confidence has developed a bit you know

Mrs T accounts for Betty's confidence developing as she becomes older: 'her maturity has naturally progressed'. It could be that Mrs T is not able to pinpoint a teacher strategy or nursery activity that may have caused Betty's increase in confidence. Some personal qualities may develop over time without intervention, as a child becomes more used to a nursery perhaps, rather than as a result of a targeted activity. It is relevant to note at this point, that the curriculum has confidence as a specific educational outcome. Therefore, teachers have to reflect on the ways in which this quality may develop for every child and have plans in place for children who lack confidence.

Another example of low confidence is accounted for as the child holding herself back:

Fiona's mum: She's not confident, I've noticed she kind of holds back a bit, sees if the teacher's like saying she can do this, you know...she'll hold herself back more because she thinks...she's wrong. And doesn't realise...I'm like 'Just try, it doesn't matter if you're wrong...it doesn't'...it's like 'You need to just try and see how it goes'...But she holds herself back a bit... its quite hard to get her to try new things, especially with new people...she's really...she's really, really quiet she'll just stand there and she'll go...really nervous and I'm like...(sighs) 'Oh no!' (laughs)

Fiona's mum begins by attributing her daughter's lack of confidence to Fiona holding back, which suggests that she thinks that Fiona has the capacity to be confident but, can't, or won't, do so. She reasons that this is because Fiona worries

about getting things wrong. In a similar way to Betty, Fiona needs extra support from staff in the form of receiving the teacher's approval before she commits to an action. Fiona's mum depicts confidence in two areas: firstly in the area of agency, in terms of able or unable to act in a situation. Secondly, she identifies confidence in a child's effective interactions with different people, especially those who are unfamiliar to them.

How teachers construct and identify confidence in a child has consequences for how they interact with the child. For the preschool teacher, Betty and Fiona are similar in that they both need additional input to help them be more confident, but the nature of the teacher's support and attention or strategy may be different for each child.

Children were described as becoming more confident in various ways, as seen in Mrs T's understanding of confidence developing as a part of the process of growing older. Interestingly Betty's mum also described her becoming more confident, but attributed this to extra-curricular classes: 'she's got loads of confidence since she started dancing'. Betty's mum thus problematises her daughter's low confidence and then attributed her own intervention, in taking her daughter to a dance class, as a solution. Betty's mum's understanding of her daughter's growing confidence contrasts with the teacher's. She understands confidence can be acquired through participation in a particular activity, while Mrs T accounts for Betty's growing confidence as a process that happened itself as she became older.

In a small number of interviews (3 out of 15) parents and teachers appeared to position behaviour associated elsewhere with children's low confidence as normal, for example: 'there's very few boys that are very outgoing' (Charlie's mum); 'that's just his nature, he's not extrovert, he's in his own wee world but happy in his own wee world.' (Mrs S about Ben). In the latter quote, Mrs S positions Ben's behaviour positively as potentially showing independence, which contrasts with a previous conceptualisation of low confidence as a child being 'clingy'. Ben may not be connected to the world but he is seen as happy. Both children's low communication and social avoidance are aspects of behaviour that other parents associate with low confidence. In both quotes, there is an implication that the children's low confidence is inherent, either in the gender or the perceived personality of the child. Unlike the previous extracts, the quotes do not suggest pathways to a growth in confidence through either maturing over time or by acquiring confidence by participating in a rewarding activity. It is important to disclose that Charlie and Ben were in the process of being assessed for Autistic Spectrum Condition (ASC⁷). It is possible that the adults' fixed views about the children are linked to understandings of ASC; difficulty in communication is a core dimension of this condition, however they respectively position their sons' behaviour as normal (in terms of 'boys' in general) or due to 'nature' rather than a condition.

⁷ Autistic Spectrum Condition (ASC): I have chosen to use this term rather than Autistic Spectrum Disorder (ASD) as it is less stigmatising, and it reflects that these individuals have not only disabilities which require a medical diagnosis, but also areas of cognitive strength' (Baron-Cohen *et al.* 2009, p.500)

5.2.2 Ability to share

Ability to share was depicted as the capacity or choice of a child to engage another through offering a turn with a toy, object or ideas that they had. In common with the previous subtheme, the capacity to share was conceptualised as fixed or inherent in some children and lacking in others. As seen in Mrs N's quote, sharing is valued in the nursery: 'it was nice to see that they were waiting their turn and sharing the instruments'.

Children who shared with others easily, with no prompting were depicted as being very good at this: 'she's a brilliant sharer...she just does it' (Mrs T about Fiona) or this quality was presented as an enduring feature of the child 'she always shares with other children' (Mrs J about Jane). Tim's mum combines these two aspects of spontaneity and stability: 'He's always helpful and shares, you know, he's kind yeah, yeah, he is' (Tim's mum). In a similar way to children who were viewed as inherently confident, the adults do not offer much reflection on why these children are good at sharing. Tim's mum accounts for her son's ability to share by attributing this to his 'kind' nature, which is also depicted as inherent. Kindness has an implication of empathy, being considerate and accommodating another's thoughts or needs. Thus, Tim's ability to share is ascribed to an altruistic intent.

However, teachers wished to facilitate and monitor the sharing ability of all children, regardless of their intent. Mrs N describes the challenges in managing children who did not share easily:

in terms of playing in a group Charlie can be very...I'm using my words very carefully... Not controlling. But things do become 'his' quite quickly. And nobody is allowed to, to kind of intervene or touch or - he's got his plan with whatever it is he has, he knows what he's doing.

The way Mrs N is circumspect in her description of Charlie's lack of sharing, indicates her sensitivity to portraying him as either greedy or possessive. She considers the possibility that he has a vision, 'his plan' which provides an alternative, (that Charlie has a creative outlook) and therefore gives a more flattering account of his character. In this example, Charlie is portrayed as reluctant to let others in on his plan, and consequently perhaps shows an unwillingness to let others into his world of ideas, i.e., the play scenario that his 'things' will participate in. Sharing can require negotiating, not having the first turn sometimes on the understanding that you 'get' a turn later. In the teacher's view Charlie seems unwilling to trust others in this process.

Mrs N also talked about children sharing ideas as well as toys, 'he'll share his thoughts and his feelings and his ideas (Mrs N about Tim) and 'she'll share ideas whether it be through...her art work or choices she makes' (Mrs N about Fiona). This view of sharing links to curricular aims in CfE which suggest a child can make their own ideas more complex through co-constructing games and developing thoughts with others. Therefore, sharing may start with concrete objects like a toy but this can be a step to sharing more abstract ideas. The teacher to pupil ratio decreases, from 1:10 in Nursery to 1:25 in Primary One. Children are expected to work in groups with less teacher intervention; sharing and negotiating to work towards a joint goal, are therefore key skills for children to acquire in Nursery.

In another extract, Mrs J described Dan's sharing as improving:

Mrs J: Yes, he is better. Before everything was his. He still does need reminded, but he is getting better, it's not all his, he has to, he realises now that is for everyone'

In this example, he is portrayed as not being a sharer to begin with, but that he has improved, although he still needs support from the teacher supplying reminders.

There is a potential tension if Dan does 'realise' that he needs to share, yet still needs reminders. This would indicate that Mrs J considers that Dan perhaps has a choice in this process, and if he doesn't share then this could be understood as him choosing to evade the rule that everyone has to adhere to. This contrasts with her earlier view about Jane, who always shared. Jane's sharing is thus cast as an inherent capacity while Dan's is lacking, but he has now acquired enough understanding that he can choose whether to share or not. Another interesting point is that 'he has to' – it is implied that there is no choice here, Dan has to understand that sharing is a rule of the nursery and therefore an explicit expectation in a school environment.

5.2.3 Summary

As demonstrated, the constructs of confidence and ability to share were conceptualised in two main ways, as being inherent, or lacking. If children were understood to be lacking confidence, this was either cast as having potential to change or inherently lacking. Interestingly, no child was explicitly described as inherently lacking the ability to share. This perhaps reflects the importance of sharing as an educational process, and therefore demonstrates the underlying values and desired outcomes of the curriculum. In addition, teachers have a professional

responsibility to account for the ways in which they develop these two capacities, if either is lacking.

The next theme explores the ways in which parents and teachers acted on their perceptions of the children with the aim of helping them develop.

5.3 Adults' strategies for the children

This theme explores the distinct strategies employed by adults to develop children's learning or personal qualities. These strategies were based on adults' reflections of how a child could be best supported towards a desired educational or personal outcome. Considering parents' and teachers' strategies illuminates the educational and cultural norms they perceive for the children. This theme comprises two subthemes, *strategies for teaching and learning* and *strategies for the person*, which will be explored in turn.

5.3.1 Strategies for teaching and learning

This subtheme is concerned with the ways in which teachers structured and controlled children's tasks. These strategies provided consistency in their approaches to interactions with the children. They are tailored to the learning needs of the individual or group. Arguably, EY teaching work has unique challenges, as seen in the following quote from Mrs S.

Mrs S: they're so young and they can't...describe what, always describe or explain what they, what they mean or how they feel and then of course the language difficulty in here with some of them as well... Although that doesn't affect how they respond to music obviously but...I suppose if you were, if you were talking to them and that you know, that can affect, and I guess there's like instructions isn't it?

You've got to keep things really, really simple and...visual you know? Sometimes you know like...you've got to...really tailor...your instructions...it's harder than you think, you think it would be simple, but once you actually start to try to do it it's actually quite hard because you say something and you think 'This is simple' and 'Yes they'll understand this' and then they don't get it. And you're thinking 'What can I, how can I reword that? How can I...?' (laughs)

In Mrs S's nursery, 80% of the children had English as a second language presenting her with additional challenge when gauging their understanding of what she wanted them to do. She also highlights that it is not always possible to not know the intent or feelings of children this age, perhaps because intent and feelings are complex concepts for children to express. The use of visual aids may be to offer the child and teacher a point of shared understanding through a concrete object. Another reason for visual aids is that teachers in this study emphasised their educational process as building on previous understanding, only moving to the next stage when they felt that the previous stage had been mastered. Understanding concepts through language may be more difficult for some children depending on the stage of development and/or understanding of language. Finally, Mrs S illustrates a cycle of reflexive thinking in her account of assessing the children's understanding of her instruction: trying a new way of giving an instruction and re-evaluating its effectiveness, all in the real time of the task.

The following three sections detail examples of specific strategies for teaching and learning used by the teachers.

5.3.2 Narrative strategies

Narrative strategies involved using stories or role-play to draw the children into participating in an activity, or to illustrate a point in a more effective way.

Mrs J describes how she uses narrative strategies in groups:

Mrs J: the...obviously the children, you know we're got lots of children with E.A.L - you know English is an additional language for most of our kids.

Una: So that makes a difference to...what, the expectations then?

Mrs J: well no, that's why we have lots, kind of lots of props and things and pictures and, well you had the instruments so they knew...that that's what they were going to do. So you show them something concrete and build a story from that, yeah. The more you explain, the more you lose them sometimes! (laughs) yeah, that's why kind of pictures and things, pictures and like...imitating and they'd imitate stuff back. Games too, you know we'd sort of build from that to make a story.

Mrs J highlights the challenges of teaching children with E.A.L (English as an Additional Language). Despite this, there is still an expectation of the same level of progress in the children as at a nursery where children are native English speakers. All schools are held to the same educational expectations by local education authorities and the government, and measured in national literacy and numeracy tests when the children reach Primary One⁸. Therefore, Mrs J explains the different ways in which she used strategies involving a narrative. She describes starting from an illustrative object (a picture) or activity (game) to serve as a jointly understood point of departure. She then explains how the role-playing strategy works through playful imitation to draw the children into the overarching narrative.

Teachers talked about 'joking' as a way into creating a game as seen in Mrs S's description:

But you just have to try and get him to join in by kind of being...jokey and kidding him on and...making, letting him think he really does want to do it, kind of turn it round on him. Say 'Ocht come on - you do! Oh well I'll just go and do it myself!' and then he's like 'Nooo!' you know 'I'll come with you'!

⁸ At the time of the empirical work of this thesis, children's literacy skills were being tested in Primary One in Scotland.

In this description Mrs S, turns the child's participation in to a role-playing game where she pretends to 'go and do it myself'. By utilising this theatrical and playful approach, the emphasis moves from the child's non-participation onto the game. This approach serves as a distraction by offering another focal point for the child, if they feel overwhelmed by anxiety. The child is also being offered some agency by the teacher in the choice to join in or not. This could serve to facilitate a shy child who may feel they have no choice or are powerless to act. For non-confident children, narrative strategies can provide a way in to participating in groups.

5.3.3 Directed process strategy

In a directed process strategy, tasks are decided by the teacher and structured sequentially, with signposting before each section. This strategy was aimed at children who were described by their parents and teachers as 'challenging, 'tricky' or 'difficult'. Mrs J describes how she manages a child who she had previously described as 'challenging' through a task:

Mrs J: and if you, if you set out the ground rules for him, if you tell him 'This is' you know you've got to tell him what's going to happen...you've got to say 'Right this is what's going to happen' you have to tell him at the beginning...of everything that's going to happen at each point of the process.

Una: Ok. So change...change from the plan he's not so good with that then?

Mrs J: No, he needs to know and you've got to kind of give him... a warning, just kind of say 'Right I'm going to be coming to get you in a few minutes. I want you to finish what you're doing' he doesn't like it when you try to stop him immediately.

This extract raises issues around power struggles with a child who was described as 'always wanting their own way', (Mrs J) 'disruptive' (Mrs S) and 'has no respect for others' (Mrs S) at various points in the interviews. By providing a heavily structured process in which the teacher signposts each section of the task, there is little choice

for the child. However, the teacher provides a slightly more open-ended conclusion, as she recognises that he may react in a negative way if he is stopped straight away. In this way the child may feel he has a small amount of agency; it is however an illusion of choice as the teacher ultimately still retains control, in signposting the end of the task. This strategy can be viewed as providing a clear path for the child, so that they know what is expected of them, while protecting the teacher's authority so that there is less potential for difficult interactions with a challenging child.

Mrs S describes a mutual understanding between teacher and child as crucial in this type of strategy.

Mrs S: They have to understand what you're going to be doing with them and then what's expected of them for them to then do it, but, as I say, the boundaries will try and be pushed

In this extract, it is argued that the child must first understand the goal of the task, and second what the teacher's expectations of them are in the process of achieving this goal. In Mrs S's final point, she says that the children will still try to push the boundaries, which implies that the process of learning customs and rules may happen through a cycle of a child's choosing to break rules and then being reined in by the teacher.

5.3.4 Positive strategies

Positive strategies are those in which the teachers sought to generate a constructive outcome, while managing a child's problematic conduct. Mrs S gives an account of the difficulty in managing a child who consistently exhibited challenging behaviour:

Mrs S: Ehm so...as I say we're kind of trying not to, we want to be really positive with him, so we're trying to kind of...make things positive rather than negative for him.

In this extract she begins by saying ‘we’re kind of trying not to’, with the implication that there may be a negative action following, but instead she continues by saying ‘we want to be really positive’. In order to maintain positivity, the teacher has to find a strategy of communicating to the child that they cannot break rules, in a way that is not harsh or punitive. Another consideration is in the language teachers use to describe children who break rules. Challenging could be understood as conceptualising the child either as personally challenging (difficult) to deal with or as challenging the rules of the nursery that the teachers have to uphold, or both. There are tensions for Mrs S to negotiate; teachers seen as rule-bound may be understood to limit children’s creativity and potential. Mrs S may be anticipating a negative appraisal (from either myself as the interviewer or other teachers) and so changes tack to construct a positive approach.

There are further difficulties for teachers to navigate when a child continues to misbehave, as demonstrated in the next extract:

Mrs J: he's still...challenging...I mean there, there are things that we can try and ignore and then there are obviously other things that you, you can't ignore, you have to then step in...if he's going to be harmful towards another child. But if he's just kind of like silly behaviour - told not to do something like say turn off, like not to turn off the computer and he does it well...you just have to tell him again and....he gets so many chances. But we are...going to have something put in place for him because he still...still challenging.

This level and type of behaviour invites a range of potential responses for the teacher. The teacher has to assess how serious the misbehaviour is and tailor her response. She may feel conflicted; ‘we can try and ignore’ implies that *she* may find it hard to ignore Ali’s silliness. Casting his behaviour as ‘silly’ may also suggest she has a perception that an outsider may expect some leeway towards Ali, if his actions are harmless. Nevertheless, a low level of misbehaving can be wearing, time

consuming to deal with and if not dealt with effectively ('he gets so many chances'), ultimately disruptive to his and others' learning. By Mrs J's later positioning of herself as 'we' perhaps gives insight into broader nursery policy about discipline, for example, to model positive behaviour, but also implies conflict with her own individual views in that the professional values of the nursery may not be the same as personal values of the teachers. This would suggest that Mrs J has a professional identity as a teacher distinct from and with different values from how she may act at home or with children in her own family.

5.4 Strategies for the person

This subtheme explores approaches used by parents and teachers to help specific children they had identified as lacking in confidence or the ability to share. These strategies are distinct from those in the previous subtheme, as they are focused on helping children in a holistic way; for example, in fostering confidence because it is seen as a desirable personal quality, rather than for an educational purpose.

5.4.1 Teachers' strategies for the person

Mrs T describes managing a child who was identified as lacking the ability to share:

Mrs T: he likes the sort of boys play, the rough play you know?

Una: how do you manage that?

Mrs T: he's got to be controlled you know obviously sometimes he gets a bit...not too good at sharing, you know. Sharing is his big thing. He's an only child ehm. Aye, but he's a nice wee boy but quite, very strong willed, he likes his own way. You know it's like a battle of wills with Lem, so it's just sort of controlling that and explaining things to him...But he will eventually back down. He will back down you know? But we need an adult to intervene.

Mrs T makes an effort to maintain positivity about Lem even when the behaviour she describes is potentially violent: 'rough play'. Her account of Lem seems conflicted as she describes him as 'nice' even though he is 'not good at sharing' and 'strong willed'. She vacillates between talking about his misbehaviour and then trying to recast it by normalising his behaviour. For example, she begins by saying 'he's not too good at sharing' but then explains this by saying 'he's an only child'. His 'rough play' is conceptualised as 'boys' play', which could be another way of attempting, if not to account for his behaviour positively, then, at least explain it. If the behaviour can be attributed to his gender then he is acting out 'boys' play' rather than making a choice to interact in a rough physical way with other children. This point is also supported by her assertion that his behaviour has to be 'controlled', therefore there is an implication that the rough play is an inherent part of his gender: he has no choice and cannot be reasoned with, so, he must be controlled. Perhaps this also helps account for the way in which a grown-up has to engage with Lem in a 'battle of wills' to maintain order and uphold boundaries. The last point Mrs T makes also supports this idea of an adult having to control an inherent trait over which the child cannot exercise choice; by saying an adult needs to intervene implies that Lem cannot control himself.

The complexity in the creation of strategies to help children at this stage can be appreciated in the following extract, where Mrs N describes the difficulty in assessing whether Charlie's attention-seeking behaviours are of his choosing or because of a possible ASC diagnosis. This implies that that she would use different approaches for dealing with each option.

Mrs N: I believe that in my opinion, there's elements of...learned behaviours to get the attention, ehm and again it's, it's how people respond to that. And it's maybe the mixed responses he's maybe having at home, ehm between Mum, Dad, because I know it's, it's quite an extended family, so, are they all singing from the same... I mean that's hard anyway but I think while the process of investigation is underway with Charlie then it's very much...they maybe aren't (sighs). You, you know what I'm trying to say here...they're not maybe...being as...firm with him, in terms of just maybe saying 'Oh it's just the autism'. Is it the autism or is it the behaviour?

Una: I suppose with a child like that is it about consistency? Boundaries?

Mrs N: Yeah, knowing the child as well and knowing, do you know what I mean? the capabilities and the....I mean is it just he's kicking off or that there's genuine concern here? Is it...and being willing to, I suppose, to some extent not challenge, but well challenge the behaviours as such to see if it is choice or it is an actual...part of his, possible diagnosis. To get, to get to, that, that understanding of Charlie.

It is important to appreciate the overarching aim in the teacher's reflexive process:

'to get to that understanding of Charlie'. At the beginning of this extract, Mrs N begins with a hypothesis, that Charlie is choosing to seek attention through utilising behaviours that he has learned will achieve his aim. She also proposes that his caregivers may not be consistent in dealing with his attention seeking. Then by saying 'it's hard anyway' she acknowledges that his situation is difficult. The nature of the difficulty may be the context of an 'extended family' where there could be more than one approach from family homes. She suggests that his caregiver's inconsistency may be because they are not sure the best way in which to deal with a child with ASC, i.e., whether his problematic behaviour is part of his diagnosis (inherent) or if he has a choice in his actions (being naughty).

Mrs N agrees with the question about having boundaries in place to facilitate consistency, but also proposes that 'knowing the child' is important. Thus Mrs N is reflecting on different aspects of Charlie's behaviour and background as part of her reflexive process. She does not say if she has 'challenged' his behaviour yet, but

recognises that she would like to. After systematically going through all of the contextual factors mitigating against challenging Charlie, i.e., his possible ASC, difficulties at home and inconsistent messages from adults, she ultimately positions challenge as a necessary experiment.

5.4.2 Parents' strategies for the person

A parental strategy to help overcome social difficulties is described by Ali's mum:

Yes, there is a lot of boys, like, they are outside the group, they no play. I saw about music on tv, it helps and so I went to the market and got a long mat. It is a piano mat.

Ali's mum describes the difficulties that her son had been having in playing with other children away from school, he wasn't part of the social 'group'. Inside school, his teachers had also identified him as 'not very good in a group really, no.... he wants all the attention on him' (Mrs S). Ali's mum's understanding of music can be understood as culturally influenced in that the information supporting her belief that music can improve social skills came from a television programme. The types of musical activities Ali's mum understood as having the potential to help with her son's issues are not clear; however, her choice was influenced by the message that music is beneficial. The parents' beliefs and attitudes towards music will be fully explored in the next chapter; however, in the context of this theme, the key point from this extract is appreciating the parent's action of investing in instruments and musical activity as a strategy to help her son overcome his struggle in playing with other children.

In the next example, Fiona's mum describes the reasons why she put her into dance classes from the age of two and a half.

Fiona's mum: I put her in because her confidence, she's quite, she was really, really shy. She still is really, really shy, but her dancing brings her out. See if you get her to start kind of dancing, she'll start dancing and then she totally, she's totally different, because that brings her out more. Because, she was really...really shy.

She describes her child as very shy and in doing so, constructs this as a problem. Her strategy for Fiona to gain confidence is to give her the opportunity to participate in dance lessons. She doesn't say what particular features of dancing give Fiona more confidence, just that she understands it to have a transformative effect on her daughter; but only when she is dancing. Fiona's mum describes her as still being a shy person, but 'totally different', showing confidence in an alternative mode of communication. Put another way, she may still be shy in the verbal mode of communication but confident in the gestural mode of communication. Performing is often conceptualised as an activity that needs a great deal of confidence and even a certain type of personality to be able to do, Fiona's example shows that perhaps this kind of intervention does not transfer skills in the way that a parent may intend but still has a positive effect on the child. Thus her confidence in some areas and not others, suggests is that it is situational and depends on certain elements or a combination of elements. These may be the activity, adults or other children present, or features of the environment such as size of room.

In section 5.2.1 Fiona's mum talked about her daughter holding back but in this extract she mentions that *her* dancing brings *her* out, that she can express herself, her identity through dance. Her confidence in dance can coexist with her shyness in other

aspects of her life. Importantly, Fiona has the agency to be expressive in dance, which perhaps lessens the anxiety of being shy at school. The key point in this section is that both parents endorse arts interventions, involving music and dance, as offering perceived benefits to the child in helping them with confidence and social skills.

5.4.3 Summary of Adults' Strategies

Parents and teachers utilised a range of strategies to help the children learn or to influence their personal development positively. Parents' strategies can be seen to be influenced by a belief that participation in arts benefits children, while teacher strategies can be seen to be influenced by EY practice and policy. In the following, final section of this chapter, I will first consider the themes from this chapter in relation to wider literature and then further conceptualise these in relation to music workshops, using AT.

5.5 Discussion

5.5.1 Confidence, sharing and adults' strategies

Scholarly discussions using the term 'confidence' can be problematic, since it has multiple and distinct definitions; but in every-day use, it can be understood as a person having certainty in their ability to act in a given situation (Stajkovic, 2006). There are psychological constructs which relate to this common understanding of confidence, for example, self-esteem, where an individual's self-belief consequently affects their feelings towards themselves, either positively or negatively (Smith & Mackie, 2007). Bandura's (1986) concept of self-efficacy is an individual's belief in their own capacity to act within specific contexts. Additionally, a person's self-

efficacy is related to the particular task and context (Bandura, 1997). For this chapter, I consider Bandura's concept of self-efficacy as having the most relevance, as the teachers' and parents' usage of 'confidence' were largely concerned with their perceptions of the children's capacity to execute actions independently.

Bandura (1993) conceptualises children with high self-efficacy as having belief in their capabilities; if they cannot achieve a challenging task then they are resilient and try again. With low self-efficacy however, a child will tend to avoid tasks they perceive as challenging and view them as a threat. In section 5.2.1, Betty was described as 'clingy' which suggests her tactic in avoiding participation was to remain very close to an adult, and perhaps to hope for the adult to act for her. Fiona frequently did not participate in nursery activities, and was understood to be reluctant to try new things independently. The teachers of these children had to find a way of helping them to participate. As CfE states, from the age of three:

Young children are partners in the learning process, actively participating in the planning, shaping and directing of their own learning. With sensitive adult support they will learn how to make good, informed choices and take responsibility for their own learning.
(Scottish Government, 2009)

Therefore, teachers have to create strategies that help children understand and undertake learning in the three different ways stated: planning, shaping and directing. In section 5.3.2, narrative strategies offer potential ways for non-confident children to be involved in making new types of interactions. Through role-play, children have the option to pretend to be someone else, potentially someone who is confident. In other words, role-play gives children an option of experiencing and practising other 'social-roles' (Larsen-Freeman, 1986).

The ability to share was identified in 5.2.2 as a capacity that nursery staff monitored in children. Again, the CfE provides context as it states that teachers have to help the children become both ‘independent and cooperative learners’. Therefore, for teachers, sharing is not just an altruistic action from a kind child, but an important process in EY learning. This can be appreciated in learning outcomes that require delivery through cooperative learning. An example of this follows from a desired outcome in EY music curriculum:

Inspired by a range of stimuli, and working on my own and/or with others, I can express and communicate my ideas, thoughts and feelings through musical activities.
(Scottish Government, 2016)

This further contextualises Mrs J’s task to help Dan realise that the nursery toys do not belong to one person. A child such as Dan, who had to be reminded to share, has to learn that toys do not have the same function in every setting. At home the toys can be all his (as an only child) but at nursery, they have a different function.

Wertsch, who builds on Vygotsky’s concept of mediation, proposes that: ‘humans use signs before understanding what they are doing’ (Werscht 2007, p.91). In Dan’s example, the nursery toys function as ‘signs’ or mediating tools, that provide an opportunity to externalise sharing before he understands the process of sharing (or internalisation of the concept).

Another useful Vygotskian (1978, p.86) concept in discussing the results of this chapter is the Zone of Proximal Development (ZPD) which is:

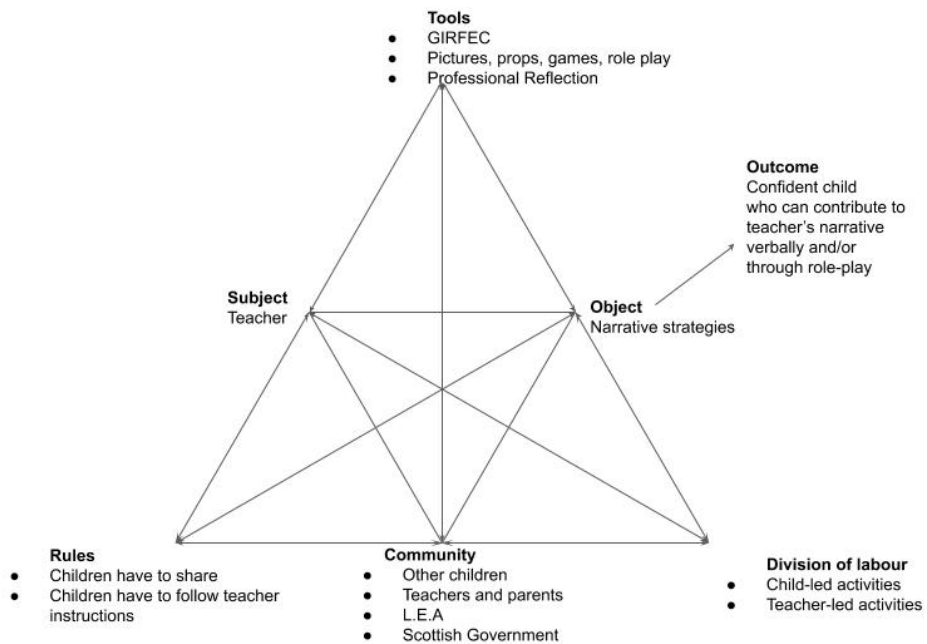
The distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers

For a child to move through the ZPD, the nature of the teacher's guidance (or strategy) is constructed according to the developmental needs of the child and the desired task. Teachers temporarily provide strategies to support learning and withdraw this help as the child gains more independence in the task, in a process defined as scaffolding (Bruner, 1966). In a study with preschool children and literacy, Pentimonti and Justice (2010) defined scaffolds in two categories, high and low support, with separate types of scaffolding strategies in each section. High support scaffolds tend to have closed questions and tasks with very limited choices available to the children, whereas low support scaffolds tend to be flexible and open. They define a 'reducing choices' scaffold (p.43) as a way of getting children to complete a task by themselves by limiting the answers that are available to them. In section 5.3.3 the directed process strategy has a similar function, as a teacher limits and controls the choices available to the children. This has an implication for children's creativity in learning activities, and I will now consider this issue in relation to my intervention.

5.5.2 Nursery Activity System

Returning to the theoretical construct of Activity Theory (AT) as introduced in section 3.10, I will now consider the elements of the nursery setting that will provide context for my music workshops. The following diagram, Figure 5.1, shows the teacher's intended outcome of a non-confident child becoming confident through specially tailored narrative strategies.

Figure 5.1 Teacher's Activity System for strategies with non-confident children



I will now consider each element of the activity system, and then how the teachers' intended outcomes compared with actual outcomes.

Subject: the subject is the individual or group who acts in the system and whose perspective shapes the activity (Engeström, 1987), in the above activity systems, the teachers in my study are the subject. In Hardman's (2007) exploration of the AT elements, she refers to the teacher making 'epistemic assumptions' (p.78) about how knowledge is transmitted and gained and that these assumptions affect how the tools are used. In this chapter, the teacher's conceptualisations of the children's capacity to be confident or able to share as inherent or lacking, can be appreciated as an epistemic position.

Object: Hardman (2007) describes the object as connected to the ‘motive behind the activity’ (p56), and that the subject (teacher) drives this. In this activity system, the object is the strategy employed by the teacher. This can be understood as the process which has the aim of encouraging a non-confident child to develop towards a goal of greater confidence.

Tools: In educational settings, symbolic tools can take the form of teacher reflection with the aim of enhancing the learning experience of the child (Sundberg *et al.*, 2016). The teacher’s interaction with the child is mediated through their professional reflective process which involves systematic working through of different contextual factors which may affect a child’s behaviour as described by Mrs N (section 5.3.4). Other tools are GIRFEC⁹ (an acronym of Getting It Right For Every Child), a government policy which places each child’s unique disposition and any additional needs they may have at the centre of decisions with and about them. Concrete objects such as pictures also can mediate the activity as well. ‘Games’ can function as a symbolic (or conceptual) tool as they are devices used purposefully towards achieving the outcome of the Activity System.

Rules: This element is concerned with the norms, conventions and guidelines for interaction in the activity system (Engeström, 1987). The teachers in this study articulated rules as including: children have to share, and children have to follow teacher instruction. These rules were gleaned from the data, however, it is important to consider there are probably many more rules prevailing in the nursery, some

⁹ <https://www.gov.scot/policies/girfec/>

implicit (cf. Meighan's 1986 concept of 'hidden curriculum') and other rules the teachers did not talk about in the interviews.

Community: A community comprises the wider circles which influence the object and has its own divisions of labour and responsibilities (Cole & Engeström, 1993). This element considers the immediate community of the participants of the activity (the teacher and the child for whom they are creating the strategy) but, in a pedagogical setting, can also encompass wider communities such as the whole school and both local and national education systems (Hardman, 2007). Policy from both the Local Education Authority and the Scottish Government affect the teacher and so are included.

Division of labour: This can refer to a horizontal distribution of tasks or vertical divisions in hierarchies or power relationships, (either symmetrical or asymmetrical). Children have agency over direct aspects of the activities in the symmetrical relationships, and very little or no agency in asymmetrical relationships. Under the EY curriculum, there has to be a mixture of child-led and adult-led activities (Education Scotland, 2006).

Outcome: Confidence can be understood as a child contributing in a particular context or to a task. In the examples in this chapter, teachers were able to entice children into participating in specific tasks but no further claims about children's overall confidence were made.

5.5.3 Transferrable points for facilitating musical creativity

The strategies in this chapter were often described as being tailored for individual children, but some suggestions were given for groups, for example in 5.3.2, using pictures and games to ‘build a story’ from. These two tools offer a jointly shared starting point, in the case of a picture which has immediate meaning (Roche, 2015). Games can have both narrative and a turn-taking structure embedded in them (Rebne & Sætre, 2019).

In the EY music curriculum there are potential difficulties for shy children in having to instigate tasks. Child-led learning is part of EY practice in Scotland (Education Scotland, 2006). If a child is shy, with the consequence of having reduced agency, this could lead to missing learning opportunities. For music workshops in a group with a key aim of developing musical agency, a teacher may have to consider narrative strategies but also be careful that more confident children do not always lead. Also, if a child is not drawn to an activity with a narrative strategy, this presents difficulties in communication between teacher and child.

However as seen in Fiona’s willingness to be expressive in a non-verbal MoC (section 5.4.2), music workshops may present an opportunity for shy children to express themselves through the music MoC, rather than the verbal MoC.

Linking back to the other main finding in this chapter, in EY education, being able to share is an explicit goal to be achieved through all areas of the curriculum (Scottish Government, 2006). In a music education context this can be realised in different ways, for example, taking turns with instruments. However, children sharing musical ideas and ideas about music, is a promising area for development. A music

intervention that includes talking about creative products appears a good way of developing the children's skills in this area. An important point to consider is that children who were described as not good at sharing often had to go through a directed process strategy. This may be a point of tension in a music workshop as the directed process strategy allows for teacher-directed creativity but not so many opportunities for child-led creativity. If communication between the teacher and child is expressed in 'battle of wills' and the perceived need to control the non-sharing child, games may offer a way of participating where the stakes are lower. Music interventions that have a clear directed process, emphasising singing in time and in tune may be less complicated to deliver than creative music activities, which have open-ended tasks with no right or wrong answers. Allowing children to experience creative music making in a group has a potential consequence; children who have difficulties participating due to a lack of confidence or ability to share may require bespoke strategies to ensure their involvement.

5.6 Conclusions

The chapter has considered how parents and teachers of the workshop participants approach their interactions with the children. These are based on the adults' perceptions of the children's personal qualities, specifically confidence and ability to share. This is a crucial point as these attitudes informed the strategies the adults used to facilitate children's learning or personal growth. Another interesting finding was that the ways in which these personal qualities are understood by adults can mediate children's participation in the nursery curriculum. Given that confidence was most often cast as self-efficacy, in a curriculum with largely child-centred activities,

children with less self-efficacy may be at a disadvantage. It is clear from the teachers' accounts that they employ a range of strategies to help children in this position and continually assess effectiveness of these. The ability to share can be externalised with toys, but even with four-year-old children, teachers encourage sharing of ideas to deepen understanding of concepts. Therefore, sharing is not just an altruistic act for a child; sharing ideas is a crucial part of their cognitive development.

In the discussion of the findings in relation to AT, this chapter has provided a wide-ranging perspective on the components of attitudes that influence teachers' and parents' decision making in creating strategies. It provides a valuable background for contextualising children's data in later chapters. Finally, my analysis highlights the value that parents place on musical activities; this will be further explored in the next chapter, which considers the adults' beliefs about creativity and music.

CHAPTER 6 BELIEFS ABOUT CREATIVITY AND MUSIC

6.1 Introduction

As the previous chapter illustrated, the parents' and teachers' beliefs about the children's confidence and ability to share were influential on how they sought to help children develop these capacities. This chapter now considers the overarching theme: *beliefs about creativity and music*. Teacher's beliefs in these areas directly affect their confidence in teaching them in Primary schools (Wilson *et al.*, 2008; Jeffrey, 2009), as well as their expectations of what children are able to produce (Cheung & Leung, 2013). This chapter will give more detail about the adults' views to contextualise chapters 7 and 8, which examine the music the children created and how they accounted for it.

The thematic outline for this chapter is given in Table 4.4:

Table 4.4 Thematic outline of Chapter 6

Overarching theme	Beliefs about creativity and music	
Theme	Conceptualising creativity	Conceptualising music
Subtheme	<ul style="list-style-type: none">• Creativity through objects and documents• Creativity through narratives• Framing and reframing creativity	<ul style="list-style-type: none">• Music is innate• Music is important• I'm not musical

6.2 Conceptualising Creativity

This theme gathers the parents' and teachers' ideas about, and understandings of, creativity and how it manifested in the children. They described children showing creativity primarily through the ability to produce artwork, but also appreciated it in their invented stories and role-play. If children did not produce artwork or participate in these activities, parents and teachers were reluctant to describe children specifically as non-creative, but found it difficult to say how they were. Creativity through music was only briefly mentioned by the adults. It is therefore useful to consider how they conceived of creative behaviour in other art forms, to appreciate influences and values in the adults' assessments of children's creativity.

6.2.1 Products and participation

Parents and teachers described the children being creative through making new artwork or stories. They were able to talk in detail about the work the children produced:

Una: do you think he's a creative, would you say he's a creative child?

Lem's mum: yes

Una: yeah, yeah. And how does he, how does he kind of

Lem's mum: yeah I can see this from ehm...sometimes we are doing crafts together and sometimes he start...or drawing. While he's drawing, I mean you can see...sometimes he's drawing a whole picture with the whole details I mean uh...once he draws Lem me and his father and...in front of the house and there is a plane because I told that he is crazy about transportation and he likes planes as well. And there is a plane in the sky and there is sun, clouds, birds and everything you can see a whole picture with the whole details in it. And eh when we uh start doing something like uh crafts or something, you use Play-Doh you can do...lots of things with Play-Doh and lots of shapes and...it's...I hope he will be creative, I hope so! I want him to be creative (laughs) ...you have, you have to have the space and tools to do this

In describing Lem's drawing, his mum values the child's detailed realisation of his world. The importance she places on the level of detail indicates an appreciation of skill, but she also values his idiosyncratic addition of a plane. Lem's mum provides opportunities for her son to participate in a variety of arts and crafts activities. These perhaps have a dual purpose: firstly to make art, but to also to explore more specific learning outcomes. For example, her participation in the activity with her son allows her to talk about early maths through making 'lots of shapes'. An inconsistency in her account of her son's creativity arises in that, when first asked, she confirms that she believes Lem is creative, but later says she hopes for and wants him to be creative.

This may represent a view that in that at this age (5 years old) with she sees creativity as an innate characteristic in her son, but perhaps something he may grow out of in the future. This may be linked with not being sure what 'space and tools' Lem will need to enable his creativity when he is older and his interests change.

Returning to learning in the nursery, Mrs S describes Tess as a creative child:

Mrs S: Just in general I would say Tess was quite creative...she can sort of produce really lovely sort of paintings and drawings and things

This quote illustrates Mrs S's view that Tess produces work of high aesthetic value, which contributes to her construction of Tess as a creative child. This is different to Lem's mum's description, with her focus on his execution of detail and therefore, an appreciation of his technical skill. Such valuing of the aesthetic aspects of a child's work has a potential implication for children's access to creative activities. Children can appreciate each other as being good at art; 'good' pictures are displayed in

prominent places in nursery schools. However, if teachers make evaluations based on personal aesthetics rather than technical skill or personalised content, there is a potential consequence of overlooking work that could be construed as creative by other standards or is valued by the child. In this way, teacher's artistic or creative values may form a barrier to children's participation. Children may not feel confident in sharing their ideas with teachers who have a particular aesthetic. As the previous chapter demonstrated, children who are not confident have to overcome difficulties in participating in nursery activities.

However, in contrast to Mrs S, Mrs J proposes a child's (Tess) participation in an art activity as an indication of creativity:

Mrs J: she's always drawing and colouring in and things like that, so she is quite creative

This account of a child's creativity recognises her engagement in the art activities themselves as an indication of creativity. There is no judgement about the quality of the work, just that the child participated. This suggests a child's preference for arts activities may influence whether the teacher perceives that child as creative or not creative, and so affect the ways in which the teacher may subsequently engage with the child. As the curriculum is a mixture of child-led and teacher-led activities, a child's initial choice not to participate in arts activities may affect the teacher's construction of the child as creative or not.

Children were described as being creative through making up stories themselves (taking place in conversation with the adult) and creating a larger narrative with

others (created with other children). Tim's mum gives an example of her son creating a story when they were walking home:

Tim's mum: he makes up a lot of stories (laughs). We were going up the street there and he was telling me about superheroes. And then going 'Mummy, I'm this superhero, you're that superhero, we did this and we did that' and I'm like 'Right, ok' and it's all just imaginative story telling (laughs)

A story where the child directs the parent into a particular role is perhaps a way for the child to entice the parent into a narrative that they enjoy. Making such a game may be the child's strategy to engage their parent's attention (Tim is one of four children). Tim's repurposing of superhero characters into a new situation is seen by his mother as the creative ('imaginative') achievement in this setting, and his participation is seen in his initiation of making a story. Therefore, Tim's mum's conceptualisation of his creativity is in this sense, similar to Mrs J's emphasis on participation in arts activities as an indicator of creativity.

Mrs N describes Fiona and her friends playing together:

Mrs N: she is in a group of friends, ehm, who do kind of spend a lot of time together each day, each session, and as I said she will communicate with them... Ehm...they're very active in terms of role play and things like stories. I mean Derek refers to Fiona as his 'Mummy' because she often pushes him in the pram! Where is my Mummy today? I'm going home with my Mummy!. I'm like 'Who is your mummy? Fiona? Oh she's still your mummy?' this has been going on for weeks kind of thing.

As seen in chapter 5, Fiona is described as shy and not speaking to her teachers much, which is an assessment shared by her mother. However, she is able to contribute to this particular child-only game, 'she will communicate with them' in a way that she doesn't with adults. In this activity the children playfully reframe adult roles. Mrs N appreciates this game as forming an engaging structure for the children to explore these roles, with favoured scripts and strategies. As this game progresses

over the weeks, the children can co-author the fine details of the story, even if the roles are set. This illustrates the children being creative with familiar structures, using them as the basis for developing their narrative. Therefore, this construction of the children's game as a form of group creativity is notable, as previous descriptions in this chapter have centred on either individual expression of creativity or in an adult/child dyad. A potential benefit of this child-led activity for Fiona can be construed as a situation where she can communicate comfortably with her peers on her own terms, through a creative activity.

6.2.2 Non participation

Parents and teachers of children who did not produce art or stories or participate in these activities were reluctant to describe their children as non-creative, as seen in the next extract.

Charlie's mum: he's been seeing the Autism team and he's just got a formal diagnosis of autism last week from the Doctor down there, and they were like 'He's got no imagination at all'

Una: and do you think he's a creative child?

Charlie's mum: it takes a lot of work to get him to...I've never had a drawing or a painting or anything like...he likes jigsaws...very logical...but I'll never get like a picture off him or a drawing or anything...so I wouldn't say he was creative that way.

Una: And how about musically creative? Would you say?

Charlie's mum: See...I don't know how musically creative they should be at that age (laughs) but I just... (exhales) I see him like picking up...musical instruments and just kind of making...like to me he's making, he's just making noises - do you know what I mean? In his head he's obviously doing stuff.

In this extract, Charlie's mum mentions her son's recent ASC diagnosis, which includes a rather harsh opinion from the doctor. However, she may not fully agree with the doctor as she works through different understandings of creativity. Also by

saying ‘it takes a lot of work’ she could be asserting that he is able to be creative but that this takes time or needs substantial input from an adult. Charlie doesn’t create pictures but she suggests there are other ways in which he could be creative – ‘I wouldn’t say he was creative *that way*’. Following the suggestion of Charlie being creative through music, she says she has no knowledge to refer to about what musical creativity might be expected of children of his age. Charlie’s mother is uncertain about whether her son’s play and experimentation with sounds could be construed as creative. She finishes by saying ‘in *his* head he’s obviously doing stuff’ which implies that she thinks he may be musically creative but she can’t access or assess this. This could be because of his diagnosis, or because she has not thought of music in this way as there is an implied lack of external value in deeming his efforts as ‘just making noises’.

Mrs S presents her perspective of Ben’s creativity

Una: would you say Ben was a particularly creative child, or?

Mrs S: No, he is...he likes singing and dancing, he likes if there's music on...you know you see him kind of thinking 'Oh, where's that coming from?' and he just...he has - he's got rhythm, he just, he just enjoys music and the, and the instruments if they're out. He would go and he would...he likes to hear the kind of different sounds that they make. And...yeah. No, he is interested, maybe not the art, crafty kind of creativity, but he's musical and he likes kind of role play as well.

Mrs S frames and reframes her thoughts on Ben’s creativity, her first thought was to say that she didn’t think he was creative, however this could be the case if she was considering creativity in relation to his painting and drawing efforts. In a similar way to all of the teachers in this study, Mrs S began a reply but quickly changed direction to focus on the child in terms of what he could do rather than what he could not do. This aligns with the ‘positive strategies’ in section 5.3.4 whereby teachers cast

potentially problematic issues in a constructive way. Mrs S thinks about Ben's participation as evidence of being musical in a similar way to how she understood Tess's creativity in section 6.2.1. A point that ties in with the next theme (*conceptualising music*), is that the way in which Mrs S talks about Ben being interested in different sounds as constructing a preference in Ben for musical activities. Finally, Mrs S makes a distinction between the types of creativity valorised in earlier quotes (in section 6.2.1), and being musical. Her qualification ('but') when offering his musicality as evidence of his creativity suggests that she anticipates that artistic activities are perceived as higher in a creative hierarchy than musical activities.

A final account of creativity in this section from Mrs N, considers a broad definition and potential applications of creativity in the nursery:

Mrs N: creativity, I mean, as I said, some people think it's just in the art area and creativity is all about art and design - well no, it's not...it's like you're saying it could be music...it could be...I mean you could even have creativity in the snack area (laughs) do you know what I mean? If they're making a kebab and they're going to have three strawberries, to me that's being creative. It's not just following suit of having, oh well everybody has got a grape and 'Well I'm going to have two pineapples. And I'm going to have' -to me that's still creativity - that's choice, that's freedom. That's being able to embrace, to me that's all creativity...it's a huge factor in play, it's a huge factor in learning

Mrs N's construction of creativity describes putting objects together in a surprising way valuing these small, everyday actions. A key feature of Mrs N's conceptualisation of creativity is the prioritising of choice and freedom – rather than an aesthetic judgement on the value of an object, document, narrative or other activity. Three important factors are that: the children have the confidence to make change in an activity when they are in a group; the teachers are open to appreciating

and discussing it and that teachers have time and space to do so. However, the kind of choices and freedom available in the snack area are perhaps easier to facilitate and manage than in a music group with six children playing together.

6.2.3 Summary of conceptualising creativity

Teachers and parents understood the children's creativity through creative products (pictures, stories and role-play) and their participation in arts activities. They seemed reluctant to label children definitively as non-creative suggesting they recognised this as a valuable attribute. Creativity through music was acknowledged as a concept but not applied to the children's music making.

The following section turns to the adults' understandings of music.

6.3 Conceptualising music

Conceptualising Music captures various ways in which parents and teachers describe their ideas and values about the children's musicianship and their own. In the first subtheme, *music is innate*, the children's love of music is described as inherent. This is understood as a deep engagement with music and also as an explanation for demonstrable skill. The second subtheme, *music is important*, gathers a variety of ways in which parents supported their children's musical activities. In the final subtheme, *I'm not musical*, the parents' and teachers' views of themselves as non-musicians are explored.

6.3.1 Music is innate

All but one of the parents spoke of their children as being musical and loving music.

A common sequence in the transcripts was to speak of a child's love for music and give an example of a spontaneous embodied response to music, often through dance.

Mrs J's description of Ben demonstrates this point:

Mrs J: he absolutely loves music...I remember when right, right when he started last year he was....he was quite strange and we were just wondering about him but then any time any music was on or anybody was singing or anything...he immediately got up and started dancing. So he's always, he does, he does love music. I remember him actually even sitting, sitting on the floor one day and there was music playing and he was...sort of just sitting and he was...making all these movements, it was really quite interesting...all these sort of...I don't know if it was Tai Chi or something, you know these kind of movements...and really responding to the music -but not much language obviously

In Mrs J's description, Ben's response to music seems almost magical, she can appreciate his level of engagement with music even though she may not understand what he is thinking. In this way, Ben's response seems to function on another level, perhaps even a separate channel of communication. Ben is a native Mandarin speaker, and when he started at the nursery he barely spoke English. For the staff, there was no way to appreciate what music meant to him, except from observing his response to music. Thus the teachers understood Ben to be musical through his spontaneous embodied response, not through playing an instrument or singing. They perhaps had this particular understanding because their communicative options were limited by the language barrier to apprehending the child's engagement and preferences through non-verbal forms of communication. This extract also presents a conceptualisation of music being mysterious as it brings forth interesting movements and a high level of engagement. The spontaneous nature of Ben's response also may add to this understanding; if he can't stop himself responding to the music, then it is

innate, and this idea could form the teacher's construction of Ben as a 'musical child'.

The next extract considers an alternative view of innate musicianship as seen through an appreciable possession and execution of technical skills.

Ali's mum: Ehm, I have a very big piano like Mrs S's piano. Ali start here and eh Ali make, different three or four type of... type of tunes ...and he know three or four ...and uh (long pause) and different playings... and one day...I was surprised by him! 'You make this tune? Very nice, is that a nursery rhyme tune? I understand... I think that button is that, that tune'....I just...pretend wrong, pretend...I know, I just pretend the wrong one...he says 'No Mum! That's wrong!' (laughs) 'its wrong, that is the right!' (laughs) you know? And he thinks that, 'I think so this is the right button'... yes he make some tunes, Mary Had A Little Lamb and...like...Twinkle, Twinkle...Happy Birthday To You. Yes, but ehm...if I say that uhm 'This, you press this', he say 'No! Don't tell me, I will think and I will.' And I think 'Yes you are genius! (laughs)

Ali's mum recounts a situation at home where Ali is playing nursery rhymes on a big piano mat. His mum describes a game in which she plays the wrong note in a known nursery rhyme and her son corrects her. She shows pride in Ali's mastery of being able to reproduce nursery rhymes correctly. Ali's mum also role-plays with him as well, by acting as the less experienced other, and Ali is able to correct her mistakes even though he has not been to formal music lessons. Ali's mum view of his musicianship is innate, of value and crucially, connected to his demonstrable aural skills. As well as this, a description of Ali from Mrs S seems to support his mum's view: 'oh, musically he's really great...he's got talent!'. The concept of 'talent' in relation to a child's musical ability can be a problematic concept if it is seen as an innate aptitude, rather than a capacity which has been, or can be, nurtured. There is a potential consequence that children who are seen as lacking in talent might not be given the same opportunities as those who are understood to be talented.

6.3.2 Music is important

This theme focuses on the ways in which parents supported their children's musical activities.

Katie's mum describes her daughter's engagement with music at home:

Una: can you tell me about what music she, she does in, in the home?

Katie's mum: Ehm she's got her...keyboard ehm and she's got a wee, she's got a, she's got a big mat...like piano type thing...like it's a big massive, massive thing. Ehm and she's got her own wee keyboard and...she's asked for a bass guitar from Santa...so her Dad's actually got her it, so, so...she's getting that for her Christmas (laughs) That's all she's went on about, is a bass guitar. Have you seen the film Tooth Fairy?...she's, she, she likes that and the wee boy in that plays the bass guitar and she...loves the, this band and she copies them and she's like 'I want one of them! A pink one but - a girl's one!' (laughs)

Katie's mum provides support to her daughter in various ways, firstly she buys instruments for Katie, but she also listens to her and takes account of her preferences when choosing these instruments. She is able to appreciate Katie's action in copying the music from the film and so can describe her daughter's engagement with music. By buying different instruments she enables Katie to experiment with different sounds, and so provides a rich musical environment for her to explore.

Fiona's mum describes her daughter's music listening preferences:

Fiona's mum: so she kind of likes older stuff right enough...like Patsy Cline and stuff like that! (laughs)

Una: (laughs) do ehm...does she, yeah. Sometimes like...does she like that by herself?

Fiona's mum: Ehm...her grandparent - her Nan likes Patsy Cline so...she just loves Patsy Cline we had to take her to the show and stuff like that and... (laughs)

In this extract, Fiona's mum describes her daughter's love for Patsy Cline, which she attributes to Fiona picking up on her Nan's interest. By taking Fiona to a show, her mum recognises the bond between Fiona and her Nan in their shared musical interest. In this way, music is important to this family. It provides a link between

generations, through an activity they can both enjoy. This mutually enjoyable activity needs the time and attention of her Nan, through listening, talking about and perhaps joining in singing with the Patsy Cline recording. Such participation does not need money, apart from an occasional show, in contrast to many musical activities for children. Thus, the family's value of this musical pursuit is passed on to Fiona through the time spent in the interactions around music with her Nan as well as the special event of going to a show.

Tess's Mum gives an account of her daughter's engagement with music:

Tess's mum: ehm and the guitar that's over at my friend's house, she sits and she just like that with her fingers and she just...things away, she just strums away, so she does, but she could be sitting there for hours if you let her

In this quote, Tess's mum allows her daughter time and space to be creative on her friend's guitar. Unlike Ali's mum in section 6.3.1, she does not intervene to try and shape Tess's activity with questions or games that might aim to test knowledge. In this example, the key features are that Tess is engaged for a long time, she is improvising, and her mum gives her time and space to do so.

These examples show diverse parental actions: some participated in the musical activity (Ali's mum), some let their children play uninterrupted (Tess's mum). Music provided a shared activity across generations (Fiona's mum) and parents were able to respond to their children's preferences (Katie's mum). The reasons behind these actions are complex. Some parents described music as being 'good for them' (Ali's mum), but did not elaborate on the ways in which they understood it to be beneficial. Other parents expressed a belief that music participation was beneficial for cognitive

development. For example, Jess's mum proposed the following: 'but music...its so important for them, its meant tae be good for their.... brains you know'. All of the parents in this study apart from one, facilitated their children's participation in music. It could be that they see it as an activity which will benefit children's cognitive development and therefore that it is 'important' to give their children access to music. It can be compared in the way that they might give vitamins to their children to help bodies develop. These beliefs could indicate an accessible discourse of 'good parenting' – i.e., positioning themselves as the kind of parent who is aware of what is good for the child, and aware that that should include music opportunities.

6.3.3 I'm not musical

The final subtheme in this section captures the teachers' and parents' constructions of themselves as non-musicians. At this point it may be useful to appreciate that music is an everyday activity in Scottish nursery settings (Gallacher, 2005). Sessions typically begin and end with hello and goodbye songs. Nurseries often have concerts at Christmas time and at the end of spring and summer terms. Most nurseries have instruments and will allow these to be played with as part of free play sessions. Songs are used as an engaging vehicle for developing and explaining concepts, for example: 'Five little ducks went swimming one day' explores numeracy; 'I can sing a rainbow' introduces colours. Songs are also a way of exploring local and far cultures. Thus, all teachers have to participate in singing with the children, teaching them new songs, both of which aspects require some skill. All of the teachers in the study identified as non-musicians, even to the extent of speaking for the whole nursery and the children's potential response to the workshops:

Mrs T: probably if they'd been in a real musical nursery they'd have been able to catch on...because we're not really a musical nursery

This quote came from a discussion about the how the children responded to different teaching strategies that I used in the first week of workshops. The strategies were designed as open-ended, with the purpose of generating new ideas, with no expectation of a particular answer. Mrs T interpreted the children's improvised musical response as not 'catching on', or in other words, not giving the correct response. Her perception of the children not completing the task satisfactorily led her to explain that the children were not at fault, because the teachers had not instilled enough musical knowledge and understanding in the children for them to 'catch on'. They had not done so because nobody in the nursery had the musical skills to pass on. As the interview progressed I was able to reassure Mrs T about my open-ended aims, but her initial thoughts reveal an entrenched conception of herself and her colleagues as non-musicians.

Mrs J describes her thoughts about teaching music:

Una: do you think of yourself being musical at all?

Mrs J: not at all and if anything I shy away from it. I'm quite arty -but musical - no. And I would like maybe somebody to come and sort of say 'Oh you could do this and do that' you know, kind of thing? so I think actually, I'll do art you know and I'll do...sort of creative things there...but not music. Singing - you know it doesn't bother me singing, playing round games anything like that you know - new songs too, but when it comes to music you know it's like eh introducing music, what sounds do they make? Things like that and then after that I'm sort of at a loss you know! I'm like ...oh!

Mrs J makes interesting distinctions between different types of arts activities. To begin with, she positions herself as strongly non-musical and even averse to music. However, she recognises that music should happen as she says she would like somebody to help her with strategies for teaching music. There is a suggestion that

she sees potential for music as a creative activity as she expresses her willingness to do ‘creative things’ in art but not music. This could be due to a lack of confidence or a lack of strategies, or both. She is at ease singing and even teaching new songs which require musical knowledge and confidence, and suggests that she would be able to start with music activities by first introducing instruments and listening to their sounds. Ultimately she ends up positioning her non-musicianship as a lack of knowledge, but this quote considers her musicianship in the nursery context as part of a professional identity. She may have a different conception of herself as being more musical away from work, for example listening to music at home or going to gigs.

Mrs T considers how her own music teachers may have affected her beliefs about music:

Mrs T: I think music is 'Oh you've got to be all singing, all dancing!' you know? But that's not really what it's all about is it? (laughs) Aye! That's it. So that's probably how it's put me off probably as a child...is that's what input I've got and I've been like that 'Oh I'm not comfortable with this' I think ehm at secondary school when you did music and things like that and the teacher was going around the class, and you had to, you know recognise your signs and things like that. And I think that I was a bit (gasps) 'I don't know my signs!' so you go into a panic so that I think that as a child it just puts you off, you're like that.

At the beginning of this extract, by saying ‘you’ve got to be’ indicates that she is considering what teaching music requires in the nursery context. Understanding music to be ‘all singing all dancing’ relates to fluency and skill in performing, and, indeed, much of the music in the nursery may be geared towards shows at Christmas and Summer shows for the children’s parents. She then reflects that music has other important aspects which performing does not cover. This could be for two reasons. Firstly, my position as workshop leader/interviewer: Mrs T knew my intervention

was about facilitating creative musical activities, so she acknowledges that I am providing a different type of musical activity from that which the nursery has given. Secondly, there is also a mismatch between her conception of musical skills and that in EY curriculum in music (see section 1.3.2), which focuses on experimentation with sounds and being able to talk about these explorations. She explains this as a consequence of being put off by teachers – she describes the kind of ‘input’ from teacher as having made her uncomfortable. As part of a music class, she was put on the spot and asked about her musical recognition skills in front of her peers. Mrs T is around 55 years of age and UK music education around forty years ago focused on learning Solfège signs (Green, 2008). She accounts for music as being about performance and the ability to recognise and reproduce signs but ultimately seeks an alternative; possibly because she is responsible for the curriculum area in the nursery and also because she may want a different learning experience for the children she teaches. Even though she feels this way about music, she would not want to pass this attitude on to the nursery children.

Tess’s mum gives an account of playing music with her daughter, but at the same time feeling unsure about her own skills:

Tess’s mum: I’ve been trying to learn the guitar for years (laughs). I can play... like...stand by me...now Tess but, she’s got a wee ukulele and that and she’ll just kinda...play wi it now and again or get the keyboard oot.. I had a keyboard from age 10...so she likes to play that

Una: do you do music together

Tess’s mum: uhhhhh...sometimes, noo and again we’ll get a wee shot but.... I’m no very...good (laughs) if you know what I mean, I cannae read music, I cannae really teach her how to dae it... but she’ll get near the guitar and sit and mess about wi it but...I dae know some chords but, I dae try and show them what I... wee chords....that’s all I know

Tess's mum does not explicitly identify as non-musical but certainly downplays what she can do. There are five chords in *Stand By Me* (G, Em C, D and D7), and as this song is approximately Grade 1, needs some skill to execute. However, she asserts that she is 'not very good' and follows this statement with an explanation that she cannot read or teach music. Thus, her understanding of being good at music is tied up with an understanding that it is about having good technical skills and being able to pass these to someone else. Tess's mum has also sustained her interest in music through her life by playing keyboard from a young age and keeping this instrument for her daughter to play on. Her long engagement with music and facilitation of musical opportunities for her child indicate that she values music highly even though she takes a dim view of her own abilities.

6.4 Summary

This chapter presents parents' and teachers' complex and contradictory beliefs and values about their understandings of creativity and music. In the first theme, *conceptualising creativity*, children's creativity is appreciated in different ways. Firstly, skill is valued as is associated with recognisable artistic symbols that parents and teachers can appreciate, and so evaluation of the art work has a tangible focus. Secondly, aesthetic quality was offered as another indicator of creativity, although this has problematic implications for access to creative activities. Thirdly, a child's participation in creative activities could also be seen as another indicator of creativity, with no judgment on aesthetic quality.

Conceptualising music has a narrative which can be seen through the titles of the subthemes. The first two: *music is innate* and *music is important*, present a positive basis from which to proceed. However, the last subtheme: *I'm not musical*, is problematic in that teachers are required to cover this area of the curriculum whether or not they feel that they are musical. In the subtheme, *music is innate*, music is described as a part of the children, who, even at the age of four, have an inborn love for, and even skills in, music. Following this, *music is important*, demonstrates the time, space and resources that parents put into musical activities with their children. The last theme of this chapter indicates that teachers wrestle with their feelings of having a lack of musical skills and knowledge to teach music creatively, yet they can appreciate the need for this to happen.

6.5 Discussion

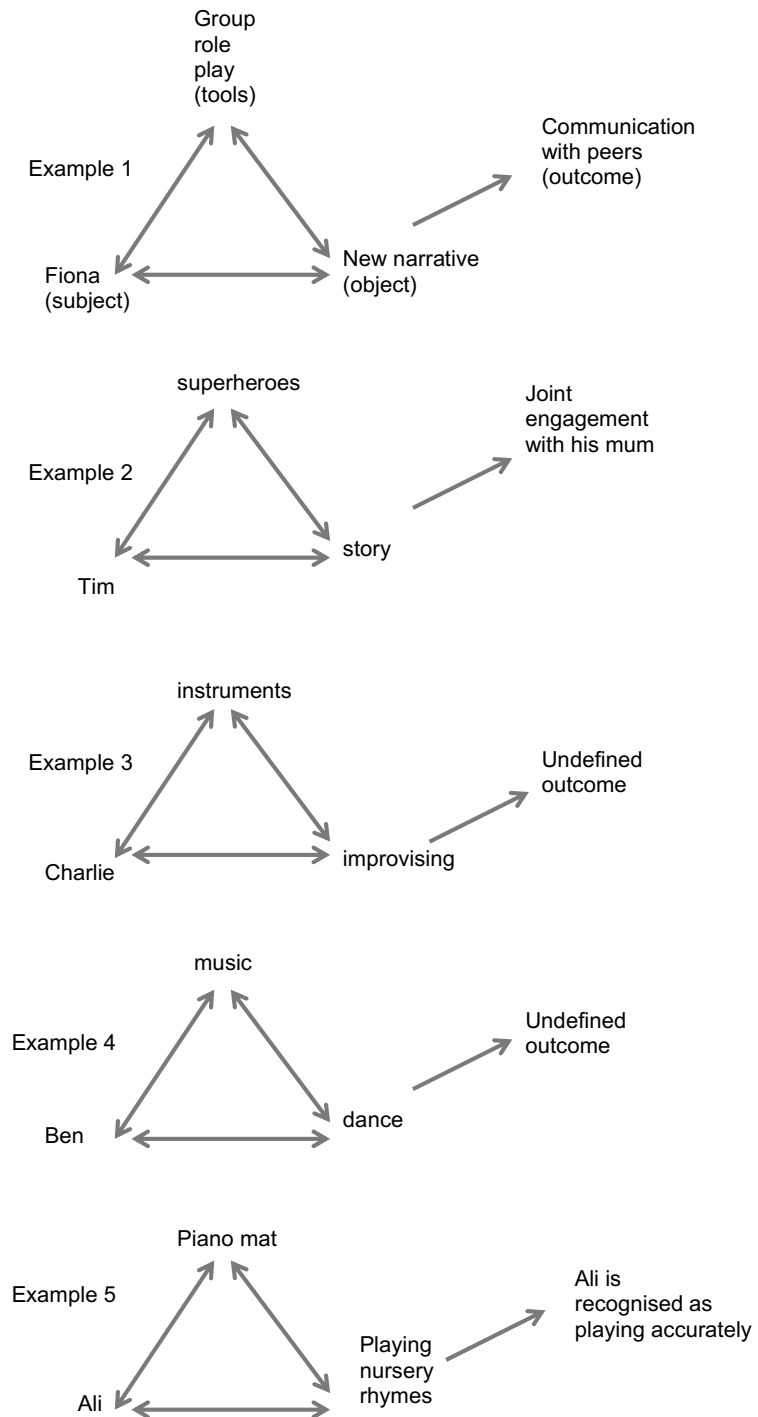
Creativity is seen as a valuable attribute by parents and teachers in this study and this attitude is mirrored in Scotland's curriculum (Education Scotland, 2006). For the teacher, there is more agency in creating the curriculum content to meet the specific needs of their environment (Biesta *et al.* 2015). However, in creative music tasks, the teachers in this chapter expressed difficulty realising the aims of the music curriculum for this stage, (see section 1.3.2), perhaps in some part due to the openness of prescribed experiences and outcomes (Biesta *et al.*, 2015; Yates & Young, 2010). Another aspect of the difficulty could be attributed to the conflict of negotiating their musical identities as non-musicians but having to teach music. (Young, 2016) also identifies a 'research/practice gap' in EY music education due to institutional demands and professional expectations. Consequently, EY practitioners

may struggle to access effective research evidence in designing and delivering music education. The following three sections expand on significant findings from this chapter.

6.5.1 Differences in understandings of creativity and music

This section discusses adults' understandings of what mediated children's creative and musical activities as well as the perceived outcomes from these (as seen in sections 6.2.1, 6.2.2 and 6.3). The top part of Engeström's (1987) activity system provides the means to compare different activities, as they were all mediated in some way. Figure 6.1 provides an illustration of how adults talk about music differently to other creative activities. In each example, the *subject* is the child who was undertaking an activity; *tools* are whichever were pertinent to each situation; *object* is the description of the activity carried out by the child and the *outcome* is the result of the activity as interpreted by the adult.

Figure 6.1 Five illustrations of the relationships between children, tools and creativity or music



In examples one and two, Fiona's teacher and Tim's mum were describing instances where they expressly understood the children were being creative. In examples three, four and five, the adults were describing the children engaging with music in some way. In the first two examples, the adults infer the child's creativity as having a communicative purpose. In examples three and four, the adults found it difficult to apprehend what was going on in the child's head or the possible intent behind their actions. In contrast, when children created stories or group narratives, the adults could talk about these products with the children as they had a shared point of reference. In example five, Ali's mum was able to understand his engagement with music as she knew his references (e.g., Twinkle, Twinkle) and was able to communicate with him playfully and praise him for his accuracy. As well as this, the nature of Ali's musical activity had a clear aim: to replicate a nursery rhyme.

For an adult, moving beyond encouraging children's creative musical play to engaging and communicating with them about it means finding a shared point of reference. The inherent ambiguity of music (Cross, 2005) and improvisation (MacDonald *et al.*, 2012) creates a challenge in finding a common basis. Therefore, talking about improvisation may be difficult as it can be construed in different ways (Wilson & MacDonald, 2017). These factors, together with the age of the children in the study and the beliefs that parents held about their own musicianship, can form barriers. This can be seen in the example of Charlie's mum's finding it difficult to understand what was going on 'in *his* head' when he was improvising.

Examinations of musical creativity in young children have mainly focused on individuals (e.g., DeVries, 2005; Young 2005; Barrett 2006) and interactions in dyads and groups of three (Young 2003b and 2008 respectively). Young (2003b) suggests appreciating musical creativity through the children's ability to negotiate structural devices (exchanging phrases, creating sequences and transformation of material) and expressive actions (responsive dynamics) within improvisations. Sawyer's (2007) concept of collaborative emergence where shared structures (such as rhythmic coordination) occur, provides a basis for identifying and understanding features arising from group improvisation. The process for researchers to apprehend these musical parameters involves repeated listening, transcribing and analysis. For parents and teachers without a musical background, this procedure is not possible. However, providing instruments and encouraging experimentation is a crucial first step to supporting children's musical exploration.

6.5.2 Identity and self-efficacy

Facilitating children's own self-efficacy in creative musical activities can lead to teachers designing creative musical activities with the emphasis on participation and engagement rather than passing on adult values of what constitutes quality. A study by Davies and Harre (2001) found that once a young person has taken up a position within a discourse, such as 'I'm not really a musician', he or she will inevitably come to experience the world and his or her self from that perspective. In Chapter 7, the children in the current study's own conceptions of themselves as musicians will be explored: it can be seen that even in young children, their ideas about music and their own ability have begun to form.

Parents have a crucial role in their children's musical development. For example, Borthwick (2002) investigated family influences on children's engagement with music using 'script theory' (Byng-Hall, 1995). This examined the ways in which different familial factors can shape a young person's musical path and identity. In examining children from different backgrounds, both musical and non-musical, parents' expectations and musical identity affected children's personal and musical development. Tess's mum's understanding of herself as 'not very good' even though she had achieved enough skill to play pop songs on the guitar reflects findings from Hallam (2017, p.142) that the ability to read music was one of the 'strongest perceived indicators of musical ability'. However, even though she did not feel skilled, she valued musical activities and provided instruments and opportunities for Tess to play music.

6.5.3 Enabling creativity

The teachers in this study felt more secure about delivering art and early drama activities (such as role-play and making up stories) than music. They also used different teaching strategies in passing on ideas of aesthetic value compared to encouraging participation with no comment on perceived quality. A study by Jeffrey and Craft (2004) suggested a learner-inclusive pedagogy to foster children's creativity, in which teachers' practices should focus on passing control back to the learner, working together with children to identify problems and discussing the children's thoughts. This aligns with the action of fostering participation rather than passing on values. Other research (e.g., Gandini, 2005 p.46) proposes 'systems' that organise and prepare children to think together in creative tasks. Both of these

studies suggest taking account of the whole nursery environment, and that creative tasks are specifically designed for groups. This aligns with Amabile (1996,1997) who suggests that creativity can be encouraged by providing sufficient resources and having support from management. Cremin, Barnes and Scoffham (2009) also highlight the need for school management to value creativity.

This chapter has shown that adults have more ways of conceptualising creativity and talking to children about it in activities such as art and making up stories than in music. To support musical creativity in EY, adults could consider the nature of their engagement with the children around their creative musical play. Approaches from how art activities are conceptualised could be transferred. An example is finding alternative ways of talking about it with children that do not focus on evaluative comments on technical or reproductive skills. The narrative strategy outlined in 5.3.2 could be used as a tool to transform musical events into metaphors that create a shared point of reference.

The next chapter will present analysis of the children's talk through the workshops.

CHAPTER 7 CHILDREN'S CONSTRUCTIONS OF IMPROVISING

7.1 Introduction

As Chapter 6 demonstrated, parents' and teachers' beliefs and attitudes towards children's creativity influenced their expectations of what the children could produce. This chapter now explores the children's personal constructions of improvising, and interpersonal actions during the workshops. It identifies three conceptual tools that mediated the children's understandings of improvising: existing references, descriptive phrases and combining tools. Children developed understanding of different hierarchical roles, for example, getting to choose what kind of activity took place. As well as hierarchical roles, the children articulated what their own distinct musical roles were within the improvisations.

Talking about improvisation has been acknowledged to be difficult, because it can be constructed in many ways (Wilson & MacDonald, 2017). There are additional challenges in this study as children of this age (four and five years old) are still developing language and communication skills. Therefore, as seen in section 4.8, the children's talk data were gathered from the children throughout all of the workshops rather than from one specific section dedicated to talk.

The following table shows the names of the children and which cycle they participated in.

Table 7.1 Children of Cycle I and II

Cycle I children	Ali, Ben, Dan, Jane, Jess, Katie, Christine
Cycle II children	Betty, Charlie, Fiona, Lachie, Lem, Tim

As described in section 4.7, all of the children’s talk from the workshops was analysed using Thematic Analysis. Two themes were identified, *conceptual tools* and *exploring roles*, which are presented with their subthemes in the following table:

Table 4.5 Thematic outline of Chapter 7

Overarching theme	Children’s constructions of improvising	
Theme	Conceptual tools	Exploring roles
Subthemes	<ul style="list-style-type: none"> • Existing references • Descriptive phrases • Combined tools 	<ul style="list-style-type: none"> • Workshop roles • Musical roles

7.2 Conceptual tools

This theme explores the nature of the references and ideas children used when talking about workshop activities. These references and ideas are defined as conceptual tools, as they served to mediate the children’s understanding of the workshop activities and their actions within them. Three categories of conceptual tools were identified, and form the following subthemes: existing references, descriptive phrases and combined tools.

7.2.1 Existing references

In early workshops, children related workshop activities to previous understandings and experiences of music from their home lives and nursery music activities. These references were from different pursuits involving music and included listening to music, films, singing nursery rhymes and playing instruments. At an early stage in both cycles, the children expressed the idea that ‘music’ was a different activity from those in the workshops.

(W2C1)¹⁰ Conversation after a vocal improvisation.

Ali: Can we do the music now?

Una: We are doing the music

Ali: No, the music

Una: the instruments? We’ll do that after this.

Ali: yes, my mum say I’m good at music

In this extract, Ali positions music as something other than the workshop activities, for example, most children in the Cycle I nursery had English as a second language and ‘music’ is easier to verbalise than ‘instruments’. Another possibility is, in this particular school, the nursery staff conceptualised and referred to music as an activity with instruments. Ali’s mum’s understanding of music is similar: in section 6.3.1, she described being good at music as possessing technical expertise on an instrument. Ali receives support and encouragement from his mother when playing instruments at home. She values Ali’s accuracy in his execution of nursery rhymes and his aptitude to spot mistakes in her playing. Therefore, Ali may have been looking for a situation comparable to playing a nursery rhyme and receiving praise for its accurate execution. Interestingly, Ali sees himself as ‘good’ at music,

¹⁰ (W2C1) refers to Workshop 2 in Cycle I. All extracts are labeled in this manner, e.g., (W3C2) is Workshop 3 from Cycle II. A brief description of the context of the extract follows the label.

demonstrating that even at the age of four, his identity as an effective musician is meaningful to him. In other words, his musical identity as a good musician mediates his workshop participation.

The children used references from music experienced in their home life such as songs sung by the character Elsa from the Disney cartoon *Frozen* (2013), as well as nursery rhymes.

(W3C1) Conversation after warm-up exercise.

Una: what did we like doing last time, do you remember?

Jane: Frozen

Una: that's right we talked about

Jess: I like Elsa [starts to sing the song 'Let it go']

(W4C1) Conversation after creating music that described going on a journey

Una: so we can think about how we feel going to the park and play it on the instruments

(Christine shows a heart-like shape with her hands)

Una: is that a heart?

Jess: no, its incy wincy spider (starts singing) 'incy wincy spider'

(other children join in with song)

In the early workshops in both cycles, I spent some time getting to know the children, asking them about music they liked and disliked. In the first extract, Jane refers to the song from *Frozen* as the most memorable feature from the preceding workshop. This could have been for various reasons. In the early workshops, the children played freely improvised music (following an instruction to 'just play') however they may have regarded this as a significant activity at the time, or might have lacked the linguistic or semantic facility to describe that experience.

Alternatively, *Frozen* may be an all-consuming interest for Jane, besides which

nothing else is memorable. The children were likely to have had an understanding of musical concepts such as fast and slow, however they perhaps did not translate these concepts to the new improvisational context. As well as this, discussing music may be a new activity for the children; perhaps their teachers did not approach teaching music in this way. As seen in section 6.3.3, the teachers in the nursery had similar conceptions of music: being good at music equates to having technical skill on an instrument rather than being able to apply musical concepts in different contexts.

In the second extract, having talked about describing feelings through music, I interpreted Christine's gestural response as a heart shape. Jess's association of her hand shape with 'Incy Wincy' provides a common reference for the rest of the group to latch on to. Singing a familiar nursery rhyme is perhaps more immediate than making up music. This episode also demonstrates the rapid response of the group to a gestural communication. As seen in chapter 5, the teachers employed a range of pedagogical strategies, verbal, gestural and role-play to accommodate 80% of the children at the nursery having English as a second language. Thus, the children in Cycle 1 may have been responding to a wider range of teacher strategies than I was aware of.

Finally, at this this point in the workshops, it is possible my purpose was not clear to the children. An iterative cycle of talking and playing presents new expectations of how to participate in a group, when compared to nursery rhymes at circle time or creating music with a parent. Therefore the children had to adjust their expectations of how the concept of 'music' was enacted in the workshop context, as it was

distinct from their previous experience. In other words, the children's understanding of what they were doing tended to be filtered through familiar music practices and commodities.

7.2.2 Descriptive phrases

Descriptive phrases demonstrate children's use of imagery, expressed verbally, as a way of categorising and talking about their improvisations. Children gave their improvisations descriptive titles, which allowed them to refer to improvisations from previous workshops. They also offered their own suggestions to enhance or develop mine; therefore the initial descriptive phrase provided a jointly understood starting point.

(W4C2) Conversation after warm-up exercises.

Una: Do you remember what we did last time?
Fiona: the spooky music!
Una: That's right, well done, spooky and what else?
Tim: the rain music
Freya: and the cold music
Una: well done! The spooky music and the cold music and the rain music
Lem: rainbow music
Una: that would be nice, rain music and rainbow music, today we could do rain music and rainbow music
Tim: rain makes rainbows
Fiona: and sun
Una: that's right, today we could do weather music?
Tim: (sings) rainbow, rainbow how are you?
Una: (copies song) rainbow rainbow how are you?
(Children begin to improvise, combining playing instruments and using their voices)

In the extract above, the children recall a list of pieces we did in the workshop two days beforehand. This contrasts with the Cycle I children, who, at a similar point in the workshop programme mentioned familiar references (Frozen and Incy Wincy) Cycle II children could remember the pieces we had explored but also suggested new

ideas, which were strongly associated with the original pieces, for example a rainbow piece following rain. The descriptive phrases allowed the development of a musical idea; in this example the children switch from verbal to musical modes of communication when Tim sings an improvised rainbow song. Therefore, the group's shared understanding of the rainbow idea functions as starting point for the next improvisation by the children making and extending creative associations.

The following extract illustrates how a descriptive phrase facilitated experimentation with instruments.

(W4C2) Conversation after a 'rainbow music' improvisation.

Una: how do we do a rainbow sound?

(Children play instruments)

Una: Are the drums good for rainbow sounds?

Lem: like that? (he plays his drum with a circling motion quietly)

Una: great! Lem came up with an interesting point – he said how about this drum sound for a rainbow, can you show me?

(Lem plays drum with circling motion again)

My purpose in this session was to explore unconventional sounds and then build new playing repertoires that could be referred to in free improvisations. The extract begins with an open question leading to Lem creating a new sound to employ when playing rainbow music. My first question was open but the subsequent question was closed, with a yes/no answer. Lem supplies the 'right answer' in this context by playing his drum in an unconventional way. More conventional ways of playing the drum would be by hitting it. The pedagogical aim was to encourage unusual way of playing a drum, with the experimental process being more important than the sound created, scratching or flicking the drum would have also been acceptable.

7.2.3 Combined tools

This subtheme focuses on children's combinations of conceptual tools. Existing references and descriptive phrases are pooled with musical terms to create a common resource for the group. These combined tools made it possible for children to communicate musical intent to each other about future improvisations, or to assess previous improvisations.

The first extract is a conversation that occurred after three separate free improvisations in Cycle I. At the time of the second extract, Cycle II nursery had a project where they had eggs and incubators, to let the children see chicks hatch.

(W8C1)

Una: How about we do a song about an animal now?

Ali: I want to do a cat song

Una: What does a cat song go like?

Ali: miaow loud, miaow big, miaow quiet

(W10C2)

Una: Shall we just play?

Fiona: Yes, but we can't do loud music

Una: We can't do loud music, why not?

Fiona: cause you'll scare them

Una: The chicks? Oh so just quiet music today?

In both extracts, a child combines a descriptive phrase with musical terms that provide a structuring or compositional element to the improvisation. In the first extract, I give a descriptive phrase to begin the improvisation, Ali then develops the task by suggesting separate dynamics, possibly as options to explore during the improvisation or as discrete sections. The second extract sees Fiona changing the nature of the task from a free improvisation with no set parameters, (my cue for free

improvisation was always ‘just play’). Fiona suggests a creative direction for the improvisation, specifying dynamics to help achieve her idea.

The following excerpt illustrates a combined application of existing references, descriptive phrases and music terms.

(W6C1) Conversation after a short instrumental free improvisation

Una: Ok, did you like that piece?
All children: yes
Una: what did you like about it?
Katie: I like ...lots of things
Una: Like what?
Katie: bounce
Una: ok
(All children talk at the same time)
Una: what did you like again?
Jess: short notes, she liked short notes, I liked it
Katie: bouncing on the drums like Elsa and bouncing
Una: ahhh like bouncy castle music from last time? Will we do it again all together?
What does bouncy castle music go like?
Katie: I like faster
Una: what else?
Katie: and soft

Cycle I children had ‘bouncy castle’ music in their repertoire of descriptive phrases, which they returned to over the course of workshops two through to seven.

Katie, with input from Jess and myself, identifies features of the previous improvisation, beginning with ‘bounce’ which Jess understands as relating to the articulation in the last improvisation. Different conceptual tools are added to the conversation in turn; first Katie invokes her existing reference in the form of the character Elsa from *Frozen*, to which I added a descriptive phrase from a previous workshop. Another interesting aspect is the embodied nature of Katie’s response, in that she describes her drumming action as the cartoon character bouncing on the

drums. Katie uses musical terms as a way of showing her preference, but ‘fast’ and ‘soft’ also have the potential to be interpreted in musical and gestural modes of communication.

The following two extracts demonstrate children combining tools with the purpose of making the rules of particular improvisations clear to each other.

(W7C2) Children have just finished playing ‘star music’

Lem that's not star music Charlie
Una: Lem, why do you think its not star music?
Lem: Charlie is making it loud
Una: what do you think star music should be like?
Lem : quiet and
Una: quiet and
Lem: slow
Una: ok, quiet and slow

(W12C2)

Una: What shall we do now?
Tim: Elephant music
Fiona: that will be loud
Tim: no it won't its a baby one

Both extracts demonstrate children communicating artistic intent through combining the descriptive phrase tool with musical terms. Lem objects to Charlie’s playing as it does not fit his understanding of what the ‘star music’ piece should be. The Cycle II children had played a few iterations of star music, and the rules guiding the piece had crystallised. Similarly in the second extract, Tim suggests a descriptive piece and by opposing Fiona’s suggestion for musical dynamics, defined two guiding principles for the improvisation. Using musical concepts to refine compositional or structural elements of the improvisations, gives the children the ability to influence the musical

outcome, even with limited parameters. Interestingly this also demonstrates how descriptive phrases become part of the children's repertoire of existing references; in the same way that they have a jointly understood idea of external music from *Frozen* star music became part of their musical repertoire.

7.2.4 Summary

The children's use of conceptual tools provides insight into how their understanding and ability to articulate their thoughts about workshop activities evolved over the twelve workshops. Both Cycles saw the same progression through the subthemes, (i.e. first using existing references, then descriptive phrases, then combinations) although in Cycle II, the children used descriptive phrases earlier in the workshop programme. Through the workshops, conceptual tools developed in response to the task and context and were co-created either within the group or with my guidance. This topic will be explored further in the discussion section of this chapter.

7.3 Exploring roles

The second theme in this chapter, exploring roles, investigates workshop roles and musical roles the children enacted, both with myself and with each other. This theme is related to the Activity Theory element known as *division of labour* (Engeström, 1987) as it explores both vertical divisions in power relationships as well as horizontal distribution of tasks. The subtheme, workshop roles, examines the fluidity of power relationships between group members, and between the group in the workshops and myself. The second subtheme, musical roles, focuses on children's

accounts of both vertical and horizontal playing roles, in other words playing in a way that emphasised personal creativity or playing in a way that emphasised listening and responding to others musically.

7.3.1 Workshop roles

Workshop roles were enacted through decisions that were often negotiated such as: *who* chose the type of activity; *when* these activities happened, and, *what* the content or intent of the activity was. Consequently, as children were able to contribute to key decisions (as outlined above), hierarchical roles were not fixed.

Workshop activities were determined partly through my instructions, but also through children developing my instructions, or offering an alternative, sometimes by interrupting. For instance,

(W3C2) Lem interrupts an instrumental improvisation.

Lem: lets play a music game, I want to play music

Una: ok, what kind of game?

Lem like Old MacDonald, not this

In this extract, Lem rejects the improvised piece the group had been playing, and suggests a nursery rhyme instead. His action in interrupting an activity was a rare and clear subversion of the hierarchy, especially as at the time, the other children were engaged in improvising. Therefore he prioritises his desire to change the piece above his peers' engagement, as well as rejecting my instruction to improvise. By suggesting another activity, he shows that he still wants to participate through a 'music game' but on his terms – he would like to specify the nature of the activity.

His wish to change the activity is further emphasised by saying ‘not this’ i.e., improvising with instruments.

(W7C1) The following exchange happened after a loud improvisation, where a couple of children had tried, unsuccessfully, to stop the rest of the group playing using the ‘stop’ sign (See Appendix 4.10).

Jane: Una, Una, Ali say stop!

Una: I know, the thing is...

Jane: Ali stopped, I didn't want that

Una: Ok, lets talk about this, when should we stop? Do you think everyone should stop when you want to stop?

Dan: Yes

Jane Yes

This example highlights a situation where different individuals' wishes were not met. Firstly, Jane wanted to keep playing and became upset when Ali showed the stop sign. This could be for a musical reason, she may have been enjoying the music and did not want to stop. Another explanation could be interpersonal tension, in that she may not like the other child (Ali) who was trying to stop the group. These unresolved power relationships perhaps demonstrate a difficulty the children have in balancing their own needs with the needs of others. In nursery schools in Scotland, improving children's social skills is a key aim for the teachers, both for the children's personal development and also to socialise the children into an education system where group work is a common part of school life (Scottish Government, 2006). This raises a pedagogical problem in reconciling ambiguity, inherent in open-ended creative tasks, and the difficulty of realising an explicit nursery rule, which is that everybody gets their turn and it is clear whose turn it is.

The following discussion occurred after an improvisation in which one of the children had been hitting his head off a drum.

(W9C2) Conversation after a free improvisation

*Una: What were our rules again? Be nice to the
Children (together): instruments
Una: and be nice to
Children (together) friends
Una: good, that's right! Am I a friend?
Lachie: yes
Lem: no
Una: if I'm not a friend then what am I then?
Lachie: a robot
Una: (laughs) that's hilarious! Yeah, I'm definitely not a robot. What do you think I
am then? If I'm not a friend then what am I in the group?
Lem: A teacher, a copying teacher
Una: A copying teacher
Lem: A listening teacher
Una: I think that's really interesting*

In this extract, power relationships between the children and myself were first enacted through a reiteration of rules, therefore at this point I take a traditional teacher's position over the direction of the workshop. However, it is important to state that the Cycle II children created these rules in their second workshop. After Cycle I, I had concluded that an effective way of facilitating children's agency was to seek their opinion about what rules a music workshop should have. The conversation which follows is playful, yet I allow the children an opportunity to define my role after I have reminded them of the rules, possibly to soften the effect of acting in a strict manner. Lachie first agrees that I am a friend, but, after Lem disagrees, changes his position through making a joke. In this way, humour offers Lachie a safe approach to experiment with hierarchies that are often fixed in educational settings. Using humour can be a way of talking or challenging a teacher or peer with the option of saving face if it goes wrong – 'it was only a joke'. Another reason could be

that he is a more cautious child than Lem who has concrete suggestions for how he sees me as a teacher. Suggesting that I'm a 'copying' and 'listening' teacher is interesting, perhaps because I copy musical gestures and make it obvious when I am listening on the few occasions that I play with the group. Another reason could be that he is aiming to please me by giving me the answer that he thinks I would like to hear, reflecting back the aptitudes that I am trying to develop in the group.

7.3.2 Musical roles

This subtheme gathered children's descriptions of personal and interpersonal actions through their musical choices in improvisations. Children enacted musical roles by expressing their own aesthetic or orienting their contribution to others in the group.

(W6C1) The following conversation happened after initial warm-up activities

Una: Will we play with Jane? (Jane has a mini-cimbalom¹¹)

Jess: (pointing at the drum) she could scratch on this side and I could scratch on that side

Una: huh?

Jess: She can scratch on that side and I can scratch on that side

Una: Yes you could, that would make a nice sound to go with Jane

Jane has a quiet instrument so Jess thinks of a way of playing a loud instrument quietly (scratching the drum not hitting with hands or sticks). She also specifies how she thinks the other in the group (Katie) should play. She proposes that they have to play in a certain way on a loud instrument to accommodate the quiet instrument.

Therefore, she specifies a musical role that has the consequence of her playing the instrument in an unconventional way. She relates her musical choice to the dynamic

¹¹ A mini-cimbalom is a small, quiet string instrument, formed of a wooden box with metal strings stretched across the top.

capacity of Jane's instrument, understanding and accommodating the dynamic properties of both instruments. Another noteworthy point is her implicit appreciation of musical concepts (loud and soft); her drum is usually loud but she has to play it quietly on this occasion.

(W11C1) Preceding this exchange, we could hear sounds of Christmas carols coming through to our room

Ali: I don't like that music

Una: Sorry, say again?

Ali: I don't like that music

Una: oh?

Ali I like this music

Una: why? What is it about this music you like?

Ali: I get to choose

The important point in this example is not whether or not Ali likes Christmas carols but the qualities of workshop activities that he identifies. Similarly to Lem's description of my teaching role in the previous subtheme, Ali could be aiming to please me by giving me the answer that he thinks I would like to hear, rather than his own ideas about the music. However, his choice of words can be interpreted as follows: 'I' is important as it shows that he prioritises his own individual contribution in contrast to Christmas carols, where it is important for the group to sing the right words and notes with others. 'I' also positions his statement as personally appealing in that he does not say 'you get to choose' or 'children get to choose'. Following this, 'get' demonstrates that he has permission or perceives an implicit understanding that he can 'get' to do creative actions; again, this contrasts with singing in choirs where conformity (creating a blended sound) is desirable. Finally 'choose' is crucial as choice is important in the creative action of the child in

that they make music based on their preference. It also implies he has artistic intent when improvising, rather than just playing or experimenting.

The following extract followed an exercise where the instruction to the group had been to begin the improvisation by prioritising listening and responding to Lachie. He played his instrument by starting and stopping, leaving silences of a few seconds between each section.

(W10C2) Conversation after a directed improvisation

Una: What did you think of your piece Lachie?
Lachie: I liked playing by myself
Una: Oh, do you know what you liked about it?
Lachie I just do

(W10C2) Conversation following a free improvisation (10 minutes after the previous extract)

Una: how did you make the music up? What did you do?
Lachie: just play and listen and play more

Over these two extracts, Lachie explores distinct musical roles; being creative and listening. In the first extract the purpose of the activity is to give musical space to one child where they can develop their own ideas. Lachie demonstrates a distinct musical concept in stopping and starting. He can control when the other children play because of the nature of the task where they are instructed to listen and respond to him. In the second extract, which followed a free improvisation, he uses the phrase ‘just play’, this was the instruction given to the children before a free improvisation. He follows this by ‘listen’. Unfortunately, it is not possible to appreciate what he is listening to or if this affects his next action of ‘play more’. However, this is an interesting chain of actions which suggests creating music, stopping the creation of

music to listen, and then creating music again – which may or may not be influenced by the previous listening action. What can be appreciated from Lachie’s account of improvising are the different musical roles he accounts for in his improvising – a creative role and a listener role.

7.3.3 Summary

This section demonstrated that roles can be appreciated in two ways, firstly through examining the decision-making processes between myself and the children. In the sessions, children were able to suggest new activities or make changes to an original idea. Therefore, the roles were fluid, and could be child-led, teacher-led or decided collectively. Secondly, it is possible to appreciate musical roles through the children’s accounts of their creative decisions. Children described making and then playing their own ideas as well as making choices to play in a way that accommodated others. Interestingly, they talked about listening to each other and one child defined my position as one that required me to listen to them.

7.4 Discussion

This chapter has highlighted complexities in the children’s ways of talking about improvisation. This information can help understanding of how the children made sense of musical activities that were different every time. Musical features of the improvisations will be discussed in Chapter 8, and some pedagogical challenges in maintaining an environment conducive to group musical creativity will be discussed in Chapter 9. This chapter’s discussion is split into four areas: mediation, collaboration, ZPD and children’s musical identity.

7.4.1 Mediation

As described in section 2.2.2, Vygotsky's (1978/1930) construct of mediation accounts for how humans develop in educational and societal settings through using tools which can be physical or symbolic. In this chapter the children's conceptual tools helped mediate their understandings of the improvisations. These conceptual tools were symbolic in that they were ideas shaped by negotiations between the children and between the children and myself (Daniels, 2001; 2008). The process of negotiation is key; the children demonstrated this in discussing specific features for future improvisations, for example in 7.2.3 where Lem admonishes Charlie for playing too loudly in the previous iteration of 'star music'.

Explicit and implicit forms of semiotic mediation are both possible in an activity (Wertsch, 2007) conceptualises these as visible and invisible. In the context of the workshops, the children's verbal communications may have functioned to make musical decisions visible, as children are more experienced verbally than musically. As well as this, writers such as Bernstein (1990), understand the social positioning of participants in a discourse as contributing to the formation of implicit or invisible mediation. The idea of social positioning aligns with the subtheme of workshop roles, as the children's capacity to contribute verbally was important in the development of both music and conceptual tools that shaped the music. Returning to the theme of confidence, manifested as self-efficacy (see section 5.5.1), children's capacity to contribute verbally was vitally important in determining the course of the workshops.

Engeström, (1999) has described four broad ways in which tools are used: *what*, where they are used to identify objects; *how*, where they are used to guide and direct processes; *why*, where they are used to explain the properties of objects or behaviours and *where to*, where they are used to envision potential development of larger complex objects such as social systems. The children in the study used conceptual tools in three of these areas. Both existing references and descriptive phrases served as *what* tools since they functioned to define the improvising as the object of the activity. Combined tools can be seen as *how* tools since they were used to structure future improvisations such as music for baby chicks, and as *why* tools since the children were able to describe the musical properties of what they did not like about someone else's playing (e.g., in the star music example in section 7.2.3).

7.4.2 Collaboration

Children's development through collaborative tasks has been explored previously by Rogoff (1990, 1995). Using a socio-cultural framework, she describes interpersonal activity in collaborative groups as existing on three planes: *apprenticeship*, where less experienced members are able to participate alongside more experienced members; *guided participation* where 'communication and coordination occur in the course of participation in shared endeavours, as people attempt to accomplish something' Rogoff (1995, p.142); and *participatory appropriation*, which is the means by which an individual's understanding of a task progresses through joining in the activity (talk activity and music activity) of the group.

In the context of the workshops, the most apparent apprenticeship is between the children and myself; however, the children began contributing ideas, which structured the next improvisations. This is arguably in a small step to becoming a more experienced member of the group with ability to influence others. Guided participation can be appreciated in this study, in the formation and delivery of tasks which allowed the children to participate on their own terms. This implies that the children are able to *communicate* (which implies an understanding and synthesis of the workshop leader's concepts) and to *coordinate* – in that the suggestions they make, contribute to the end goal of a task. Through the children's use of narratives, communication and coordination about an essentially abstract and fluid concept (improvising) became possible and meaningful for them.

Other work on collaboration focuses on the type of communication between participants, for example Miell and MacDonald (2000), argue that 'transactive communication' is key to a successful collaboration. This construct was developed by Kruger (1992) based on work by Berkowitz, Gibbs & Broughton (1980) which placed types of communication into 11 mutually exclusive categories (Miell & MacDonald, 2000). These categories were refined into transactive, where communications function to 'extend, elaborate or refine' (ibid p353) and non-transactive, which 'propose, agree with give or repeat information' (ibid p353). Transactive communication involves collaborative partners jointly engaging in the process of working together, to co-create. In this study, the musical products of the pairs of children that had a higher proportion of transactive talk were judged to be more successful than those with less transactive talk. Age and number of children are key differences between this study, which looked at children who were 10 and 11

years of age working in pairs. However the growing capacity of the younger children in my study to elaborate ideas through combining conceptual tools led to workshop roles where they could articulate ideas and musical concepts to each other. This suggests that, in common with Miell and MacDonald's study, 'elaborating ideas' is a type of communication which is important in young children's group collaboration.

7.4.3 Zone of Proximal Development

Collaboration between the teacher and children in creative tasks provides a path across the Zone of Proximal Development (ZPD), an important construct, introduced in section 2.3. ZPD is the gap in task between what children need help with and what they can do independently. In creative, open-ended tasks, the end goal can be flexible and hard to define (Burnard & Younker, 2008). The workshops in which the children participated had a mixture of instructions, game and open-ended tasks (see Appendix 4.10). As stated in section 2.7, CMA and S-MA were the overarching goals for the workshops and most of the workshop activities contributed to one or other.

In the context of the workshops, the first conceptual tool (existing references) can be seen as the children and workshop leader's first step into the ZPD. Dewey (1916) (see section 2.3) proposed that children's learning grows from their own knowledge, which the teacher can apprehend and accommodate in task design and reflecting children's existing knowledge in instructions. This aligns with the workshops in this study, as existing references formed the first conceptual tool used by the children. The second conceptual tool (descriptive phrases) links to the nursery teachers' narrative strategies (see section 5.3.2). In these strategies, teachers shaped narratives

to entice children into participation in a learning activity. There was creative choice for the child as long as they contributed to the story in some way. Descriptive phrases can be considered building blocks towards an overarching narrative; children reframe adult teaching strategies to progress their own development. The ZPD has been conceptualised as multi-directional in a study with young children repurposing physical tools when learning mathematics (Abtahi, 2018; Abtahi, Graven & Lerman, 2017). This is similar to the ways in which the children in this thesis adapted their teachers' strategies, which can be seen as conceptual tools.

In a similar way, in combining tools, children reframed existing references and descriptive phrases. Griffin and Cole (1984) propose ZPD should be a place where children can generate 'novel creative analyses' (p.62) in learning activities. The children had creative agency in the workshops as they able to tell the rest of the group what was needed to execute their vision (see 7.2.3).

7.4.4 Children's musical identities

The concept that musical identities mediate musical development provides another perspective. Hargreaves, MacDonald and Miell, (2017, p.6) suggest that

the development of musical identities enables us to see how the social environment is incorporated into the development of musical thinking at the individual level

In this chapter, the *existing references* subtheme demonstrated that the children brought existing understandings of music from their home life and for some, a concept of their own skill level in music. If, as proposed in Hargreaves, MacDonald et al., (2017), Identity in Music (IIM) is a universal construct in that everybody

positions themselves in relation to music in some way, then these children express musical identities as a consumer (Jess) and as a person with musical skill (Ali). Both children's musical identities can be appreciated as socially constructed. For Jess, watching and singing along with 'Frozen' happened in her home, facilitated by her parents. Ali's mum described how she encouraged her son's musical activities through buying instruments and playing musical games with him. Ali's musical identity can also be appreciated as embodying a popular concept of musicality being the possession of technical skill on instruments.

Through the workshops, both Jess and Ali account for their creative processes when improvising. As seen in the subtheme, *musical roles*, Jess proposes a way of playing to accommodate another child and Ali associates the workshops with situations where he can have musical agency. In this way, both of the children describe their musical identity in a 'performative' sense (Hargreaves, MacDonald et al., 2017), as these are descriptions of future or past musical actions. For both children, these performative musical identities evolved from their earlier position through social construction: the conceptual tools which developed during the workshops, mediated the children's musical identities.

In another example of performative musical identities, Lem and Tim enact 'composer' identities, as they combine conceptual tools to either correct or dictate improvisations (section 7.2.3). In this way they are reinforcing their vision by placing more musical constraints through creating rules for the others in the group to follow. These examples contrast with Lachie, who retrospectively describes his improvisational process as 'just play and listen and play more'. The key difference is

his inclusion of 'listen' in the middle of the chain of actions. Listening would suggest that his following playing action is contingent on what he previously heard – from others as well as his own playing. Therefore, the rules in Lachie's description are related to playing actions rather than following a jointly agreed narrative or sticking to one dynamic in a piece. I suggest a 'collaborator identity' in Lachie's case since it aligns with Sawyer's (2003) assertion that group free improvisation processes are collaborative because they are contingent on previous actions of others.

By examining children's talk throughout the workshop programme, this chapter has highlighted the progression of learning and types of roles which children were able to explore in the workshops. It has added to an understanding of how the children had creative agency in influencing future improvisations, in collaboration with other children and the workshop leader. The children's contributions centrally influenced pedagogical decisions. These findings will be further discussed in Chapter 9. The next chapter will consider personal and interpersonal actions through music, gaze and gestural modes of communication.

CHAPTER 8 DEVELOPING CMA AND S-MA AS TOOLS FOR EVALUATING GROUP IMPROVISATION

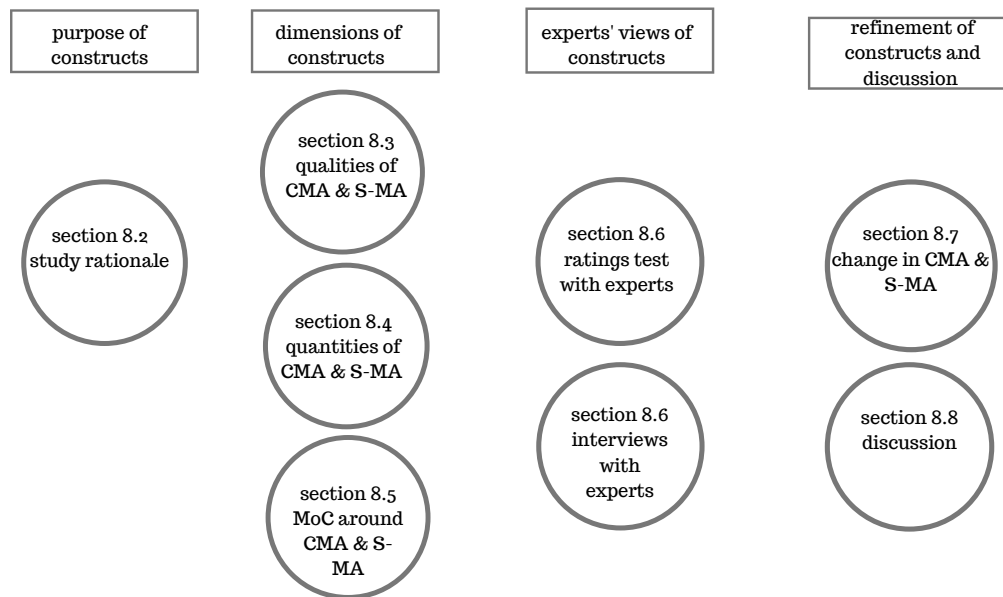
8.1 Introduction

The previous three chapters have provided a detailed picture of parents' and teachers' beliefs about the children, and strategies for facilitating their development (Chapter 5). Attitudes towards the children's creativity and musicianship have also been considered (Chapter 6). The children's ways of talking about and making sense of improvisations in a group have been explored (Chapter 7). Chapter 8 investigates the first research question in this thesis: *How can children's creativity and engagement in group improvisation be appreciated and evaluated?*

Two novel constructs of CMA and S-MA are proposed as working measures to address this question (see section 2.7). Through this chapter, qualities and quantities of CMA and S-MA events in the children's improvisations will be reported, as well as key MoC between children and workshop leader before and after CMA and S-MA events. How the constructs changed after researcher analysis and reflection on video data after each AR Cycle is detailed. Further to this, a rating test of the video data coding and interview with two experts after Cycle II offered additional perspective for analysis and reflection.

Figure 8.1 provides an overview of Chapter 8.

Figure 8.1 Chapter overview and structure



Section 8.2 comprises the rationale for this study. Section 8.3 explores the nature of the CMA and S-MA events through analysing musical parameters within which the children improvised, for example, tempo. Section 8.4 examines the quantity of CMA and S-MA events over the course of Cycle I and Cycle II workshops, and considers particular children's contributions. Section 8.5 examines gaze and gesture MoC occurring *before* and *after* CMA and S-MA events over both Cycles. Section 8.6 presents the results of the rating test with the experts and analysis of data from the interview that followed it. Section 8.7 demonstrates the change in definitions of the constructs after two cycles of Action Research. Section 8.8 will provide a discussion for the whole chapter.

8.2 Study Rationale

As stated in section 2.7, CMA and S-MA were developed as novel conceptualisations of specific capacities that can be developed through process-based improvisation workshops. As well as offering a theoretical proposition, developing children's CMA and S-MA was the overarching educational purpose of the improvisation workshops. Consequently, workshop activities were created to foster these two capacities (see Appendix 4.10). The original, pre-Cycle I definitions are as follows:

Creative musical agency (CMA) is the capacity to invent new music and be able to contribute to an improvisatory context. Through this, the child is able to execute their personal musical aesthetic in an effective contribution to an overall group piece.

Socio-musical aptitude (S-MA) is the capacity to apprehend others' skills and personal qualities within a group that is improvising and to accommodate these in an appropriate musical response. Therefore, the improvisers' intent is both a musical contribution and an interpersonal positioning within the group improvisation.

It was anticipated that the children would demonstrate CMA in creating new musical events, and S-MA by playing in a way that was clearly influenced by others in the group. It was expected that this would be increasingly evident in their free improvisations through the course of the 6-week workshop programmes.

As discussed in Chapter 3, using mixed methods can provide a fuller picture of a research situation (Woolley, 2009). This is particularly pertinent in this thesis as I am both workshop leader and researcher. When teaching, actions and reactions happen very quickly and often unconsciously, particularly in contexts which involve improvisation (Holdhus *et al.*, 2016). Video analysis offers a method to appreciate these quick multimodal actions and reactions between workshop leader and the

children during improvisations. In this way, video analysis and quantifying observable data gives another perspective not possible through qualitative methods. In this chapter, quantitative data from the workshops are reported and analysed. Additionally, as a check for the new constructs, a rating test was devised for two experts to undertake (see section 4.8), the results of which follow in section 8.6.

A systematic approach to coding the video data was undertaken with the aim of measuring aspects of both the children's and researcher's behaviour quantitatively in the sampled improvisations (see section 4.5.3). Improvised sections were identified as being: a musical episode where some or all of the material is spontaneously created through the course of the performance, and a significant part of the music is negotiated by the participants in real time. Instances of the use of music, gaze, gesture and verbal modes of communication were transcribed. Conclusions from the analysis of descriptive statistics are not generalisable as inferential statistics were not used. In keeping with this PhD's pragmatic theoretical stance, transferability is the main aim. This is undertaken with an abductive approach, sequencing quantitative and qualitative methods, where the inductive goals of a qualitative approach are based on the deductive results from the quantitative approach, and vice versa. Therefore, descriptive statistics are used to summarise the observed data and to inform researcher analysis of two novel constructs.

As this investigation is undertaken through Action Research, where each cycle's results inform the next, results for sections 8.3, 8.4 and 8.5 are reported using the

following structure. Introduction to results → Cycle I quantitative results → qualitative analysis → planned action → Cycle II quantitative results → qualitative analysis → conclusion.

8.3 Musical qualities of CMA and S-MA events

Section 4.5.3 gave a detailed account of the coding procedure for the video data. This section presents descriptive statistics of the two constructs for different musical parameters and qualitative analysis of relevant fieldnotes.

8.3.1 Cycle I Results

Table 8.1 gives examples from the systematic analysis of the music mode of communication in the children's improvisations. Each cell shows an example of an event that was coded as a CMA or S-MA event in one of the different musical parameters. There is also a numeric value underneath for the number of events coded in each category in this cycle.

Table 8.1 Illustration of the children's CMA and S-MA within each of the musical parameters found in Cycle I.

CATEGORY PARAMETER	CMA	S-MA
Tempo	Child sings or plays a new tempo in the group CI 15	Child alters their own tempo to match tempo of another child CI 64
Dynamics	Child introduces a new dynamic which is louder or quieter than the rest of the group CI 12	Child alters their playing or singing to match dynamic of another child CI 58
Articulation	Child instigates music which has a different articulation to the rest of the group (e.g., singing short notes when the rest of the group is singing long notes) CI 19	Child matches their articulation to another child's. (e.g., singing short notes straight after another child has proposed this musical idea) CI 31
Signs	Child initiates hand signs with the effect of changing the music (e.g., long note sign when the group are singing short notes) CI 23	Child responds to hand signs shown by another CI 18
Pitch	Child initiates a different pitch from the rest of the group CI 7	Child matches (or nearly matches) pitch of another child CI 16
Arrangement	Child A starts and stops playing or singing CI 8	Child B starts and stops with child A CI 5
Body percussion	Child makes a percussive action on, or with body (e.g., claps hands, hits floor) CI 4	Child imitates percussive action of another child CI 3
Alternative vocalising	Child makes a sound other than speaking or singing with their voice (e.g., altering timbre to be squeaky or growly) CI 2	Child imitates alternative vocal sound of another child CI 1

Table 8.1 illustrates how CMA and S-MA were realised in different musical parameters and also presents these in order of frequency, i.e., CMA and S-MA were observed most often in tempo, then dynamics, and so on to alternative vocalising, the last parameter on the table. The number of musical parameters within which the children improvised increased through the course of the workshops. Appendix 8.1 provides a chart for each musical parameter indicating the frequency of children using it in CMA and S-MA events in each workshop of Cycle I; two examples of these charts are shown in Figures 8.2 and 8.3.

Figure 8.2 Percentage of children in Cycle I utilising musical parameter of TEMPO in CMA and S-MA by workshop

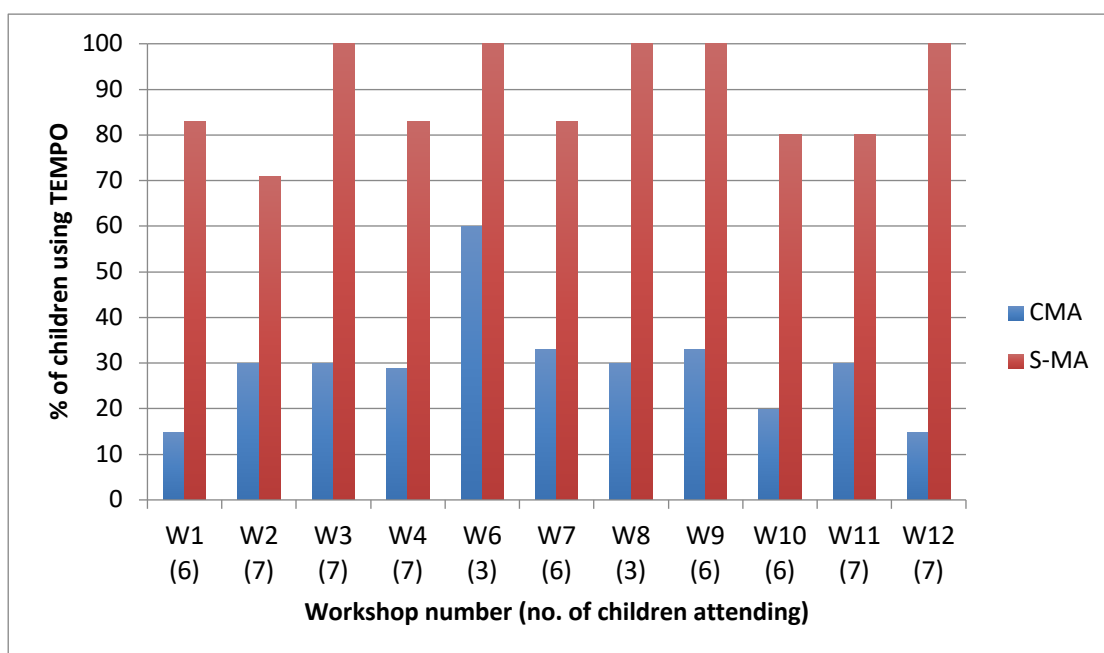
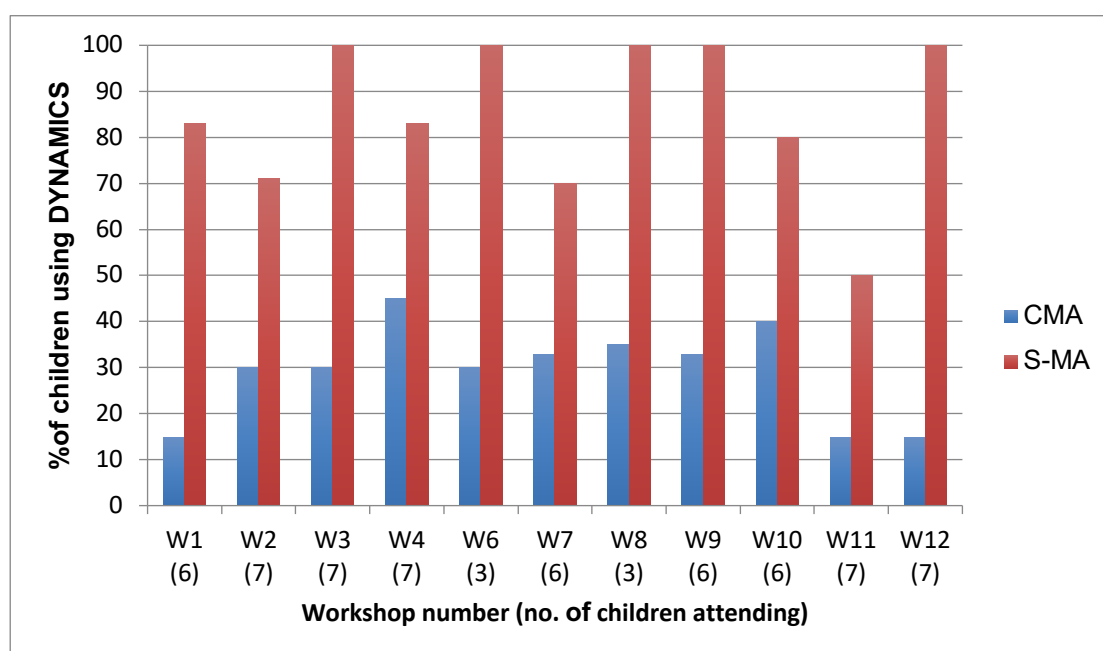


Figure 8.3 Percentage of children in Cycle I utilising musical parameter of DYNAMICS in CMA and S-MA by workshop



Musical parameters were often realised in pairs, for example, tempo and dynamics or pitch and articulation. Tempo and dynamics were often linked; in other words, when the group played a faster tempo, they would play louder and vice versa. Smaller groups were very responsive to CMA events as seen in W6 and W8 when all children carrying out S-MA events in both tempo and dynamic. The other workshops where all the children exhibited S-MA in tempo and dynamics included more vocal improvisations than instrumental improvisations. This can be seen in Appendix 8.2, which is a workshop log of the content of Cycle I workshops.

8.3.2 Cycle I analysis

Analysis of the frequencies of musical parameters with reflection on workshop fieldnotes now follows; the name of the parameter is in italics, followed by the appendix reference if necessary. As stated above, *tempo* (all workshops) was often

linked with *dynamics* (all workshops), however this was not the case in W7 and

W11. For example, from W7 field notes:

Ali and Christine kept playing very loudly when the rest of the group had changed dynamic to play with the cimbalom in one improvisation and with Jane's quiet singing in another. Ben did have 2 S-MA events this time, but mostly appeared disconnected (he was smiling but looking into the middle distance or at the ceiling) from the group in the other improvisations (FC1.8.2)

There could be different reasons for Ali and Christine not changing their playing to match the others. Firstly, they may not have heard the rest of the group adjusting their playing if their own playing was very loud. Secondly, they may not have wanted to switch dynamic to match the others, as they enjoyed the sensation of playing loudly.

The children began using *articulation* (see Appendix 8.1, chart 3) in the third workshop where the group had more improvisations (7 improvisations in workshop 3 as opposed to 1 in Workshop 1 and 2 in workshop 2). Typically, *articulation* was used in vocal improvisations with S-MA events following CMA events very quickly. This suggests that it was easier for the children to adjust their voice to respond to a CMA event than attempt on an instrument. The instruments the children had access to were not capable of sustaining a note as they were all percussion instruments. Therefore, creating long sounds was only possible with their voices.

Children began to use *signs* (see Appendix 8.1 chart 4) in Workshop 3 during their improvisations and thereafter in Workshops 4, 7, 9, 10, 11 and 12. They had been introduced to the signs for 'long', 'short', 'stop' and 'go' in Workshops 1 and 2 (see Appendix 4.10). In the two workshops with low attendance (W6 and 8), signs were not used. A reason for this could be that the children had greater opportunities to be

expressive because there was more space for the creation of ideas with less sound to listen to and process. Use of *signs* (known as conduction among professional improvising groups) is a strategy that adult improvisers use at times to coordinate others' musical actions: the signs facilitate synchronous events or dramatic silences when everyone follows the same instruction (see diagram in 4.10). Thus, a child's use of signs may be a strategy to make the texture less busy. An alternative view is that children enjoyed playing with the ability to create and influence sounds on a larger scale than possible when playing by themselves.

All of the *pitch* (see Appendix 8.1 chart 5) events in workshops 3, 4, 7, 10, 11 and 12 occurred during vocal improvisations; that is, the children did not sing back the same pitch originating from an instrument, only other voices. It suggests, in a similar way to *articulation* that is far easier for children of this age to show S-MA on the parameter of pitch with their voice – to find the someone else's note on an instrument would require relatively well-developed pitch recognition skills and familiarity with an instrument.

Jess and Katie were the only children who used *arrangement* (see Appendix 8.1 chart 6) in Workshops 4, 6, 8, 10, 11 and 12. In workshop 4 they played a starting and stopping game with one another which they tried again in other workshops. None of the other children made this part of their repertoire and it is interesting to note that these two children are close friends – mothers of both of the girls and their teachers described them as 'best friends' in their separate interviews. *Body percussion* and *alternative vocalisation* (see Appendix 8.1 charts 7 and 8 respectively) were only

used by Dan and Ali. In contrast to Jess and Katie, Dan and Ali were not described as friends and Ali was characterised as having social difficulties by his mother and both of his teachers in the interviews.

The final three parameters are interesting as when they occurred, the whole group split into two distinct groups. For example, Jess initiated CMA events in *arrangement* that Katie responded to with *arrangement* S-MA events, while the rest of the group played their percussion instruments in a synchronised and unchanging tempo and dynamic. For these lesser used parameters, not all CMA events were responded to with an S-MA event, particularly within the less frequent parameters: *signs, arrangement, body percussion* and *alternative vocalisation*.

A final point is that in Cycle I, 4 out of 53 improvisations were synchronised and unchanging for the whole duration. The children played at the same dynamic and tempo throughout and did not introduce any new musical parameters.

8.3.3 Cycle I planned action

A crucial change following the Cycle I workshops was in the definitions of the constructs. As seen in sections 2.7 and 8.2, the original definitions of CMA and S-MA were as follows:

Creative musical agency (CMA) is the capacity to invent new music and contribute to an improvisatory context. Through this, the child is able to execute their personal musical aesthetic in an effective contribution to an overall group piece.

Socio-musical aptitude (S-MA) is the capacity to apprehend others' skills and personal qualities within a group that is improvising and to accommodate these in an appropriate musical response. The improvisers' action is musical and also contributes to an interpersonal position within the group improvisation.

Throughout the analytical process for Cycle I data, re-watching video clips several times, the definitions of original constructs were not fully realised in the video data. The concept of CMA became problematic to apply as 'aesthetic' is more commonly understood to be a term applied to adult's art and music making practices. As well as this, the original construct did not allow for situation where a child was not enacting a personal aesthetic, for example when experimenting with sound. Similarly, the original definition of S-MA did not appear to fit all of the instances of a child responding to another in a group improvisation. It did not always seem that a child was capturing another's 'personal qualities' in their musical responses.

Therefore, in the first part of the *reflect* section in the AR cycle, these definitions were returned to and adjusted as seen in Table 8.2. It is important to note that both Cycle I and II data were subsequently analysed in the same way, based on the updated definitions of the constructs after Cycle I.

Table 8.2 Change in constructs in between Cycle I and II

CONSTRUCT STAGE	Creative Musical Agency (CMA)	Socio-Musical Aptitude (S-MA)
Before Cycle I	CMA is the capacity to invent new music and be able to place this in an improvisatory context. Through this, the child is able to execute their personal musical aesthetic in an effective contribution to an overall group piece.	Socio-musical aptitude (S-MA) is the capacity to apprehend others' skills and personal qualities within a group that is improvising and to accommodate these in an appropriate musical response. The improvisers' action is musical and also contributes to an interpersonal position within the group improvisation.
Before Cycle II	CMA: Child creates novel musical material independently of the group and executes this in the improvisation.	S-MA: Child creates a musical response in relation to another child's musical contribution in the group improvisation. This response can draw from the original musical event on a range of parameters e.g., tempo, dynamic, pitch and/or articulation.

In reflecting on the workshop activities, it was apparent that the same children often initiated less frequent parameters (e.g., body percussion). Therefore, for Cycle II, a priority was to engineer opportunities for all of the children in the group to generate new musical ideas. This led to the creation of a turn-taking activity which gave the illusion of choice but ensured each child had designated space to effect change.

Visual cues representing CMA and S-MA were printed on cards and presented in a playful game-like way (see Appendix 8.3).

8.3.4 Cycle II results

The children were found to improvise within the same musical parameters as in Cycle I with two additions, as seen in Table 8.3:

Table 8.3 Musical parameters children improvised within in Cycle II

CATEGORY PARAMETER	CMA	S-MA
Tempo	Child sings or plays a new tempo in the group CII 16	Child alters their own tempo to match tempo of another child CII 61
Dynamics	Child introduces a new dynamic which is louder or quieter than the rest of the group CII 13	Child alters their playing or singing to match dynamic of another child CII 59
Articulation	Child instigates music which has a different articulation to the rest of the group (e.g., singing short notes when the rest of the group is singing long notes) CII 14	Child matches their articulation to another child's. (e.g., singing short notes straight after another child has proposed this musical idea) CII 20
Signs	Child initiates hand signs with the effect of changing the music (e.g., long note sign when the group are singing short notes) CII 6	Child responds to hand signs shown by another CII 8
Pitch	Child initiates a different pitch from the rest of the group CII 14	Child matches (or nearly matches) pitch of another child CII 19
Arrangement	Child A starts and stops playing or singing CII 6	Child B starts and stops with child A CII 10
Body percussion	Child makes a percussive action on, or with body (e.g., claps hands, hits floor) CII 5	Child imitates percussive action of other child CII 7
Alternative vocalising	Child makes a sound other than speaking or singing with their voice (e.g., altering timbre to be squeaky or growly) CII 5	Child imitates alternative vocal sound of other child CII 7
Spoken word	Initiates spoken single words or phrases CII 2	Copies spoken word proposal CII 7
Sung material (in an instrumental piece)	Initiates sung words or small sung fragments of melody CII 2	Joins in with sung words or sings own words or melody CII 3

Charts of the percentages of children improvising in each Cycle II parameter workshop by workshop can be found in Appendix 8.4.

8.3.5 Cycle II analysis

In a similar way to Cycle I, *tempo* (W2-12) and *dynamics* (W2 - 12) were often linked and when compared to Cycle I, there were more instances of these two parameters being linked. Interestingly, in W1, there were no CMA or S-MA events; the children played two improvised percussion pieces, which were both synchronised and unchanging. In Cycle II, synchronised and unchanging improvisations happened in the following workshops W1, 2, 3, 4, 5 and 6, at times for up to 1 minute, 50 seconds. In total, 16 out of 72 improvisations were synchronised and unchanging in Cycle II compared to 4 out of 53 improvisations in Cycle I. In Cycle II, they were only ever executed during percussion improvisations and following an instruction to ‘just play’. A reason for this could be that the Cycle II group understood ‘just play’ to correspond with this way of improvising. As seen in Chapter 7, the children developed their own *conceptual tools* from previous knowledge, narratives and combining tools. Thus the children’s interpretation of ‘just play’ became a conceptual tool which signified playing in a particular way.

The children began to use *articulation* (W4-12) and *pitch* (W4-12) in W4 where there were only four children. Field notes from the first three workshops documented that the children seemed very shy as a group. This was in contrast to the Cycle I group who were lively and talkative. In the first workshop in Cycle II, the children were very reluctant to sing, so singing activities were approached with sensitivity

and care in later workshops (see Appendix 8.5, Workshop log for Cycle II). By the end of W4, the children were happy to try more vocal improvisations and so improvise in *articulation* and *pitch* using long and short notes of varied pitches.

Signs (W3, 4, 5, 8, 10) were used more in Cycle I (31 CMA and 36 S-MA sign events in Cycle I compared to 12 CMA and 17 S-MA sign events in Cycle II). It was noted that the Cycle II children did not seem to be enthused by this activity and they preferred working on improvisations that had a descriptive instruction. For this reason, conduction exercises were not initiated after W4, however, the children did use *signs* in their free improvisations in later workshops, albeit infrequently.

As found in Cycle I, less frequent musical parameters were used by one to three children both in CMA and S-MA: *arrangement* (W8, 9, 10, 11, 12), *body percussion* (W9, 10, 11); *alternative vocalisation* (W9, 10); *sung material* (W10) and *spoken word* (W9, 12). As in Cycle I, not every CMA event was responded to with a S-MA event. In a similar way to Cycle I, these exchanges were often playful and enjoyable for the children, for example, Charlie laughing and jumping up and down while responding to Lem's alternative vocalisation with his own.

8.3.6 Section conclusions

The number of musical parameters explored by the children increased over the workshops. Tempo and dynamics were the parameters most coded within improvisations. Each group had preference in activities which were accommodated in the workshops; Cycle I children liked signs (see Appendix 4.10), Cycle II children

liked descriptive instructions and making up stories. Despite this, the children largely improvised within the same musical parameters, with Cycle II children using more parameters than Cycle I. The coding system noted initiatives and responses in the group improvisations, however, there were some synchronised and unchanging improvisations in which no CMA or S-MA events took place. Finally, at times the groups splintered: two children would be initiating and responding to each other on different parameters from the rest of the group.

8.4 Quantity of CMA and S-MA events

This section now considers the quantity of CMA and S-MA events over Cycles I and II. Charts reporting the number of CMA and S-MA events for the whole group and selected individuals will be shown.

8.4.1 Rates of CMA and S-MA events in Cycle I

Figures 8.4 and 8.5 present frequencies of CMA and S-MA events divided by the number of children present at each workshop in Cycle I to account for variation in the number of children attending (from three to seven). The number of children present at the workshop is shown under the numeric label for the workshop.

Figure 8.4 Mean number of CMA events per child at each workshop over Cycle I

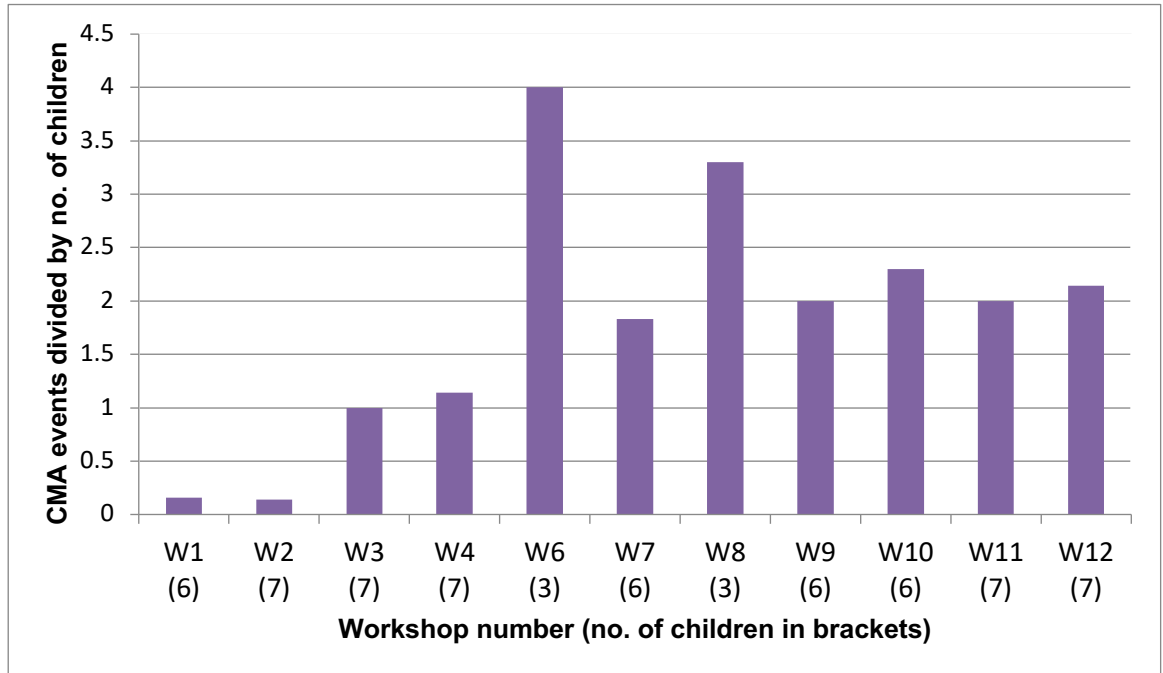
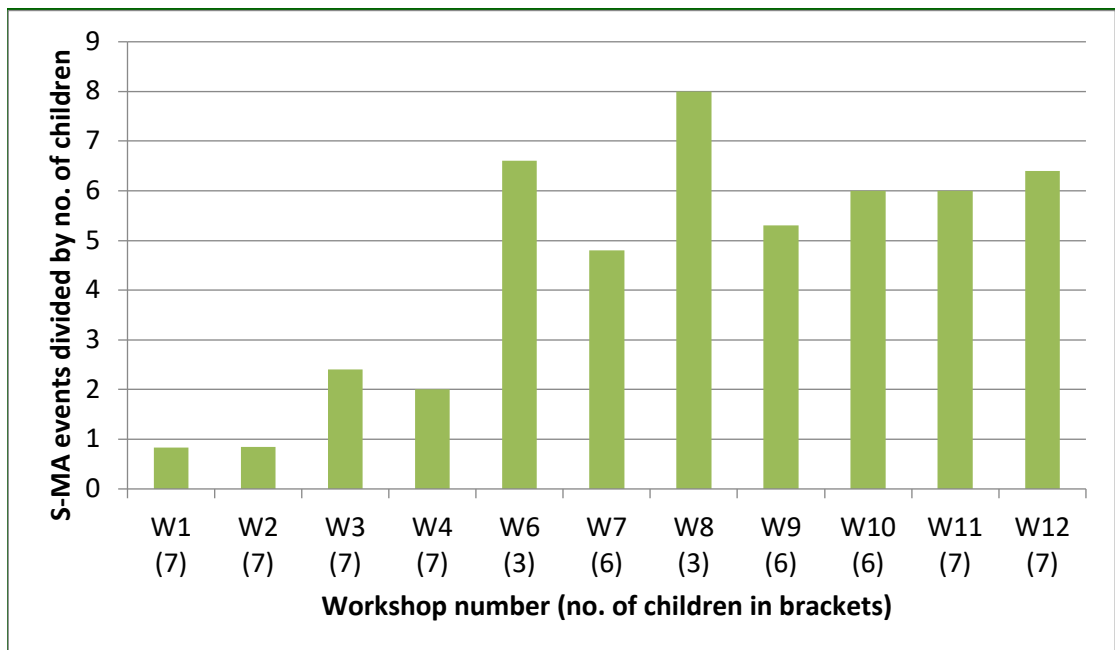


Figure 8.5 Mean number of S-MA events per child at each workshop over Cycle I



These two figures show that numbers of CMA and S-MA events increased over the workshop programme in Cycle I. They also both demonstrate that CMA and S-MA

events peaked in a smaller group, for example in Workshops 6 and 8 where n=3. In these workshops, activities were explored in greater depth as there were only three children's needs to consider and accommodate. These workshops were both noted as 'relaxed and fun with lots of focused playing and good conversation' FC1.8.6.

8.4.2 CMA and S-MA results for selected individuals in Cycle I

Across the workshops, children varied in the numbers of CMA and S-MA events they contributed and were distinct in terms of the parameters they used (as seen in the previous section). This section focuses on two children from Cycle I to investigate their individual input further. Most children (five of seven) had fewer CMA events than S-MA events per workshop, and these events increased over the workshop programme. Figures 8.6 and 8.7 show rates of events for Ali and Ben respectively. All of the children's individual charts from Cycle I can be found in Appendix 8.6

Figure 8.6 Frequency of CMA and S-MA events from Ali over the course of Cycle I

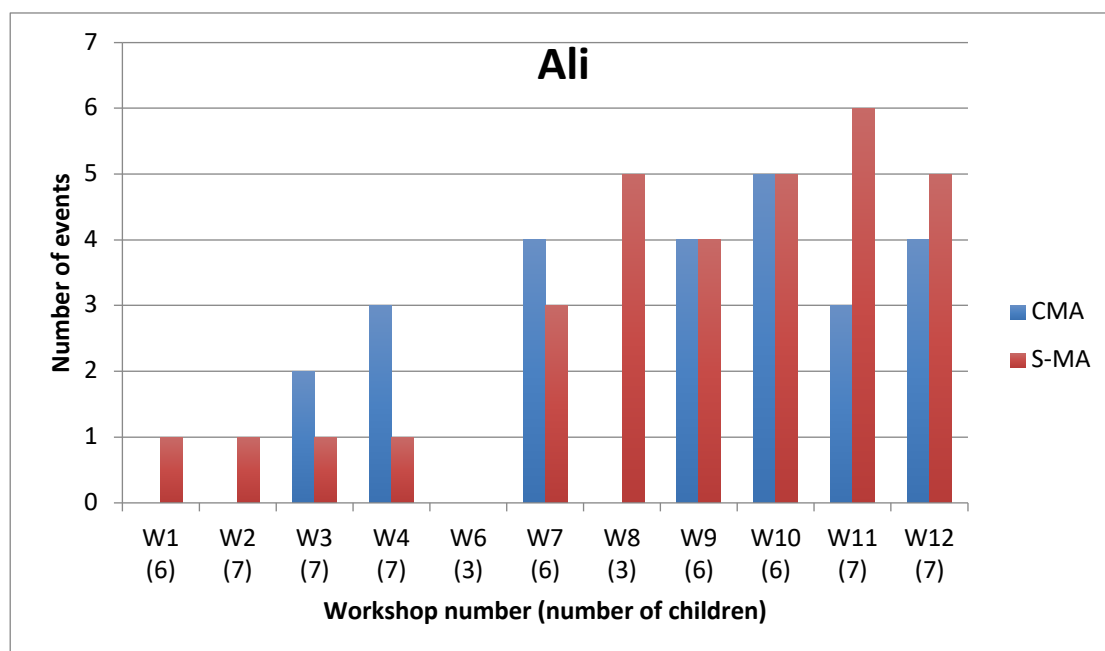
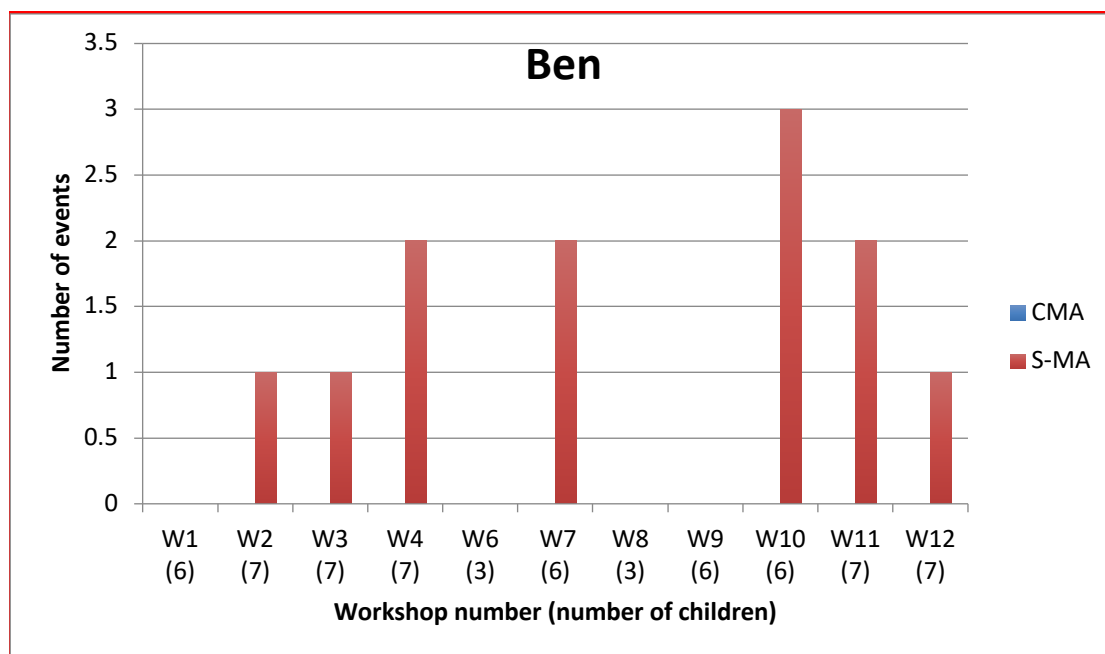


Figure 8.7 Frequency of CMA and S-MA events from Ben over the course of Cycle I



Ali was absent from school on W6 and Ben was absent for W1, W6, W8 and W9.

Ali was distinct from most of his peers, as he exhibited more CMA events than S-MA events in three workshops and equal numbers of events in two workshops, whereas his peers had fewer CMA events than S-MA events (see Appendix 8.6). Over the course of the workshops, his rate of S-MA events increased, and over the last two workshops, the number of his S-MA events was greater than that of his CMA events. As seen in section 7.3.2, having agency was important to Ali; he defined this as the feature of the workshops that he liked. During the workshops he was resistant to playing with or creating a response to other children, which is also illustrated by his low number of S-MA events when compared to the other children's. However, by the last two workshops he had shown progression in his greater capacity for S-MA events, as noted in the following:

I still feel at the end of programme that Ali would much rather play his own ideas than participate in the group by listening and responding. It often feels like a battle of wills to get him to listen, but he can do it. FC1.12.4

Ben's chart shows a contrasting picture, with no CMA events. As seen in Chapter 5, during the workshop programme he was being assessed for ASC and received this diagnosis after the workshops and interviews were completed. During the workshops Ben did not appear to be initiating CMA events. At times he seemed very disconnected from the group but always seemed to be enjoying the music, even if he did not contribute much. He did play in the previously mentioned synchronised and unchanging improvisations. The nature of his participation was noted as follows:

Ben always comes to the workshops happily but doesn't do much. He'll sit in the circle or go where he is meant to go but he is usually looking away from the others in the group into the distance. He will experiment with instruments but doesn't play in the group very much unless I am sitting next to him and encouraging him which I did today. He does seem happy. FC1.11.3

8.4.3 Action points between Cycle I and Cycle II

The size of the group was reduced (n=6 rather than n=7) for Cycle II, because both CMA and S-MA events were more frequent when the group was smaller (in Cycle I). As children can be off school or occasionally refuse to attend, it was decided not to reduce the number further.

8.4.4 Rates of CMA and S-MA events in Cycle II workshops

Figures 8.8 and 8.9 present frequencies of CMA and S-MA events divided by the number of children present at each workshop in Cycle II to account for variation in the number of children attending (from three to six). The number of children present at the workshop is shown under the numeric label for the workshop.

Figure 8.8 Mean number of CMA events per child at each workshop over Cycle II

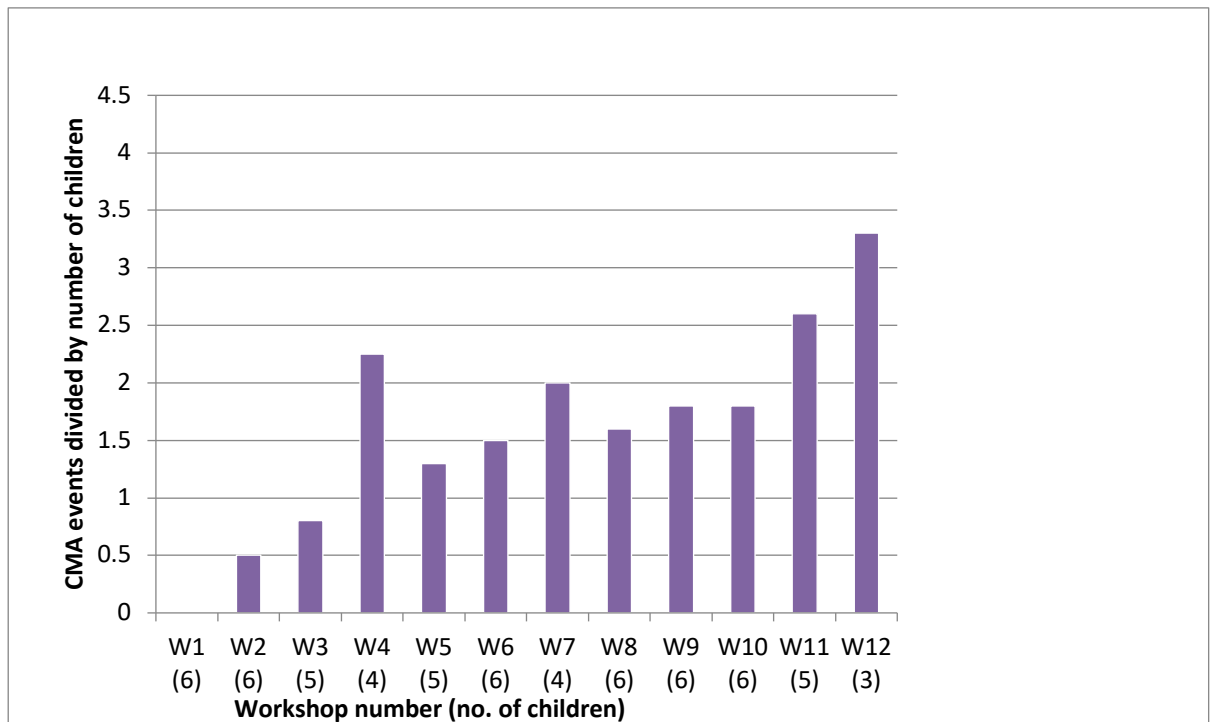
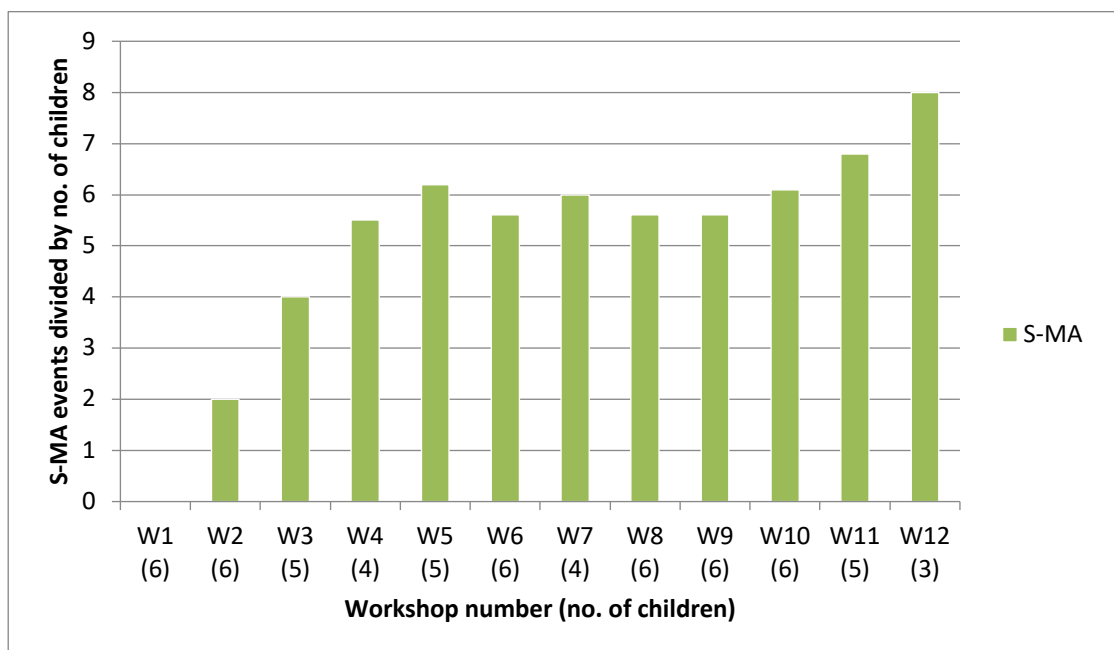


Figure 8.9 Mean number of S-MA events per child at each workshop over Cycle II



As seen in Cycle I, charts for both constructs show that rates of events increased over the workshop programme. CMA events were more frequent in a smaller group for example, in Workshops 4 and 7 where n=4, than in a larger group. Also, as in Cycle I, activities were explored in greater depth in those workshops as fewer children's needs had to be accommodated.

8.4.5 CMA and S-MA results from selected individuals in Cycle II

Individual charts for all children from Cycle II can be found in Appendix 8.7.

Figures 8.10 and 8.11 show charts for Fiona and Charlie, results of which are discussed in the following text.

Figure 8.10 Frequency of CMA and S-MA events from Fiona over the course of Cycle II

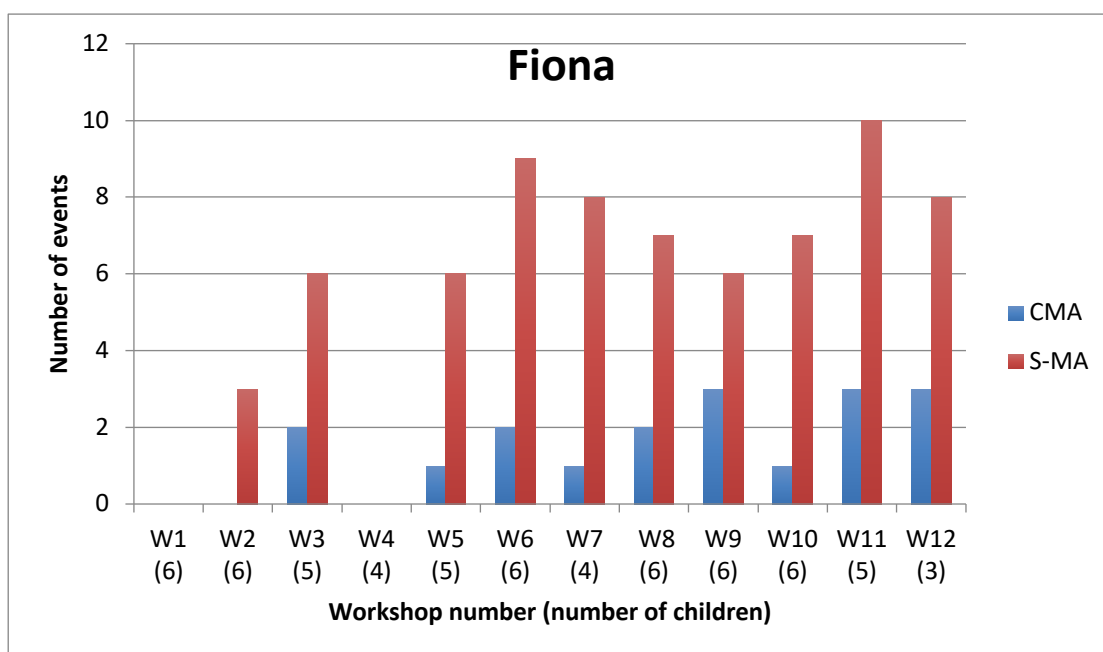
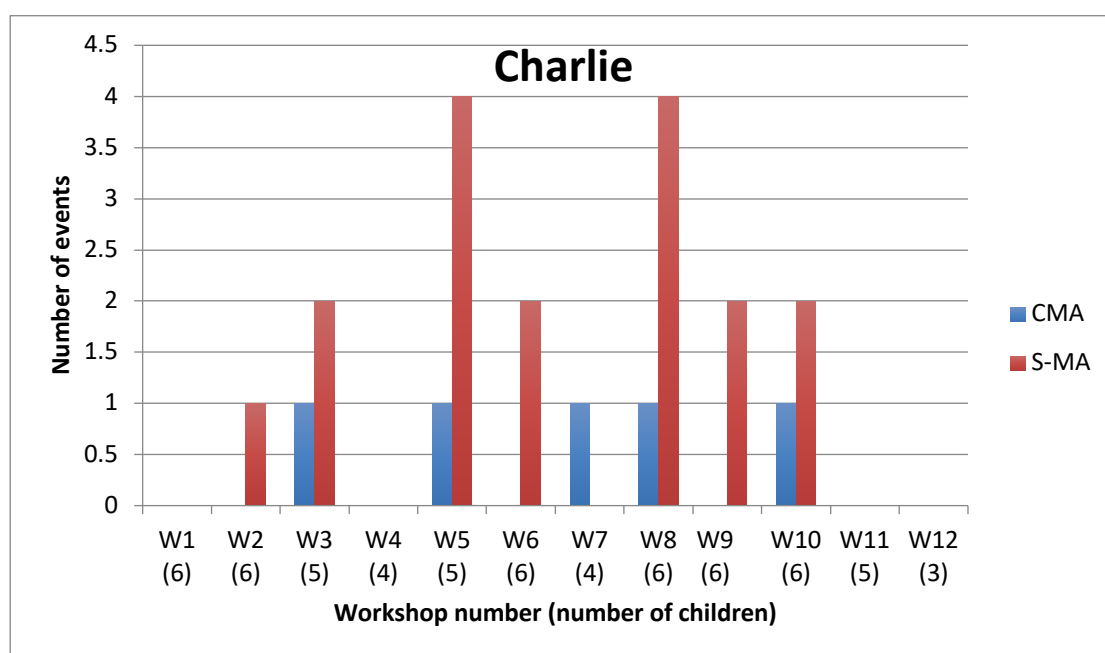


Figure 8.11 Frequency of CMA and S-MA events from Charlie over the course of Cycle II



Fiona was absent from school for W4 and Charlie was absent for W4 and 12, and refused to attend W11.

Comparing two children from Cycle II, highlights the differences in their contributions to the improvisations. In the early workshops (W1-3), Fiona and Charlie have similar results, although in Workshop 3 Fiona's S-MA events (six) were more frequent than Charlie's (two). As seen in Chapter 5, Fiona was described as very shy and reluctant to speak to her teachers. Despite her shyness, she consistently contributed S-MA events, as seen in her chart. Field notes documented that she needed encouragement for CMA events but not S-MA.

Charlie's contribution was inconsistent, with no CMA events in some workshops (W6 and 9). This contrasts with Fiona's contribution, and also Tim, Lachie and

Lem's charts (see Appendix 8.7). The other children's charts had CMA and S-MA events every workshop with S-MA being greater than CMA. The following fieldnote describes Charlie's seemingly short attention span:

Charlie was very easily distracted today. The fire brigade are visiting the school later, so that is all he can talk about. FC2.8.2

8.4.6 Summary of quantity of CMA and S-MA events

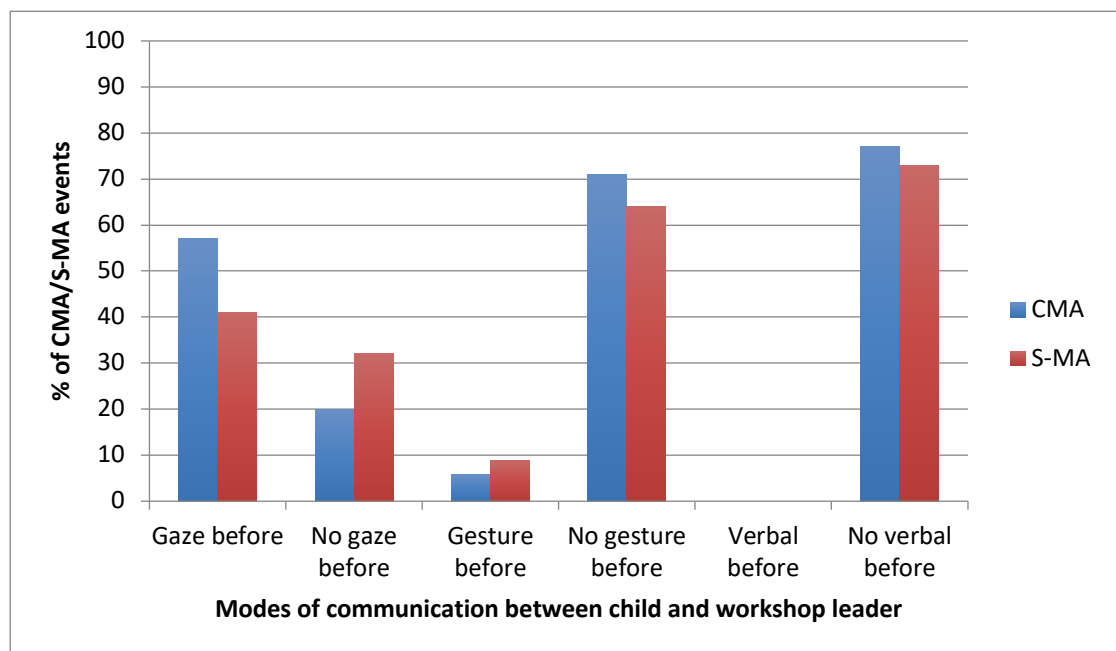
Rates of CMA and S-MA events increased over the workshop programme in both Cycle I and Cycle II. The frequency of CMA and S-MA events was highest in the smallest classes of three (Cycle I) and four (Cycle II) children. Most of the individuals contributed following a similar pattern (i.e., fewer CMA events than S-MA events). Field notes informed these observations; it was noted that the children whose individual charts were illustrated above presented idiosyncratic challenges. For example, Ali appeared to want his own way all of the time, which is consistent with him offering fewer S-MA events than the other children. Ben seemed disconnected and exhibited very few of either type of event, but field notes report he was happy. Fiona was very shy and needed encouraging; in early workshops, she gave fewer CMA events than other children. Charlie was easily distracted, and his chart shows inconsistencies when compared to the other children; in some workshops he did not want to listen to others and only provided CMA events (W2, 6 and 9).

8.5 Interactions before and after CMA and S-MA events

As presented in chapter 4, four modes of communication were transcribed in the sampled workshop video data: music, gaze, gesture and verbal. The greatest number of communications through the transcribed modes were between the child(ren) and workshop leader. There were some instances of communication through these modes noted between the children, but 83% of the communications were child/workshop leader or workshop leader/child. Most of the time (76%) the order of communications was: child initiates communication, CMA or S-MA event, workshop leader responds. Not all of the communications could be transcribed, as the video camera was in a fixed position. This accounts for percentages not adding up to 100% in the following charts. The focus on MoC before (presented in fig. 8.12) and after (presented in fig. 8.13) CMA and S-MA events is to ascertain if there are patterns in the communications between the child(ren) and workshop leader.

8.5.1 MoC before CMA and S-MA events in Cycle I

Figure 8.12 MoC preceding CMA and S-MA events in Cycle I

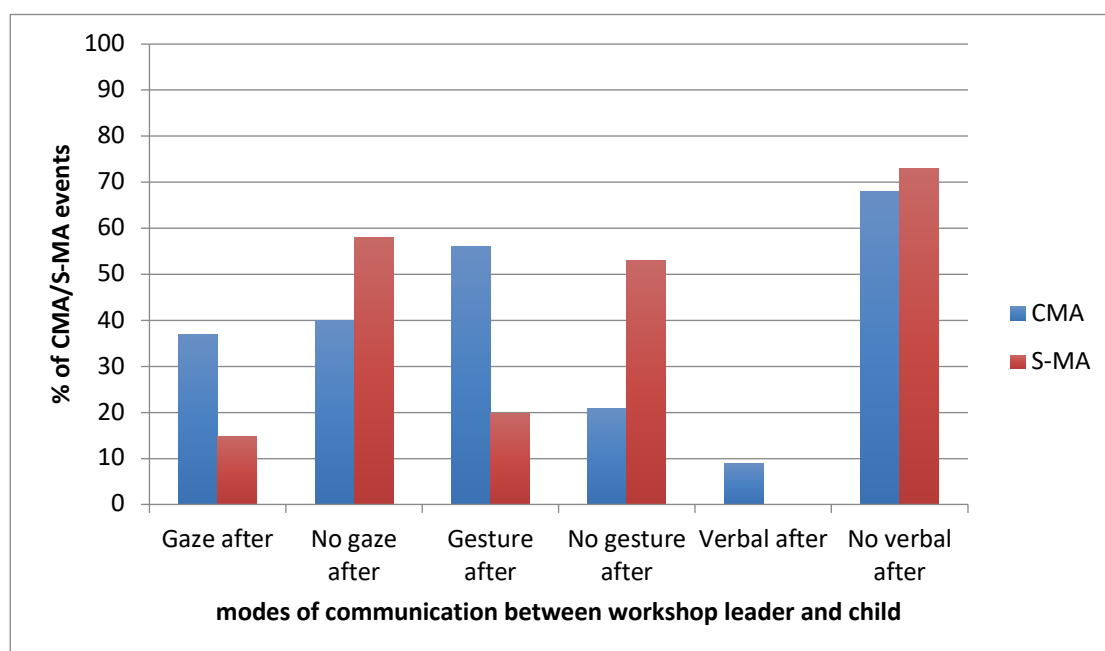


The most frequent mode of communication before a CMA event was gaze, manifested as a child looking at the workshop leader before they executed a CMA event: 57% of CMA events were preceded by a child looking at workshop leader. Some children consistently looked at the workshop leader before their CMA event (Tess, Katie, Jane). Some children consistently did not look at the workshop leader before their CMA events (Ali and Dan). Some children (Christine and Ben) had very few or no CMA events. Therefore, it would seem that an anticipatory gaze action towards the workshop leader is crucial for some children in enabling them to carry out CMA events. Alternatively, some children may have been more concerned than others about what the adult in this situation might think say or do. This wish to coordinate with the workshop leader could be part of finding the 'right answer' in the improvisation workshop.

The proportion of S-MA events preceded by gaze was less (41%) than the equivalent proportion of CMA events (57%). This could be due to a more complex process involved in S-MA than CMA. For example, S-MA process may be: listen; identify who or what to respond to; create a response; execute this response. Consequently, there may be less time for a child to look before the S-MA event is executed.

8.5.2 MoC after CMA and S-MA events in Cycle I

Figure 8.13 MoC after CMA and S-MA events in Cycle I



This chart demonstrates that gesture was the most frequent MoC after CMA and S-MA events. This chart also demonstrates that CMA events were responded to more than S-MA events. This may be because multiple children executed S-MA at the same time, whereas CMA events tended to be a perceptible change in one or more musical parameters by an individual. A small amount (9%) of events had a verbal MoC afterwards, these consisted of affirmative vocalisations such as ‘uh hu’.

8.5.3 Action points between Cycle I and Cycle II

As the gaze mode of communication before CMA and S-MA events was the most frequent (both occurring in over 50% of CMA and over 40 % of S-MA events) one consideration was to see if this MoC could be used more frequently. However, as the workshops were fast paced, attempting to change moment-to-moment reactions

seemed unrealistic. An activity was then planned which aimed to circumvent the need to 'check in' with the workshop leader before playing. This was to facilitate children who may not initiate a CMA event if the workshop leader was not in a position to look at them.

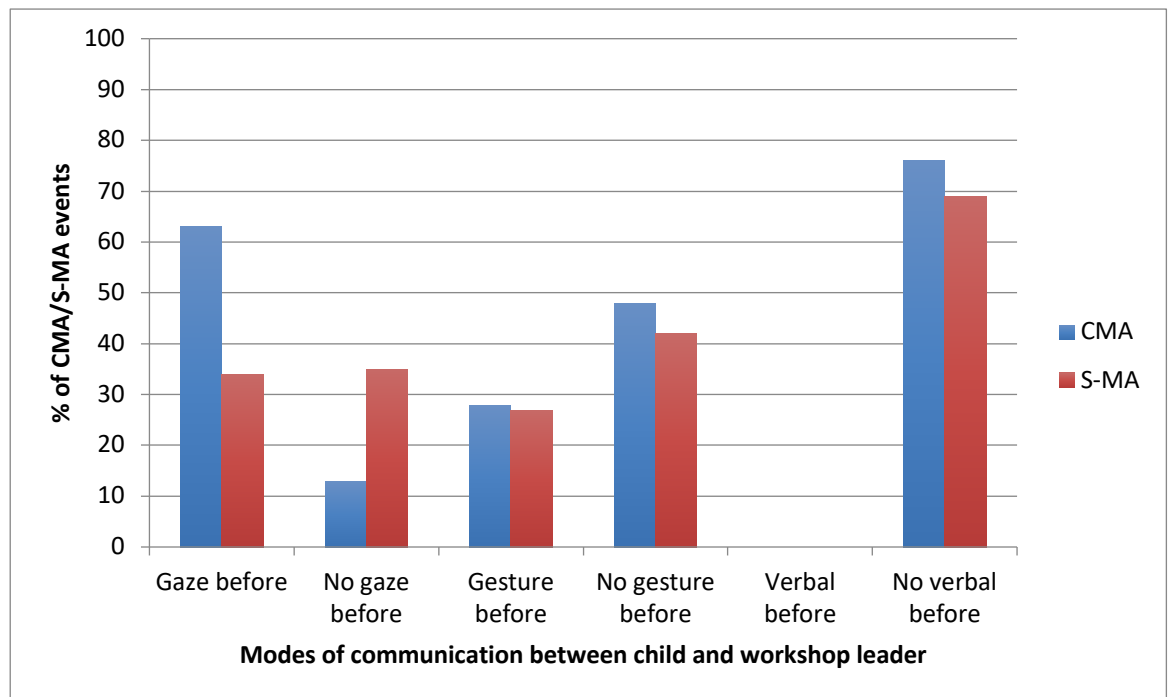
As described earlier in section 8.3.3 and Appendix 8.3, a game with visual aids was devised. Designs were created for an 'idea card' (representing CMA) and 'listening card' (representing S-MA). The aim with these cards was partly to make the children aware of who had which card and to playfully shift focus from the adult facilitating creative events towards the game. The aim was for the children to create pieces with the help of the visual aid, and ultimately with more independence (less reliance on the workshop leader).

Another point considered for change was the workshop model. The original version had a sequential path through the workshop activities with a talk section at the end of the model. This had a disadvantage, as by the time the children were nearing the end of the workshop, their attention waned and it was hard to keep the group focused on talking about the workshop activities. Therefore, a flexible, responsive model was designed which placed talk sections (that could be returned to) directly after activities rather than leaving them until the end of the workshop. (See Appendix 8.8)

The following charts show MoC before (in fig 8.14) and after (in fig. 8.15 CMA and S-MA events in Cycle II

8.5.4 MoC before CMA and S-MA events in Cycle II

Figure 8.14 MoC preceding CMA and S-MA events in Cycle II

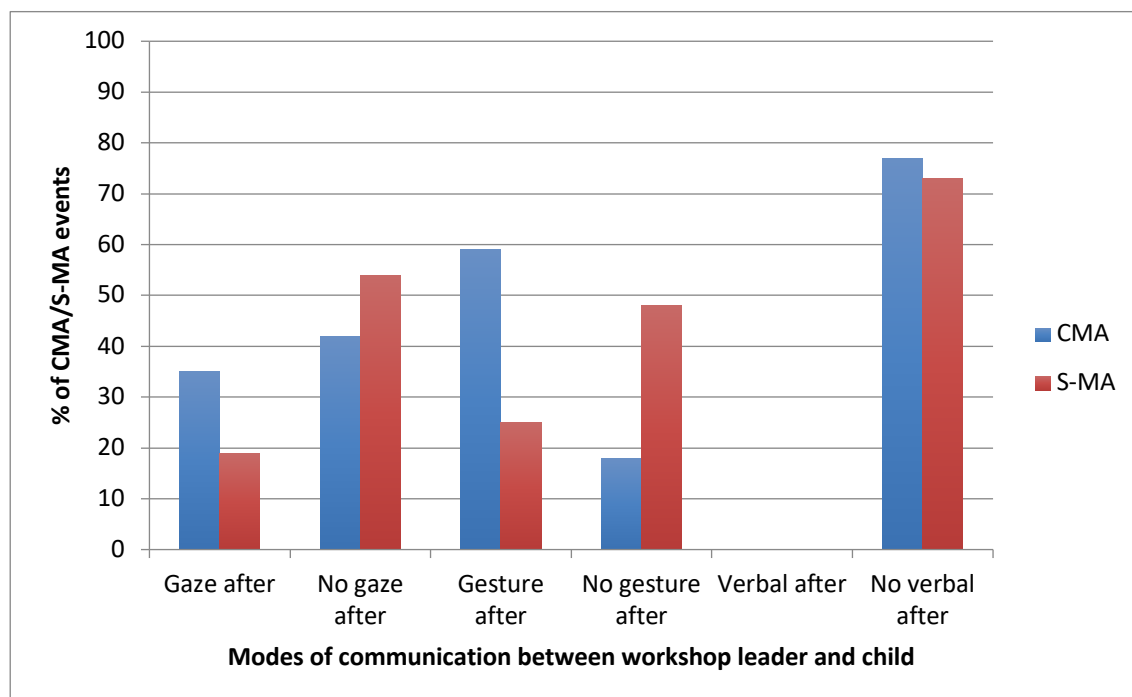


Gaze MoC before CMA events was more prevalent in Cycle II (63%) than Cycle I (57%) and gaze before S-MA events was slightly less prevalent in Cycle II (34%) than Cycle I (40%). This indicates that the children of Cycle II needed more encouragement for CMA events but not so much for S-MA events. Reflecting on field notes supports this interpretation as the children of Cycle II were a quieter group to begin with; it was noted that they needed to be drawn out and responded well to positive reinforcement (see section 8.3.5).

Gesture before CMA events was more frequent in Cycle II (28%) than in Cycle I (6%) and preceded S-MA events more frequently in Cycle II (27%) than in Cycle I (9%). A possible reason could be that the workshop leader provided more encouragement through gesture as Cycle II children were initially a quieter group.

8.5.5 MoC after CMA and S-MA events in Cycle II

Figure 8.15 MoC after CMA and S-MA events in Cycle I



This chart has similar results to the corresponding chart for Cycle I, in that gesture was the most frequently occurring MoC after CMA and S-MA events. Also, Cycle II showed a more frequent gestural response from me after CMA and S-MA events than in Cycle I.

8.5.6 Summary of interactions before and after CMA and S-MA events

The child's gaze before, and workshop leader gesture after, are the most common MoC around CMA and S-MA events. CMA events have more instances of gaze and gesture MoC both before and after than S-MA events. Cycle II children initiated gaze communication with the workshop leader more than Cycle I children. The workshop leader made more gesture responses towards the Cycle II group than the Cycle I.

8.6 Rating results and interviews with experts.

As described in section 4.8, a rating test was devised with the purpose of checking whether two music education experts understood and agreed with the categories of CMA and S-MA, and if so, could discriminate between them. Cohen's kappa (1960) was considered to be the most appropriate statistical measure of concordance to estimate inter-rater reliability, as it takes into account the amount of agreement that could be expected to occur through chance (Siegel & Castellan, 1988). Inter-rater reliability was 0.21 for CMA events and 0.5 for S-MA events.

Following the test, an interview was held with the two experts. This interview occurred straight after they had seen the video clips, therefore, each expert had no knowledge of how the other had rated them. Two themes from the results of the thematic analysis of the transcript follow: *questioning constructs* and *workshop leader as mediator*. The first theme, *questioning constructs* considers the specific aspects of the workshops that the experts highlighted as problematic or sought clarification on.

The experts were keen to understand if the specific musical features that the children were displaying could be attributed to the workshop context. The experts considered conceptualisations of musicianship and creativity in various ways. For example:

Expert 1: It comes down to this thing: what is music? What kinds of sounds constitute music? There was one clip towards the end where the little boy, one little boy on the right was thumping his feet down, he kept lifting his knees up and thumping his feet down. Now was he just being energetic because he was driven by what was going on or was he actually making a musical sound because...he didn't have an instrument at that point? the others were using vocal things, yeah, but he, he was actually, well he was using his feet and I couldn't work out, was he geed up because he wanted to move, or was he physically using his body as an instrument? I took it that he was using his body as an instrument. But there's lots of these kind of grey areas...he was improvising physically -a gesture that's making a noise, as opposed to a hand gesture which doesn't make a noise.

Expert 1 gives an example of an incidence where a boy's gesture could be interpreted in different ways. The boy (Charlie) was responding to an alternative vocalisation improvisation from Lem by using what was categorised as body percussion (see section 8.4). Expert 1 considers varied purposes that might be behind the gesture; for example, Charlie responding to the physiological aspects of Lem's improvisation by 'being energetic' and 'geed up' could be a purely physical response and not one which involves creative intent. Expert 1 also considers the option that Charlie is responding with his body because he doesn't have an instrument and so his musical intent is expressed through a sounding physical gesture. This implies that the category of S-MA did not fully capture Charlie's response, and a broader category is necessary to include a physical as well as musical response or even an entirely new category, for example Socio-Gestural Agency.

By articulating that she thinks there are many ambiguities or ‘grey areas’, Expert 1 does not fully state her view on what music is, but argues that the children’s responses could be interpreted either as musical or not musical. A key point here is that the interpretation is by an adult, not the other children in the group. Finally she seems to come around to the idea that there could be musical intent behind Charlie’s gesture as she acknowledges that his physical choice results in sound- and he had the option to choose a silent gesture. Expert 1’s acknowledgement of a possible musical intent could also be attributed to her considering the initial statement of ‘what is music’ and ultimately conceptualising it in a broad and flexible way.

The next quote further problematises judging whether children have creative or social intent in their actions:

Expert 1: what makes it difficult I think is that you will have some children there that are just totally independent and really, they live there in their own bubble. They are quite happy to get on with life, no matter what it is, whether its improvising or whatever, play, anything, and so, therefore, they are going to fit in to those categories quite ...strongly, aren't they....and it might not be anything to do with improvising, it's just because, by nature, that, that's their personality type, whereas others are much more social leaning and want to integrate and interact with other people, so they are going to fit in here in the S-MA much much more, this is their choice, their bracket, isn't it?

In this quote the expert proposes that, even at four years old, children’s personalities are stable and enduring. In doing so, she raises issues for both delivery and assessment of the workshop. Expert 1 suggests that, if children have a choice, they are more likely to pick the construct that their personalities align most closely with. Both points have implications for the workshop model and strategies and will be discussed in the next section. Following expert 1’s argument, assessing children’s development in CMA and S-MA would require an understanding of which construct

they were more drawn to. However, it is interesting to consider that the test was to make a judgement about the musical properties of events and not about children's personalities. Perhaps this demonstrates that it is difficult to make a judgement about CMA and S-MA without inferring attributes of the children taking part.

The second theme: *workshop leader as mediator* focuses on the ways in which their actions facilitated the children's creativity. As demonstrated in the fair degree of agreement between the experts in rating the CMA (0.21) both experts felt that the category needed refining to accommodate an adult role that enabled the children's CMA events.

Expert 2: I would argue that, that depending on what your definition of free improvisation is, the kids are able to make choices but its within a structure and that structure is something that you're actually defining in some of those clips

As explored in the literature review in chapter 2, there are plural understandings of 'improvisation' and 'free improvisation', therefore clarifying this in the interview was important to create a basis for shared understanding. Expert 2 returned to this point of defining the artistic and educational context at several points during the interview. This was perhaps an attempt to understand the aesthetic, as it has pedagogical implications. For example, she may appreciate a difference between her perception of how she thinks 'free improvisation' should be defined and what she saw in the video clips. By the workshop leader defining a structure, the improvisation can't be 'free' any more and the children's contribution has to be considered in relation to the workshop leader. It is important to note that no mention of 'free improvisation' was given in the printed material for the rating test, but, as previously mentioned, both experts are aware of the researcher's professional work

as a free improvising musician. This quote also offers a view of the role as the workshop leader ‘defining the structure’ for the children in the improvisations at times. In this way it can be understood that structural features such as *arrangement* or starts and ends of pieces may be communicated to the children.

Later in the interview, Expert 2 explained how she saw some of the S-MA events unfolding in a more complex interaction than the researcher’s categories had suggested:

Expert 2: there’s certain kids there that were not necessarily copying the other kids but were copying you when you were copying the others... you are playing a part, and actually for some of those kids, you are playing a vital part

Thus, the workshop leader can be seen to be acting as a mediator for some of the children. One reason for this could be that, as proposed earlier, S-MA has more than one process. Firstly the child has to identify and analyse the music they will respond to, and secondly, they have to create their musical response. For children of this age, one-step instructions with one resulting process are more commonly given. Also, a shy child’s input may be mediated through a reassuring communication before, and validating communication after, S-MA.

Considering the rating test in light of the interview data offers some insight into the rating agreement scores: 0.21 for CMA, and 0.5 for S-MA. As seen in the results in section 8.6, the most common interaction before CMA and S-MA events was a gaze from the child to the workshop leader. The experts also noticed these child to adult communications, which may have had the consequence of experts having difficulty placing a workshop leader-mediated CMA event into the CMA category. As seen in

Cycles I and II, the gaze communication from child to workshop leader before S-MA events was less frequent, which perhaps accounts for the higher 0.5 score for S-MA, if the experts understood the children as acting more independently.

The section that follows offers an expansion of the constructs after reflection on these results.

8.7 Change in constructs of CMA and S-MA

As in seen in 8.3.3, in keeping with the AR design of the project and in the light of the results from the experts which strongly suggested that the workshop leader had such an important role, the definitions of the constructs were considered once again.

Table 8.4 shows the change over the course of the two AR cycles.

Table 8.4 Change in definitions of constructs of CMA and S-MA over both Cycles

CONSTRUCT STAGE	Creative Musical Agency (CMA)		Socio-Musical Aptitude (S-MA)	
Before Cycle I	CMA is the capacity to invent new music and be able to place this in an improvisatory context. Through this, the child is able to execute their personal musical aesthetic in an effective contribution to an overall group piece.		S-MA is the capacity to apprehend others' skills and personal qualities within a group that is improvising and to accommodate these in an appropriate musical response. The improvisers' action is musical and also contributes to an interpersonal position within the group improvisation.	
Before Cycle II	CMA: Child creates novel musical material independently of the group and executes this in the improvisation.		S-MA: Child creates a musical response in relation to another child's musical contribution in the group improvisation. This response can draw from the original musical event on a range of parameters e.g., tempo, dynamic, pitch and/or articulation.	
Before a hypothetical Cycle III	<i>Child initiated CMA:</i> Child creates novel musical material independently of the group and executes this in the improvisation.	<i>Teacher mediated CMA:</i> Child creates novel musical material independently of the group and executes this in the improvisation after seeking validation from the teacher (through any MoC)	<i>Child initiated S-MA</i> Child creates a musical response in relation to another child's musical idea in the group improvisation. This response can draw from the original musical event on a range of parameters, e.g., tempo, dynamic, pitch and/or articulation.	<i>Teacher mediated S-MA</i> Child creates a musical response in relation to another child's musical idea in the group improvisation, after checking in with the teacher (through any MoC) This musical response can draw from the original event on a range of parameters, e.g., tempo, dynamic, pitch and/or articulation.

The version of the constructs created after Cycle II, offers a refined way of coding and understanding children's improvisations both musically and socially. Within the scope of this PhD a third cycle was not possible, but the implications of this change to the constructs will be discussed in the next section and in section 9.7.

8.8. Discussion

This section first discusses the chapter's results and then examines the first research question of this thesis. Transferrable points are then proposed. An important finding of this chapter (see section 8.4.2) is that the results were consistent with the intervention's aims, which were for children to become more creative and interactive in their musical expressions as the workshop sessions progressed. Although the sample is too small to be significant, the results give a promising basis and rationale for a larger scale intervention (see section 10.2.1). Additionally, constructs of CMA and S-MA offered a new way to appreciate and evaluate children's creativity.

8.8.1 Dimensions of CMA and S-MA

Viewing CMA and S-MA through separate lenses offered insight into the children's musical actions in distinct ways, which informed planned change in the workshops. The first dimension: *Qualities of constructs* (section 8.3) investigated the musical nature of creative and responsive choices that were made by the children. Analysis of the musical parameters that the children improvised with (see Table 8.1) revealed that they used various physical tools to make music with. These were the various percussion instruments supplied by the nurseries as well as their voices and bodies. It

is possible that that children reframed musical exercises such as conduction, as the musical parameters of ‘articulation’ relate to conduction signs of ‘long’ and ‘short’, and ‘arrangement’ relates to ‘stop’ and ‘go’. Therefore, conduction functions as a musical tool for the children. Towards the end of both cycles the groups ‘splintered’ with a pair of children creating and responding to CMA events on different musical parameters to the rest of the group. In this example it can be seen that their improvisations were mediated by both musical and social factors.

These findings align with work discussed in section 2.4.2 which identified children’s improvising being mediated in different ways. For example, in Young (2003a; 2005) the large size of the percussion instruments combined with ways in which the children’s bodies operated with and on the instrument to make sound. The types of movements were possible and comfortable for the children influenced the musical material they produced. Children in Moorhead and Pond’s (1941/78) study synchronised their rhythmic movements with others and imitated each other’s simple melodic fragments. This could also demonstrate a similar ‘reframing’ of previous musical experiences, as seen in this study.

When examining *Quantity of constructs* (8.4) it was found that rates of CMA and S-MA events went up over both Cycles and also that the frequency of events was highest in the smallest groups. Individual charts illustrated that children contributed in very distinct ways, with some children (e.g., Ben) not giving any CMA events. This point demonstrates a key challenge in working with groups; the diversity of responses in a group of six or seven can be hard for the workshop leader to

appreciate in real time. Another aspect of working with groups was examined in *MoC around constructs* (section 8.5) where the child's gaze before, and workshop leader gesture after, were the most common MoC around CMA and S-MA events. Cycle II children initiated gaze communication with the workshop leader more than Cycle I children. Cycle II children were initially noted to be a quieter group, this may be related to confidence; shy children may need (and are perhaps used to) more reassurance from the teacher through various MoC. In Wassrin (2019) children's improvisations were 'taken up' by their teachers through non-verbal MoC such as gaze, gesture and movement. These types of teacher-child communications can be seen as effective strategies for facilitating children's improvisations. Future research in improvisation pedagogy with groups could investigate teacher strategies that accommodate and work from children's diverse responses in a group. Examples of strategies used by nursery teachers can be found in section 5.5.1 and were: role-play (or narrative strategies); using toys as symbols for an action; experimenting with high and low support scaffolding strategies and sharing ideas.

8.8.2 Research question one: *How can children's creativity and engagement in group improvisation be appreciated and evaluated?*

In addressing this question, it is proposed that *appreciate* means understanding the musical qualities of the children's improvisation and *evaluate* means apprehending the extent of those qualities. By appreciating children's creativity in terms of the constructs of CMA and S-MA, a rich picture of musical and initiatives and responses through the workshops was described. A detailed analysis of the parameters within which children improvised, demonstrated that children were creative in and responsive to many different forms of musical expression. This was seen in children

using their voices, instruments and bodies to make sound. Therefore, children's creativity can be appreciated as creating new musical material (CMA) across several musical parameters.

Engagement in group improvisation was evident in the charts that detailed each child's contribution of CMA and S-MA events; for example, Ali and Ben (section 8.4.2) and Fiona and Charlie (section 8.4.5) (for all children in this study, see Appendices 8.6 and 8.7). However, it is important to emphasise that these charts captured the children's engagement only in the sampled free improvisations. In the course of the workshops, if the children requested, we would sing nursery rhymes, sometimes transitioning to an improvisation and then back to the nursery rhyme. The children may have executed CMA or S-MA events in these fluid activities, but these were not noted. Additionally, although Ben (from Cycle I) did not contribute many events (as seen in section 8.5), he always seemed to enjoy the workshops on his own terms.

Examining the children's creativity and engagement through CMA and S-MA does not show every way in which the children can be creative or engaged, but offers a flexible tool in which small creative initiatives and responses can be appreciated. CMA and S-MA will be compared to other ways of conceptualising creativity in children's music in section 9.3.3. A practical implication is for the teacher to judge whether a child would benefit from developing their preferred construct as the child may stay engaged in the workshops, or, encouragement to work on the construct they

found more difficult as this may help a child gain confidence. This process demands a high level of teacher reflexivity and balancing the needs of all in the group. In conclusion, children's creativity and engagement in group improvisation can be understood through analysis of CMA and S-MA events. Interestingly, for some children, these events were mediated through the workshop leader. However, this is not a comprehensive way of capturing children's creativity and engagement in group improvisation. For example, children on occasion played their percussion instruments in a synchronised and unchanging tempo and dynamic with no observable CMA or S-MA events. This may reflect a similar option to what Wilson and MacDonald (2016) label as 'maintain', where free improvisers in trios did not change what they played; this musical 'treading water' (ibid. p1033) tended to create a group improvisation with a stable texture. Another way of appreciating creativity and engagement is through the analysis of the children's talk in Chapter 7. The way in which the children's talk about the improvisations developed through the workshop programme demonstrated an additional way to apprehend the nature of the children's participation.

8.8.3 Transferrable points

If, as asserted by MacDonald and Wilson (2014, p.1) 'Improvisation is... a complex phenomenon with unique psychological features', then evaluating improvisation presents challenges in capturing these multifaceted aspects. For example, in another music class, Charlie, who responded to another child's improvisation by banging his feet on the floor might have been told to sit with his legs in a basket. By appreciating and allowing creativity in gesture as well as music, these workshops allowed

children to respond in ways that were comfortable and meaningful for them. The growing use of video and multimodal analysis (Jewitt, 2006) allows for recognising different forms of creativity in preschool settings. As well as this, multimodal ‘events’ are a key feature of children’s learning in early years settings (Flewitt, 2006).

Charlie’s contribution was a creative, spontaneous response to Lem’s improvisation which involved making his voice growly and loud (see alternative vocalisation definition in table 8.1). Lem’s improvisation came from an open instruction ‘just play’ – not a strategy which defined musical parameters to the group. The musical parameters which originated with the children (body percussion alternative vocalisation, sung material and spoken word) were facilitated by open or descriptive instruction. Arguably the other musical parameters that the children experimented with can be seen to originate from the workshop strategies. This result, which suggests that musical originality increases through improvisational activities, was also found with older children (aged six) (Koutsoupidou & Hargreaves, 2009). Other studies such as Flohr (1984) and Kratus (1991) look at the musical parameters with which children improvise, but do not consider the relationship between the workshop activities and creative output. Inferences about children’s creativity need to be transparent to appreciate how the context may inform creativity, as creative thoughts may not always be realised musically (Amabile & Gitomer, 1984). This leads to an important consideration for workshop leaders: what creative decisions are possible for the children?

One way of considering the choices that are available to children in a workshop may be in further investigation of the new constructs of teacher-mediated CMA and S-MA. Expert 2 points out similarities between the ways in which processes in the workshop were facilitated by the workshop leader and a parent's role in certain language acquisition models. Social constructivist views on language acquisition for example from Vygotsky (2012/1934) and Bruner (1985) have potential utility as they emphasise how learning is mediated by a more experienced other. Bruner's (1985) concept of a 'transactional format' maps on to the function of the strategies used in the workshops:

[Language acquisition] begins when the mother and infant create a predictable format of interaction that can serve as a microcosm for communicating and for constituting a shared reality. The transactions that occur in such formats constitute the input from which the child then masters grammar (p78)

In the workshops, the 'predictable formats' can be seen as the different types of instructions (see Appendix 8.2). These instructions were categorised as *direct*, *descriptive* and *co-created narrative*. Through these instructions, the workshop leader provided different strategies depending on her assessment of what the best choice for the children at the time (see section 9.8.1 for further discussion of this process). Mediation is seen as a crucial part of facilitating creative learning, especially for young children (Burnard & Younker, 2008). In both cycles of workshops it would appear both CMA and S-MA events were mediated through gaze and to a lesser extent validated by gaze and gesture. Future research could investigate the role and effectiveness of different transactional formats (or prompts to improvise) in facilitating children's engagement and creativity in improvisation.

The next chapter focuses on discussing the key findings of this thesis.

CHAPTER 9 DISCUSSION

9.1 Introduction

This thesis has investigated preschool children's experiences of improvising in group through multiple lenses provided by mixed methods. These lenses indicated ways in which parents' and teachers' beliefs affected the strategies they employed to shape children's experiences at home and at school, as well as in creative and musical tasks. Children's own understanding of the concepts and context of the workshop were explored in their talk during workshops. Analysis demonstrated development of the children's improvisations over a dedicated programme delivered by the researcher, and how this was facilitated by their interactions with the researcher. The final perspective to be considered is my own; I give a detailed account and theorisation of issues and challenges I encountered in my PhD.

The purpose of this chapter is to discuss key findings from the data chapters. I first give an overview of the thesis, through a synopsis of each chapter with the main findings. I then discuss these main findings with reference to the original research questions as well as the wider literature. The penultimate section contextualises strengths and limitations of this work and the chapter closes with a detailed examination of my reflexive process.

9.2 Synopsis

Chapter 1 first detailed the research dilemma and then my personal motivation behind this thesis. I then examined the Scottish curriculum's requirements for EY music and difficulties with implementing it, thus demonstrating a gap in knowledge and need for my project. I defined key terms and also presented my practitioner position as a workshop leader.

Chapter 2 provided a review of relevant literature on definitions of improvisation, teaching approaches and educational purposes, highlighting challenges to teaching due to plural understandings of improvisation. An overview of sociocultural approaches to learning followed, as these inform both the curriculum and pedagogic methods in Scottish education. Two main approaches to teaching improvisation were identified: model-based and process-based. Further to this, five discrete educational purposes when teaching improvisation were identified; to develop personal growth, musical skills, collaborative skills, creativity and reflective and critical skills. Therefore, this chapter provided an overview of the significant areas for this investigation and also revealed a gap in empirically based methods for and approaches to teaching improvisation to groups of more than three preschool children. Another gap was in methods for evaluating creative behaviour in process-oriented improvisation with preschool children. Two novel constructs were proposed to form the basis for workshops to address this gap: CMA and S-MA.

Chapter 3 outlined the theoretical underpinnings of this investigation. It began by providing an overview of qualitative and quantitative approaches in psychological

research and then focused on a pragmatic theoretical stance as the most suitable to support Mixed Methods Research. Action Research was evaluated and proposed as a suitable framework for this PhD as it provides a model for action, analysis, and planned change. This was important to facilitate and accommodate improvement in the workshop model and methods of delivery. Following this, specific analytical techniques were discussed and a justification for choosing Multimodal Video Analysis and Thematic Analysis was given. Finally, Activity Theory was proposed as an effective meta-analytical method for reviewing the researcher's position in the project.

Chapter 4 detailed the research methods that were used in this thesis. An account was given of a pilot project, consisting of one workshop, with the aims of assessing new workshop activities and refining important methodological procedures. One example was ascertaining the best camera position and angle to capture specific MoC (e.g., gaze) with a group of children and myself. An explanation of the main study design, recruitment procedure and participants followed. A complete description was given of data gathering methods and the analytical process of the four methods used in this thesis: 1) video data; 2) semi-structured interviews with parents and teachers; 3) children's talk data; 4) rating test and interview with experts.

Chapter 5 was the first of two chapters which analysed interviews with the children's parents and teachers. Chapters 5 and 6 addressed sub question one: 1) What are parents' and teachers' attitudes and beliefs about the children, creativity and music? Chapter 5 detailed aspects related to how the adults described the

children in terms of their confidence and ability to share and how this informed their strategies to help the children develop. Chapter 6 investigated attitudes to creativity and music. The first overarching theme *approaches to interacting with the children*, was formed of two themes: *adults' perceptions of the children* and *adults' strategies for the children*. These are linked, as the adults' reflection on children's personal qualities informed a range of their interactions, for example tailoring teaching strategies or attempting to support personal growth. The adults' accounts of the children indicated ways in which they understood qualities of confidence and ability as *inherent* or *lacking*. These two qualities were frequently reported and identified as important qualities to develop in CfE; teachers in Scotland are required to monitor children's progress in these areas. Tensions and inconsistencies in the ways that children were described gave insight into how teachers' professional values were enacted, at times in conflict with their personal beliefs. Some parents took their children to music or dance classes if they understood them to be lacking in confidence or sharing ability.

Chapter 6 explained the second overarching theme from the parent and teacher interviews: *beliefs about creativity and music*. This comprises two themes: conceptualising creativity and conceptualising music. *Conceptualising creativity* detailed the ways in which the parents and teachers described their children as creative. Importantly for this thesis, all of the descriptions of creativity were framed in creating art work and stories rather than music. *Conceptualising music* categorised the conflicting ways in which teachers and parents understood music; for example, they enabled musical activities for and with the children but did not consider

themselves to be musical. This also had a negative effect on teachers' confidence in their ability to teach music. None of the teachers or parents understood music to be creative, which was at odds with the aims of CfE in EY.

Chapter 7 then turned to the children's talk during workshops about their improvisations, thus addressing the second sub question: *What are the children's conceptualisations of the workshops?* It explored the children's personal constructions of improvising, and interpersonal actions during the workshops. Three key factors that mediated the children's understandings of improvising were identified: existing references, descriptive phrases and combining tools.

Additionally, children developed understanding of different hierarchical roles, for example, getting to choose what kind of activity took place. As well as hierarchical roles, the children articulated what their own distinct musical roles were within the improvisations. Apprehending children's views highlighted their learning through: understanding their improvisations on their own terms, building a repertoire of jointly understood descriptive phrases and synthesising their knowledge.

Chapter 8's focus was on the first research question: How can children's creativity and engagement in group improvisation be appreciated and evaluated? The constructs of CMA and S-MA were proposed as the basis for interpreting results from video analysis of the children's improvisations. Two experts rated 39 clips of the children improvising, and Cohen's kappa was the measure used to estimate inter-rater reliability for their rating of CMA and S-MA. There was slight agreement for CMA (Kappa 0.21) and moderate agreement for S-MA (Kappa 0.5). In the

subsequent interviews, raters accounted for this by proposing that I, as the workshop leader had facilitated some children's CMA events. This was supported by video analysis which showed that in 57% of CMA events, a child looked at me beforehand. The chapter continued by exploring the quality of the CMA and S-MA events through analysing the musical parameters within which the children improvised, for example, tempo. Both CMA and S-MA events became more complex over the course of the workshops (i.e., on more combinations of musical parameters). The quantity of CMA and S-MA events increased over the workshops for most of the children, although not all.

Chapter 9 presents a discussion of the two research questions (with sub questions) and main findings of the PhD, and Chapter 10 will close the thesis by presenting implications and conclusions.

9.3 Research questions

9.3.1 Research question one: How can children's creativity and engagement in group improvisation be appreciated and evaluated?

As section 8.8.2 has addressed this question in detail with relation to the video analysis, I will now contextualise CMA and S-MA with reference to key research and discuss relevant findings from other chapters. The two novel constructs of CMA and S-MA were created through my reflection on my own background as a free improvising musician. As well as this I considered psychological research on decision-making processes in free improvisation trios (Wilson & MacDonald, 2016), which described professional free improvising musicians choosing to either to

initiate new material or to respond to another musician in the group improvisation. I faced the challenge of finding ways of translating my own idiosyncratic experience and research with professional musicians into the specific educational setting of EY education. My purpose in creating these constructs was to provide flexible concepts, whose educational purpose (cf. Biesta, 2009) emphasised creative and social aspects of music making, rather than improving technical aptitude. Additionally, these constructs were a means to define and identify these valuable aspects.

Researchers in pop music (Green, 2002) and collaborative composing (Thorpe, 2015) have analysed key features of informal musical genres or styles with the purpose of bringing them to a formal educational setting. Thorpe describes this process as ‘back-engineering pedagogy’ (ibid. p164); however, it is important to appreciate that in both contexts, students were collaborating towards a piece of music that had to be recognisably in a style within the popular music genre. The tasks in these situations had genre-specific musical parameters as boundaries, and so can be compared to model-based methods of improvising discussed in Chapter 2. However, there is a common purpose in giving students agency in their learning through facilitating their creative choice, an important feature of informal improvisation contexts (MacGlone and MacDonald 2017).

Other researchers looking at group improvisation have identified similar concepts sharing significant aspects with CMA and S-MA. For example, Burnard (2002, p.167) identified leaders who ‘defined the direction in which the others should move’ which is similar to CMA, and followers who were ‘musically led and influenced’

which is comparable to S-MA. However, in Chapter 7, the children's talk suggests more fluidity in their musical roles than Burnard allows for. In section 7.3.2 Jess suggests a way of playing that would go 'with Jane', Lachie speaks about listening to others at times and just playing at other times in the same improvisation. Perhaps because the children in my study were younger, occupying a musical role was not a fixed choice for the duration of whole piece in the way it may be in improvisations by children aged 11-12. There are also similarities between CMA and S-MA and Young's (2003b) work, which describes adults' sympathetic responses to preschool child-led initiatives. It is important to note however, that this work considers an adult playing with one or two children. Also, the adult's interactions with the child are influenced by their values and responsibilities as music educators, for example, being responsive and using the material of the child (as seen section 2.3.2 in a process-based educational approach). Addressi *et al.* (2017) evaluated children's improvisation on criteria including Reflexive Interaction, (to create a response that is clearly influenced by another) and Attention (to another). These criteria are similar to S-MA, but in their study the child is improvising with a computer. The main difference between the existing research and this PhD is the size of the group; it is a key point to note that these interactive processes do occur in larger groups. Both this research and the other cited works are consistent with studies that show that another musician or their actions can function as a mediating tool for professional improvisers (Born 2017; Linson 2015, 2017; Lewis 2008, MacDonald & Wilson 2016, Sawyer 2003), despite the focus here being on young children. Voyajolu and Ockelford (2016) have proposed a framework for children's musical development from birth to 5 years, based on Ockelford's (2006) 'Sounds of Intent'

framework for children with an additional support need. The framework divides children's musical acts into three areas: proactive, reactive and interactive. The interactive area, which describes actions such as 'copy other sounds and like to be copied' and 'engaging with musical dialogues' shares attributes with the construct of S-MA, as both are concerned with the ways in which children recognise and synthesise other children's music acts. The main way in which this is different from my approach is in the endpoint of musical development. These authors focus on creativity as a way to progress from one level to the next with the aim of being able to 'perform short pieces gradually more in time and in tune' and the ability to 'concentrate on short pieces all the way through and anticipate key features' (Voyajolu & Ockleford 2016, p.102). While these can be seen as important aims, they differ in the educational purpose of my workshops which can be appreciated through the constructs of CMA and S-MA and how these develop one's own music within a group.

Section 7.4.2 considered Miell and MacDonald (2000)'s classification of pairs of 11 and 12-year-old children's verbal communications with each other in a collaborative task, as transactive or non-transactive. The music they created in this task was also coded based on the same theoretical framework as the verbal communications:

A musically transactive statement was defined as a spontaneously produced refinement, extension or elaboration in music of previously presented musical or verbal ideas. This is in contrast to musical transactive responses which were defined as direct musical responses, clarifications or elaboration of verbal questions or inquiries. (ibid, p353).

When comparing these categorisations to my constructs, S-MA maps on to musical transactive response as the child's musical contribution is in relation to a previously

existing music idea. CMA is similar to a musically transactive statement in that it is spontaneously produced, however, it does not account for a previously stated musical idea that has been elaborated or referenced. Useful future research could investigate instances of CMA being mediated by a previous musical idea. As seen in section 7.2.2 the children's improvisation could be moulded by descriptive instructions, thus demonstrating how the children's CMA events were affected by 'previously presented... verbal ideas' (ibid, p.369). Another interesting point of comparison is in the 'orientation' of the statements and responses in Miell and MacDonald's study and my PhD. Musical and verbal statements and responses were described as oriented towards either the self or other, for example: 'When a child appears to be playing for him/herself and is not engaged with/oriented to the partner, the motif is coded MS' (p.396). In this PhD, the category of teacher-mediated CMA and S-MA demonstrates the child orienting a musical response through the workshop leader. In section 9.4, two examples are given of environmental sound (lawnmower and fire engine) which influenced the children's improvisations. This offers another mediating artifact because the improvisations were shaped by a response to environmental sound rather than a gaze, gesture or musical cue from another person.

There are some key differences to consider; Miell and MacDonald (2000) observed twenty pairs of 11 and 12-year-old children. At least one of the pair had experience of instrumental lessons (ranging from 6 to 72 months). Therefore, the older children have a greater range of musical possibilities due to the type of instruments and level of sophistication in musical skills and knowledge (cf existing references in section 7.2.1). The study's task was specific (even though it was open-ended) which

contrasts with the range of workshop activities in this PhD. Finally the coding structure is derived from communications theory between two people rather than among a group. However a key process is shared between the study and this research; in section 7.2.2 the group were seen to have *coordinated* communications through building of a 'library' of co-constructed descriptive instructions.

The constructs add to existing literature in conceptualising musical development and specific capacities that developed through preschool children's improvising. As seen in chapter 8, the children developed CMA and S-MA in a varied range of musical parameters. This represents an observable outcome. However, as the experts did not substantially replicate my original coding scheme, more research would be valuable to refine my categories. I suggest that these results should not be viewed in the same light as models showing a linear progression through increasing skill in manipulating musical parameters (Kratus, 1995; McPherson, 1995; Ilari *et al.*, 2017). The order in which the children progressed through parameters in this study, although interesting, is not as important as appreciating that the children showed CMA and S-MA in a range of different parameters of their own choosing. Future research could specifically consider the nature of pieces, exercises and instructions used, with the range and type of musical parameters in the subsequent improvisations.

The teachers viewed confidence and the ability to share as crucial aptitudes for nursery children to develop and described these qualities as either inherent or lacking in the children in Chapter 5. This is an interesting point in relation to my constructs, for two reasons. For young children to show CMA in a group, arguably, they have to

be confident. Also, turn taking can be associated with S-MA since an original idea has to be listened to before a response is given, which implies waiting (for your turn) before responding. Because nearly all of the children proportionally increased their number of CMA events through the course of the workshops, a case can be made that the children developed their confidence through the workshop programme. There is triangulation from the teacher and parent interviews, in that they perceived an increase in confidence for different children through the workshop programme. While this is an encouraging finding, it remains an interesting observation from the research that can be potentially developed in future work. Additionally, the number of children's S-MA events proportionally increased through the workshop and also increased in complexity (i.e., the number of musical parameters that were employed increased). Therefore, I suggest that the children's skills in turn-taking increased as did their skills in listening and processing other children's improvisations.

9.3.2 Sub question one: What are parents' and teachers' attitudes and beliefs about the children, creativity and music?

Parents' and teachers' talk about their children revealed the importance of developing the children's confidence and abilities to share. Their beliefs affected how they helped children become more confident or able to share. The results in Chapter 5 are important since as developing children's personal capacities that are not dependant on particular knowledge, presents many challenges for teachers (Biesta & Priestley, 2015). A key issue is to understand the processes between more experienced adult (teacher or parent) and the child in developing their capacity (a word that means both ability and potential) for skills which are context dependent

(Johansen, *et al.*, 2019). Also, as seen in chapter 5, parents and teachers place great emphasis on nurturing children's ability to share their ideas. This functions to let the adults know how much the children understand. This information from the children is important for planning future work and also to share with visiting teachers who may only work with children for a short time.

Teachers were happy to talk about the children's creativity in terms of creating products (art work) and narratives (made-up stories) or role-play (acting out stories). One reason for this could be due to nature of the product from those activities; for example, a painting is a document that can be examined, appreciated and discussed at the time of execution and revisited afterwards. Made-up stories can be discussed and developed by children and their teacher either to explore the process of creating images through words, to create larger narrative structures or to link to learning in other areas of the curriculum. Discussing creativity or improvisation in music presents distinct challenges. The temporal aspect means that, unless recorded, music exists only at the time of playing. Recording and discussing music would create more complications for teachers in the extra equipment and time needed to make this activity effective. As well as this, the performative aspect of music places additional values and expectations on the activity. Many nurseries have Christmas or summer shows which involve singing, with the potential consequence that the day-to-day classroom focus on music may be less as an activity to explore and enjoy and more as work towards a showcase that has to be perfected. Another important finding was that the teachers in this study had a low level of confidence in their own music skills,

and a belief that this affected their ability to teach music. This reflects the findings of a studies into teacher's attitudes and beliefs when teaching arts subjects (Wilson *et al.*, 2008). Over ten years after this study, despite a change to curriculum which foregrounds facilitating engagement and experimentation in music rather than teaching specific skills, teacher attitudes were found to remain similar in this PhD. Taking these challenges into account, it is perhaps unsurprising that none of the teachers or parents in this study conceptualised music as a way of being creative, and none felt confident in their own musical abilities, one teacher going so far as to say 'we're not really a musical nursery' (see section 6.3.3). The implications of this will be explored in Chapter 10.

Nearly all of the parents in this study described ways in which they facilitated their children's creative activities (i.e., drawing and crafting). This is similar to the teacher's discourse about creativity being valuable and desirable. The parents understood that facilitating their children's creativity required them to be supportive through encouraging activities that accommodated their children's preferences. This belief contributes to their construction of what a 'good parent' does. Ten of the eleven parents bought their children instruments and made music with them, consistent to their reported beliefs that music can help social skills and develop cognitive ability. These beliefs could be drawn from a wider cultural discourse about music having transferrable positive effects on other aspects of children's learning (Wolff, 2004). Children's perspectives reflected their parent's ways of conceptualising music (e.g., being good at music was about being technically

accomplished). This implication has to be considered in how creative music interventions are explained to parents in the future.

The interviews with parents and teachers offered valuable information which helped contextualise the children's own words, but also to deepen understanding of the children's musical identities and experiences at school and home. Section 9.4 considers these mediating factors along with others which mediated the children's improvisations.

9.3.3 Sub question two: What are the children's conceptualisations of the workshops?

Talking about improvisation is difficult, as it can be constructed in many ways (Wilson & MacDonald, 2017). This is of particular interest to improvisation pedagogy, as a teacher's language about improvisation may have to be decoded by students (MacGlone & Johansen, 2019). Encouraging children's critical appraisal of their musical actions is still a rare approach in music education for young children (Kanellopoulos 2007; Wright & Kanellopoulos 2010). This may be because it presents new challenges to teachers that they have not been trained for (Wright & Kanellopoulos, 2010). However, appreciating children's verbal contributions are an important part of creative activities; they allow the teacher to integrate the child's own interests into creative tasks (Barrett, 2011).

Children's talk about their improvisations revealed growth in their collaborative skills, exploration of roles (both hierarchical and musical) and development of their

musical identities. Their talk about improvisation tells us how they understand a creative activity that is essentially abstract and only exists in the moment of its happening. Through the workshops, conceptual tools (i.e., ways of talking about improvisation that were grouped around a central theme) developed in response to the task and context and were co-created either within the group or with my guidance. The first conceptual tool, existing references, suggests that they first build on previous knowledge. This aligns with views on how young children learn (Dewey, 1966). When learning, ideas are carried forward from one experience to the next as the child ‘takes up something from those which have gone before and modifies in some way the quality of those which come after’ Dewey (1938/2015, p.13).

This concept is viewed as an important basis for teaching in Early Years (Roche, 2011). The children used descriptive phrases to build a shared recollection (as described in 7.2.2) and therefore created a knowledge base to refer to. The descriptive phrases can perhaps be seen as a repurposing of teacher’s narrative strategies described in 5.3.2. The children also combined these conceptual tools with simple musical terms to form instructions for future improvisations (e.g., to play more slowly and quietly). Therefore, in my study, children created the means and the structure for their own conceptual growth in a collaborative process with myself, and in this way, had agency in their own learning. Importantly, the children’s understanding of the workshops was mediated by many different factors (see section 9.4).

9.3.4 Research question two: Do the workshop activities and teaching methods change through two cycles of Action Research?

In section 3.7.3, three components of this question were defined as: 1. the workshop programme, which comprised how workshop activities were organised (workshop model), number of children; 2. teaching approaches, which were understood as the way in which a combination of the teacher's ideas and values inform communications with the pupils; 3. methods, which were the nature and content of the workshop activities. This question was considered using a combination of reflection on all qualitative methods (i.e., analysis from parents' and teachers' interviews, children's talk data and researcher field notes) and all quantitative methods (video analysis and ratings test). The change through AR is demonstrated in Table 9.1.

Table 9.1 Change through Action Research

		Before Cycle 1	Before Cycle 2	Before (Hypothetical) Cycle 3
Workshop programme	Workshop model	Workshop model 2 (Appendix 4.4)	Workshop model 3 (Appendix 8.8)	Workshop model 3
	Number of children in group	7	6	6 (but have some workshops where the children are purposely split into smaller groups)
Teacher approaches	Teacher approaches	Listen to children + accommodate their choice in activities where possible. Encourage turn taking and respect for each other in verbal communications	As before, also talking circle techniques (with teddy prop) Engage children with talk around non-workshop tasks (such as checking video camera)	Use combination of approaches mentioned, appropriate to the group's needs/preferences
Methods	Constructs	Original constructs	Constructs were refined based on video analysis from Cycle I	Two new categories are proposed 'teacher mediated CMA' and 'teacher mediated S-MA'
	Workshop activities	See Appendix 4.10	As before with addition of CMA and S-MA game (see Appendix 8.3)	Use all activities mentioned.

At the end of the cycles of Action Research, researchers may have 'come full circle, but...not closed the circle.' McNiff and Whitehead (2011, p.13). These authors suggest that any conclusions can contribute to creating more informed and complex questions and ways of working. This can be seen in the table above, for example in the decision to keep the same number of children for a hypothetical third workshop

but to split children into smaller groups for some activities. This was based on the finding in Chapter 8 (see Figures 8.4 and 8.5) where CMA and S-MA events peaked in a smaller group.

Another key finding of two new categories of teacher-mediated CMA and S-MA has implications for both activities and approach. This is an area for future research, in developing and investigating more workshop activities. The refinement of teacher approach was seen in the pre-Cycle II recommendation to engage the children in non-musical tasks. Building up rapport quickly is a key skill in working with young children (Roche, 2011) and in musically creative tasks (Kanellopoulos, 2007). This is crucial as the new categories of teacher-mediated CMA and S-MA suggest that some children's creative engagement relies on good communication with the teacher. It is important to state that it took 2 cycles of AR to develop and refine these findings and this research design is a strength of this PhD (this will be discussed further in 9.5).

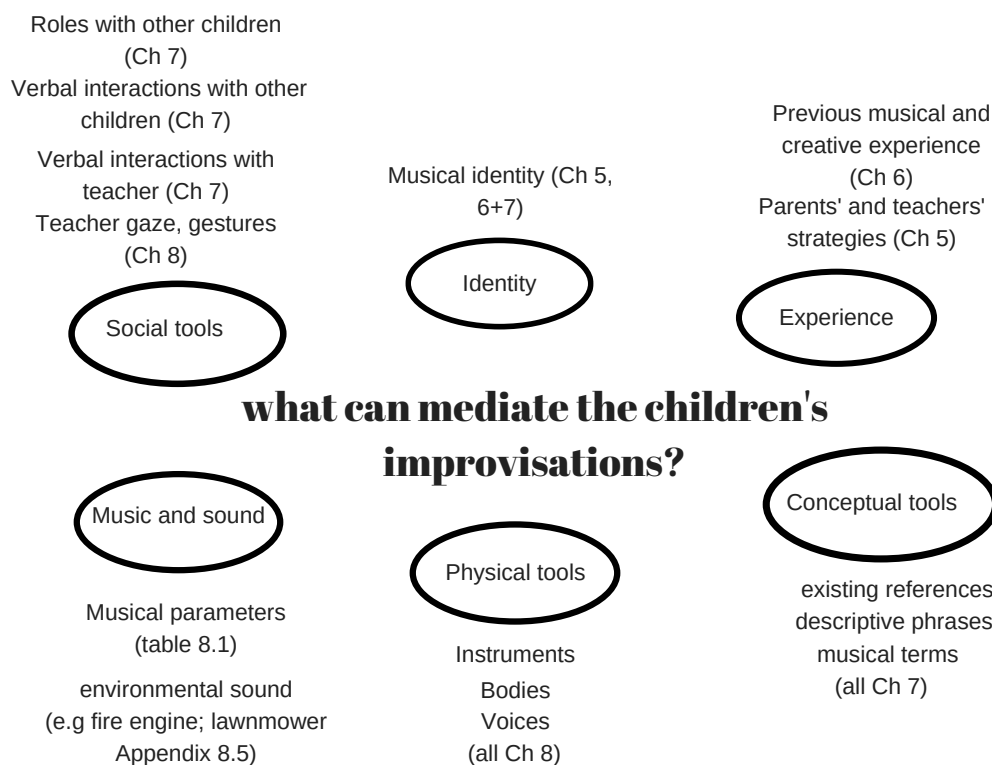
Evaluation of children's creativity and engagement has to accommodate an understanding of the purpose and intended outcomes of music workshops, therefore approaches to evaluation should reflect this (cf. Amabile, 1996; Hickey, 2005). Some of the pieces and strategies of the workshops and the musical parameters within which the children created may be linked. For example, early in Cycle I, I used conduction signs (see Appendix 4.10) which directed the children to create long or short notes as well as to start or stop. The Cycle I children frequently employed the articulation parameter in their improvisations, using long and short notes with the relevant hand gestures (signs). Therefore, this exercise, originally used as a 'way in'

strategy, was reframed in the improvisations. The children's reframing of a previous musical activity aligns with one of Sawyer's (2008) main ideas about learning music through improvisation. He suggests that learning music through improvisation can provide a deep learning experience through integration of knowledge.

9.4 Mediation

In Chapter 2, the socio-cultural concept of mediation was introduced as a way of conceptualising and differentiating various approaches to improvisation. I return to this construct now, as a way of theorising the experience of the children. Each of the data chapters in this PhD highlighted different tools which the children in my study used, or were potentially influenced by, in their group improvisations. Figure 9.1 categorises different forms of mediation, which are discussed in the subsequent section.

Figure 9.1 What can mediate the children's improvisations



Identity

In section 7.2.1 Ali's statement 'my mum say I'm good at music' demonstrates that he has an idea of what he thinks music is, (e.g., how it is played, by whom and on what instruments) as well as his belief in his self-efficacy. His initial concept of music was different to the improvisational activities. However, later in the workshop programme he identified that having musical agency in the workshops was important to him. Ali's mum had disclosed in her interview that his uncle is a well-respected percussionist in his own country (not UK). Ali's musical identity is also bound up in his cultural identity. More research is needed to investigate the intersections of how musical and cultural identities can affect children's participation in improvisation. Section 7.4.4 gives different examples of children's musical identities, for example

as a consumer (by watching and singing songs from Disney musicals) or dancer. The children's engagement in the improvisation workshops could be perceived in their experimentation with different musical roles, as composers (i.e., explaining what they wanted to happen) and as collaborators (i.e., by expressing that listening was part of the chain of actions in an improvisation). Therefore, musical identities mediated the nature of their participation (cf Hargreaves, MacDonald & Miell, 2017). Another important point for researching improvisation workshops is that the nature of the children's engagement was different, expressed in distinct ways through different musical identities. This has implications for ensuring inclusivity in creative musical workshops, that is, not to expect a universal outcome but that success can be seen in children engaging and developing on their own terms.

Experience

In an educational setting with a teacher, children bring their other experiences of interactions with adults (Dewey, 2016/2005). In Chapter 6, teachers' own beliefs about creativity and music may affect the kind of tasks they feel comfortable about with undertaking with children (Wilson *et al.*, 2008). The children's conceptual tool descriptive phrases, perhaps has a link to teachers' narrative strategies (see section 5.3.2). In these strategies, teachers shaped narratives to entice children into participation in a learning activity. There was creative choice for the child as long as they contributed to the story in some way. Descriptive phrases can be considered building blocks towards an overarching narrative; children reframe adult teaching strategies to progress their own development. This can also be seen from the other perspective, in that adults create stories using their knowledge of the child and their

cues to help form an intersubjective communicative space (Roche, 2011; 2015). In 6.2.1, Mrs N describes the Cycle II children being very absorbed in their own stories and role play in free play episodes during the nursery day (see section 6.2.1). In Chapter 7, the Cycle II children created suggestions for improvisations where there was enough descriptive information to place specific constraints on what they were going to play (see section 7.2.3).

Physical tools

The instruments used in the workshops belonged to each of the nurseries; they were of mixed quality, with some plastic and some wooden instruments. The Cycle I nursery had a greater variety with some world music instruments (e.g., cimbalom). They produced non-sustaining and mainly monophonic sounds. Sustained sounds were possible with voices. It has been proposed that the bodies of improvisers themselves inform and shape the music created (Baily, 1991; Ashley 2009). This is particularly relevant with young children, in Young's (2003a) study with young children improvising on large Xylophones, the shape and size of the instrument presented a mediating factor which combined with the children's movement to make sound. How the children's bodies operated with and on the instruments, what types of movements were feasible for the children demonstrate how physical tools mediated improvisations (Young, 2003a). In this PhD, children's bodies were also used as instruments (see table 8.1) through 'body percussion' where children stamped their feet, clapped their hands, and struck their legs to create sound. When children used their voices, the improvisations had many pitch and articulation CMA and S-MA events (see section 8.3.2). The children did not sing back the same pitch

originating from an instrument, only other children's singing. Different physical tools present different potentials for use in a group improvisation; improvisations that were solely instrumental were on distinct musical parameters from those that were solely vocal improvisations (see section 8.3.2).

If the children had access to a greater variety of higher quality instruments, it is plausible to suggest that they would create a larger range of sounds. Research such as Young (2005) proposes that the 'generative potential' (p.288) of classroom instruments may act as a limiting factor to musical expression of young children. Her study focused on communicative interactions between an experienced community musician and one young child. The research setting included access to a wooded outdoor space and sufficient materials to create bespoke instruments for this space. An important principle arising from her research is to reconceptualise and increase expectations of young children's music making, exemplified here by using high quality instruments in an inviting situation. This study was very well resourced in many ways, for example: a 1:1 staff to child ratio; an attractive outdoor space; the skills of the musician (i.e., building new instruments as well musical and communicative skills). A key concept from Young (2005) is to provide the best physical and special resources for young children, however the level of funding and access to outdoor space in this study would be prohibitive for most Scottish Local Authority EY establishments. A factor is that both Local Authority education spending and external arts funding (e.g., Creative Scotland) has decreased in recent years (Scottish Government, 2019). In keeping with the pragmatic stance of my

research which aims to refine transferable activities, it was an important choice to work with the resources each nursery had.

Conceptual tools

Chapter 7 gives a full account of how the children's conceptual tools were categorised and developed over the workshops. The children came to the workshops with a great deal of experience in improvising but very little or none in improvising in a group with a teacher. The children's conceptual tools, how they understood and talked about their improvisations can be seen to have developed in relation to the music they played, myself as teacher, each other and their experiences with their parents and teachers in being creative. Therefore, the conceptual tools themselves were mediated by other factors (see *combinations* below).

Music/sound tools

As seen table 8.1, various musical parameters mediated improvisations as children proposed ideas (CMA) and responded to them (S-MA). In the log of the workshops (see Appendix 8.5), there is a record of children creating pieces based on environmental sound (fire engine music and lawnmower music). In previous research there has been investigation of a call-and-response between child and teacher (Moorhead & Pond, 1941/78; Young 2003b; Wassrin, 2016). Other studies such as Flohr (1984) and Guilbault (2009) demonstrate children improvising within musical parameters set by the teacher (e.g., a drone or a specific a harmonic framework). Detailing the musical parameters with which children experimented with in a group is a rare approach.

Social tools

Social tools are communications from the teacher to the children and in between children. Teacher to child social mediation has been investigated (e.g., (Moorhead and Pond, 1941/78; Young 2003b; Wassrin 2016; 2019), however considering child to child mediation is far less common. This was seen in the ways that the different musical and communicative roles that children enacted influenced what they played. In Wassrin (2019, p) children's improvisations were 'taken up' by their teachers through non-verbal MoC such as gaze, gesture and movement. Therefore *others* mediated children's improvisations through different MoC. This joint negotiation internalised to create repeated patterns of communication between the teachers and children. I suggest this finding is consistent material in section 8.5.1 of this thesis, where 57% of CMA events were found to be preceded by a child-teacher gaze communication.

Combinations of tools

An important point is to appreciate that the tools often worked in combinations. In the workshops, a combination of music and sound tools and social tools can be seen in the process that led up to the group of children creating 'lawnmower music'. The children commented on the loud sound of the lawnmower coming through the window, spontaneously making noise to go with it. A more formalised improvisation was created after my suggestion to play along with the sound. Here, the 'existing references' (lawnmower music) developed from the experience tool 'previous creative and musical experience'. Social tools informed conceptual tools; in this

example the children's discussions with each other and myself helped form the descriptive instructions.

Experience and *identity* can be linked: experience mediates identity and identity is formed through a person's views of themselves as musical (or not) and their self-efficacy in musical contexts (Spsychiger, 2017). For the children in this study, experiences at home and in the nursery and workshops were synthesised through the music they played and talking about it afterwards. These elements have been identified as key for Welch's (2007) wish to gain better understanding of interrelations between the socio-cultural setting; participant's background and disposition and how this may influence a child's participation musical activities (as outlined in the Research dilemma in 1.2). This thesis adds to existing work, for example, Barrett (2006) who proposed that the content of children's spontaneous songs were influenced by a combination of process and a child's background in both home life as well as the nursery. Campbell (1998; 2009) proposed that children use improvised song to communicate with others and to make sense of the world. In common with this PhD, children appropriated pop culture and other cultural references from their home lives. Campbell proposed that the children's purpose was to experiment with different identities.

Mediation conclusions

In section 2.4.2, five different categories of mediating tools in children's creative music making were defined: 1. *external materials* (e.g., instruments and surrounding space) 2. *internal processes* (e.g., expression of ideas or feelings); 3. *children's own*

bodies; 4. *musical material* and 5. *others* (e.g., parents, teachers and other children).

This thesis has added to existing literature by apprehending more forms and combinations of mediation. This section offers insight into the many tools preschool children used to mediate their understanding of, and experience in, improvisation activities.

Investigating multiple aspects of improvisation workshops, makes it possible to appreciate their complexity and richness of the workshops and how the children made sense of them. Through improvisation in a group, they developed new music, but also ways of communicating about it through verbal, gaze and gesture MoC as well as through new categories of verbal expression (conceptual tools).

9.5 Strengths and limitations

My position as both workshop leader and researcher can be seen as both strength and limitation. As I am female, a parent and an educator, I shared some identifying features with my interviewees, which affords an insider's perspective (Gallais, 2008). In qualitative and mixed methods research this is not considered a limitation as long as personal assumptions are acknowledged and suspended, so that interpretations are not automatically shaped by these (Braun & Clarke, 2013; Willig, 2001). For example, Mrs J's description of employing a directed process strategy (see section 5.3.3) seemed harsh and perhaps restrictive of the child's creativity. My initial reaction could then lead me to assume an interpretation of Mrs J being an overly strict teacher. This personal assumption, shaped by my own identity as a professional free improviser, a parent and educator has created different values

towards teaching. However, after recognising and putting aside my assumptions I concluded that this directed process strategy may have been an example of a personally tailored 'high-support' scaffolding strategy (Pentimonti & Justice, 2010) which is in line with the implicitly socio-constructivist values of the curriculum (Priestley & Biesta, 2013). In the parent and teacher interviews, participants will probably have spoken to me in particular ways that they might not have in another social situation (Puchta, 2004). Despite my aim to relate to the interviewees as a fellow parent or educator as well as a researcher, they were aware of my background as a professional musician and perhaps perceived me as having a high status as a PhD candidate. This perception of a gap in knowledge and status may have influenced their answers; however, the way they spoke, revealed concerns they brought to the interviews, which is informative in itself.

Additionally, as mentioned in Chapter 3, researchers working particularly with in a pragmatic paradigm can choose methods which challenge their assumptions (see section 3.4.2). In this research this was seen in the choice of a quantitative approach to video analysis which allowed me to reflect on the ways in which children manipulated particular parameters. The addition of raters to examine videos of children improvising in a test and then be interviewed offered me additional and valuable points of view to reflect on and resulted in two new meaningful categories (teacher mediated CMA and S-MA).

As well as my role, chosen methods and analytical choices placed limitations on this research. For example, the video analysis examined four separate MoC (verbal, gaze,

gesture, music), yet, there are more possible MoC to consider. I chose the MoC most pertinent to this research partly due to time constraints within the framework of a PhD and also because not all MoC are important in a specific interaction (Korkiakangas *et al.*, 2014). Different research questions would require another analytical approach. For example, I looked at the children's interactions with me in detail, but future research could examine intergroup communication to answer other questions. Another way of enhancing future research would be to get nursery teachers to rate and be interviewed about the videos as well as music education experts. Their contribution would offer a valuable perspective which could usefully inform the implementation of improvisation workshops.

Each cycle's nurseries were based in similar socio-economic areas. Cycle I was in an area in the 2nd decile of the SIMD¹² scale and Cycle II nursery was in an area in the 3rd decile on the SIMD. Originally a private nursery (which reflected a more affluent population) had signed up for the PhD project, but withdrew, as the nursery was too busy to support the work. Future work could explore nurseries from different socio-economic backgrounds to appreciate any additional challenges or inequalities of income. Because nurseries have to follow a common curriculum, any differences might not be expected to be significant; however, the context and circumstances of schools or socio-economically disadvantaged families who use them are likely to be a factor affecting CfE delivery and impact. Another important point is that both

¹² SIMD is the Scottish Index of Multiple Deprivation, the Scottish Government's official tool to identify areas of multiple deprivation in Scotland:
<https://www2.gov.scot/Topics/Statistics/SIMD>.

nurseries in my study were considered ‘excellent’ or ‘very good’ (which are the top two grades) in all areas in their Care Service Inspection Report¹³.

The length of the workshop cycles was six weeks, which could be considered a limitation. However, this length was chosen in order to fit two cycles of action research, with adequate time for reflection in between cycles, within the same academic year. My research aim was to improve my workshop model; while having a longer workshop cycle would potentially yield interesting results, managing the Action Research project within the constraints of a PhD was an important priority. Future research could experiment with different programme lengths or intensity, but ideally my workshop strategies would be part of a nursery’s repertoire of musical activities and not a discrete intervention.

A crucial strength of the study has been the combination of a pragmatic theoretical stance using Mixed Methods with an AR design. By situating this PhD in pragmatism, investigation of the nature of children’s experiences in the workshops lead to the choice of mixed methods. Mixed methods illuminated aspects of my research not possible through a monothematic approach (Hesse-Biber, 2016). AR allowed for planned change based on empirical findings (Townsend, 2013). Changes were made to the number of children per workshop, workshop model and the creation of new workshop materials as a result. (Hesse-Biber, 2016). A good

¹³ The Care Inspectorate regulate and inspect care services in Scotland to make sure that they meet the right standards. Nursery schools are inspected under this organisation and receive a written report with grades in the following areas: care and support; environment, staffing management and leadership. <http://www.careinspectorate.com/>

example of this is in the creation of new workshop materials (see Appendix 8.3) as a result of findings from my video analysis of Cycle I. This revealed the importance of children looking at me before executing a CMA event. I did not apprehend this action or the importance of it in any of my field notes at the time; as such my chosen methodology and methods have provided an effective combination of analytical lenses to improve the workshops and my own practice.

This thesis demonstrated innovative methods in using multimodal video analysis with a group of this size in an EY music education context. This method of analysis was an essential tool in revealing the complexities of the children's creative initiatives and responses. As seen in section 8.5.6 the children's CMA and S-MA events were often preceded by the child looking at the teacher. This method was thus important in giving a richer understanding both of the different modes of children's creativity, and also of the ways in which the teacher can mediate and validate the children's contributions. It revealed the interactive nature of the pedagogical process in teaching improvisation to this age group.

Another important methodological contribution was in the sampling and analysing of all of the children's talk from the workshops. The talk that was analysed was gathered during the whole time the children were in the room, including setting up equipment and tidying up at the end. The resulting data gave a rich picture of how the children developed their conceptual and contextual understanding of the workshops. Children's views about improvising have been sought previously (Kanellopoulos, 2000; Kanellopoulos, 2007; Burnard, 2002). However, the children

in those studies were older (9-12 years of age). Therefore, this PhD has an important contribution in presenting an effective way of gathering children's complex views on improvisation at a young age.

9.6 Researcher position

Throughout this thesis I have engaged in a reflexive process. This section is devoted to exploring further the pedagogical issues that I encountered during teaching. The final section of this chapter presents a synthesis of these issues using Activity Theory as a meta-analytical lens.

9.6.1 My reflexive process

My initial conceptions, before I undertook the workshops, were that the children would function as their own improvisation group with me to call on for advice and support. This was based on my previous experience as workshop leader over eight years, which had been in a variety of settings, but mainly public workshops where parents were in the same room. During my field work, I experienced several shifts in my conceptions through reflections on the workshops in real time and directly afterwards. I used a variety of tools to help me reflect, recording voice memos, writing field notes and keeping a personal reflective diary. I will now outline the key processes and points of this reflexive process through my PhD.

As soon as I could manage after the workshops were over, I always recorded my initial thoughts and feelings and documented the pieces and exercises I had used. The

voice memos tended to capture the highs and lows of my experience of teaching as seen in the following example:

I can't believe it. Leo bit Ali's arm today- I thought I was good at managing behaviour. M (the headteacher) said he'd been acting out recently and said that that acting out can happen with new teachers or in open-ended tasks with some of the more disruptive kids. I'll need to think about this. About the structure of the workshops maybe or perhaps less talking from me and more showing. The open-ended nature of the task is absolutely integral to what I do. I can't change that. I feel quite upset at the moment.

Therefore, from the start of the workshops, reflexivity was not only part of the research process, but an essential practitioner skill for assessing the workshops and making change if necessary from workshop to workshop. I discovered very quickly in Cycle I that on the day of the workshop itself, my reflection was often focused on my perceptions of how the children had behaved, if they were engaged, if they seemed to enjoy the workshops and finally how I felt about it. Trying to reflect on the reasons why (either positive or negative) events may have occurred was much easier the day after. As an example of this next layer of reflection, a written diary extract follows from the day after the previous voice memo:

I think it's really important that this work has more impact than just to improve what I do. I'm used to doing workshops with kids whose parents bring them to workshops....so if the parent thinks its important, then the children will understand that too. The teachers told me that most of my participants did not come from 'musical homes', they had no experience of music apart from the singing they do around the nursery. The kids probably have no idea of what I'm going to do next! I have to remember that I've done this before but they haven't.

As part of the Action Research process, I reflected further in between the two cycles of the workshops. I had interview and video data, which gave me multiple perspectives to appreciate. Through repeated viewings of the workshop videos where I noted down the gaze, gesture and verbal modes in relation to the music, the patterns I saw in my own interactions with the children helped me realise the complexity of

the workshops. Noting down these transactions helped me see the workshops almost as an outsider. This perspective helped me realise that my perceptions of a successful or unsuccessful workshop were linked to breakthrough or breakdown moments, and, I did not fully appreciate the hard work that happened throughout the workshop, from both myself and the children until I made my video analysis. My position as a researcher in a PhD also affected this zoning in on the breakthrough or breakdown moments because my level of personal investment was consistently high, which I realised when comparing my level of investment to other teaching situations from my past.

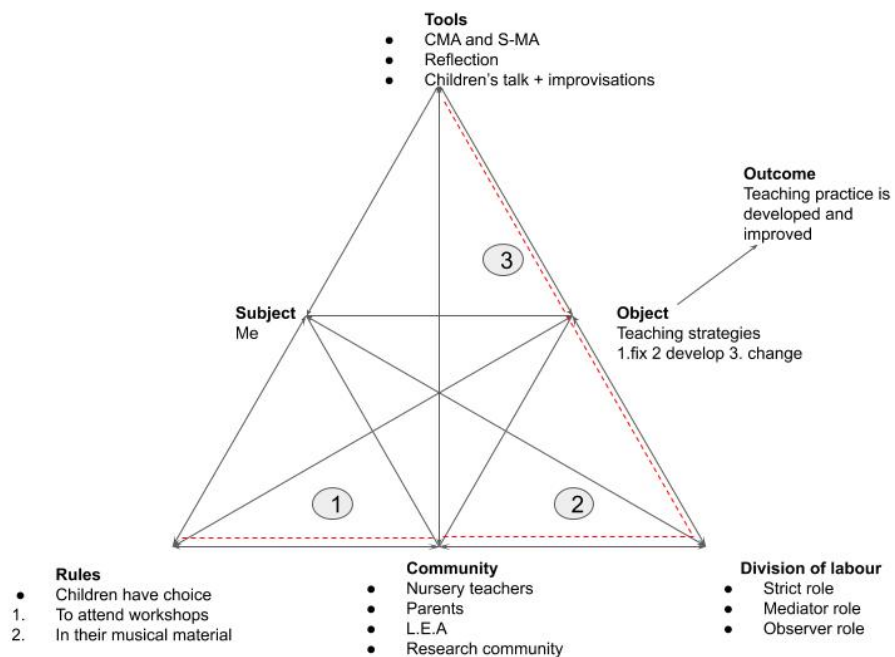
Field notes were useful when analysing parents' and teachers' interviews as having a written exploration of my thoughts and feelings helped me appreciate and then bracket my own personal assumptions (Braun & Clarke, 2013). However, a point to consider in the future is that the teachers' own musical identities may affect their ideas about what a 'musical home' is. As seen in the parent's interviews, opportunities for musical participation were provided in many ways for nearly all of the children in this study.

9.6.2 Activity Theory: my internal plane

One of the hardest aspects for me to reflect on was the complexity of my role in the workshops. For this reason I have used Activity Theory to assess the different aspects of the roles and how these affected my thoughts about teaching in the workshops (see section 3.10 for full explanation). Figure 9.2 shows how I saw myself in the workshops based on the synthesis of my reflexive tools (diary, field

notes and voice memos). I will describe each node of the activity system and then explore the tensions and inconsistencies, which are the red dotted lines marked 1-3.

Figure 9.2 Activity system of my internal plane when teaching improvisation



Subject: me, my internal plane when teaching improvisation

Object: As in Figure 5.1, the object is connected to the 'motive behind the activity' (Hardman, 2007, p56), and that the subject (teacher) drives this. In this activity system, the object is formed from various strategies which I employed. During the children's improvisations, I decided on the strategy for the next piece, either to *fix* a perceived issue by giving the children specific feedback and trying again; by *developing* the children's understanding and confidence by saying what they did well

and trying the same thing again or to *change* the activity. A change could be for different reasons, for example, at the end of a session if something wasn't working and I felt the children's concentration was not at its best then I would take the decision to change activity and perhaps come back to the original task later, or in the next workshop. At times when the children were playing, I would have an idea for a new strategy, for example to co-create a story with the children that allowed the quieter children a chance to have their own musical ideas heard, rather than telling the more confident children to be quiet all of the time.

Mediating artifacts (tools): the purpose of the pieces or exercises used was always for the children to play sensitively with one another (S-MA) or to create a new idea (CMA). My listening and decision making was often mediated through these two constructs. Even during times where I took a decision to keep them engaged by giving them a task of their choice, I still listened for any instances of either construct. Additionally, my own reflection and the children's talk and improvisations formed

Division of labour: this node in Activity Theory is primarily concerned with power relations in an activity system. Each role reflects a different way that I related to the children giving them more or less agency and voice in the workshops; an explanation of each follows. *Strict role*: this role was characterised by my perceptions at times of the importance of maintaining discipline in the group where I was clearly in charge and the children had to follow my instructions. *Mediator role*: this role was based on an ideal of achieving equality, to help create situations where every child could propose ideas as well as listen to the others in the group. This role encouraged

discussion and talking out differences. *Observer role*: this role allowed the most agency and freedom to the children. In this role I sat back, observed and reflected and did not intervene or give instruction to the children.

Community: my perceptions of the expectations of various groups of people form this node. As a visitor in the two different nursery schools I was aware of the community of the schools, and being part of the everyday life of a school. On every visit I would speak to different members of staff, I would always sign in at the office and speak to staff there, I would check in with the main key workers and headteachers on every visit. At times I would have a cup of tea and long conversations with staff after my workshops. If there were any issues with the children then I would report them to the child's keyworker. I was aware that the nurseries were part of the larger learning community of Glasgow City Council and Education Scotland, posters about the areas of the curriculum were in staff rooms and in common areas. I also was aware of my own research community. I would imagine talking about my work to fellow postgraduates and my supervisors particularly if something out of the ordinary happened. I would reframe the activity in my head in imagined descriptions to each of these different and distinct communities, presenting aspects of this complex situation that I thought were most interesting to or relevant to them.

Rules: my own rules for the workshops were principles based on ensuring children had agency which then guided my interactions with them.

The intended outcome was to improve my own practice. Through the creation of and reflection on the strategies and how these were mediated by various factors, the depth of my knowledge about this complex activity and my place in it has grown. Considering tensions in my Activity System (see next paragraph) has also contributed towards this growth.

Tensions in the activity system happened in three main areas, each will now be explored. The first dotted line between the rules and environment nodes shows the tension between my principles and the teaching environment. I, both as a teacher and researcher, felt that the children's participation should be their choice. Before every workshop I would ask them if they wanted to come, and if they did not want to come I would reassure the child that it was ok and that I would see them the next time. Teachers (Mrs J and Mrs S) commented on this principle in both Cycles saying that 'they shouldn't get a choice'. I talked to the teachers about my reasons for this, about ethics when working with young children but I felt that both sides still held the same views at the end of our conversation. Therefore there is a tension, which, while it perhaps cannot be solved, needs to be understood by both sides.

The second dotted line was concerned with the tension I felt at times with my principles and approaches as an improviser and the expectations of the teachers. These expectations were possibly inculcated through teacher training and school/curricular policies. In my informal conversations some of the teachers talked me through their approaches to teaching which involved a step-by-step modelling of the outcome. This was inconsistent with my preferred approach in the *mediator role*,

which encouraged exploration and, afterwards I would explain what I liked, i.e., how close to CMA and S-MA the children came. At times I took on more of a *strict role* in the workshops but I did worry that it would take me too far away from my intended outcomes of encouraging creative agency. This tension highlights the challenge of facilitating open-ended creative tasks in groups within a school system which has more tightly defined outcomes.

The third dotted line reveals a tension between the role of teacher and the tools of CMA and S-MA. When in the *strict role* I felt at times that achieving these constructs was not possible as the children were not listening to each other or were unable to resolve their own power struggles. At points such as these, I would stop the activity and talk about what had happened. Following this, I would then suggest a structured musical activity where the rules were explicit and thus limit opportunities for CMA events. This action would cause me to consider whether a different strategy would be more successful in helping the children play or understand these constructs better.

Reflecting on my activity system reveals the complex roles, negotiations and inherent tensions in teaching improvisation. It also shows the process of ‘pedagogical decisions in the moment’ (Thorpe 2015) when teaching open-ended creative activities in a group. It has revealed a detailed account of the values, principles and process in the workshops and my position in them. In 3.5.1 I proposed Dewey’s following questions as a starting point for challenging my assumptions (Morgan, 2007). What are the sources of our beliefs? And, what are the meanings of our

actions? In Chapter 1 I described my own experiences; a key belief rising from my childhood engagement in music was in the transformational power of music and creativity. This belief has been a strongly motivating factor throughout my life as well as this thesis. Re-examining this belief, I find it as strong as before but I have a greater depth of understanding about the meaning of my actions in the workshops as complex and contingent on different elements and combinations of these.

The final chapter will consider recommendations, implications and future research.

CHAPTER 10 RECOMMENDATIONS, IMPLICATIONS & CONCLUSIONS

10.1 Introduction

The final chapter in this thesis will present recommendations and implications for future research followed by final conclusions. The research has contributed to the fields of music education and music psychology and findings from this study have important implications for reconceptualising and teaching music as a more creative activity through improvisation in Early Years.

10.2 Recommendations

Recommendations for future research based on this thesis are in five areas: curriculum; workshop activities; further investigation of children's cognitive processes; methods and cross-disciplinary areas.

10.2.1 Curriculum

For music to be fully integrated into the curriculum, it has to be apprehended in broader and more nuanced ways than demonstrated by parents and teachers in chapters 5 and 6 who appeared to recognise only the 'correct' execution of known materials. This is only part of what making music involves; a fuller curriculum requires appreciation of the collaborative, creative and critical thinking skills that can be developed through improvisation. These skills have been championed in earlier theoretical work, for example Hickey (2009) and Sawyer (2008). The latter highlighted four learning outcomes: deep conceptual understanding of music; integration of knowledge through the act of creating music in real time; expertise in

adapting to immediate changes; and collaborative skills. This thesis showed children developing deep conceptual understanding and integration of knowledge in that they were able not only to express CMA and S-MA in music but also to describe these qualities from their own perspective (see section 7.3.2). Children also developed collaborative skills; they were able to work together on a task to create a piece of music by specifying the parameters the group should work within, and correcting others if they did not realise the specifications.

As discussed earlier, progression in improvisation skills can be realised in both musical and cognitive development. It is important to know how children develop their understanding (internal plane) as well as the number of musical parameters they can manipulate (external plane). Knowing some of the children's internal plane of thought illuminates the process they go through in making sense of what is happening. A teaching approach based on this would involve the teacher not correcting children's perceptions, for example, when the children proposed that the workshop activities were not music (see section 7.2.1), but to appreciate this as part of the children expanding their understanding of a creative or new context. However this was not common practice in teaching music in the nurseries in this study; their focus was on learning songs and developing skills to sing the right note or replicate the right rhythm rather than exploration and building up contextual understanding through experimentation and discussion with the teacher. Other subjects in preschool education are viewed in a broad way, for example, literacy is understood to be a combination of skills (e.g., reading, inferring) and knowledge (Scottish Government, 2006). Curriculum for Excellence emphasises development of the four capacities

(confident individuals, successful learners, effective contributors and responsible citizens) in every subject (Biesta & Priestley, 2015), therefore music education must accommodate the development of the child in all four capacities.

Agency in learning has been viewed as crucial for children by many key educational philosophers (for example, Dewey and Bruner) and is embedded in the Curriculum for Excellence (2006). Increasing occurrences of CMA and S-MA in the workshops demonstrate that children developed agency to express themselves (which maps on to the CfE capacity of confident individual), or to respond in ways that were creative and meaningful for them as both individuals and in their group of peers (which maps on to the CfE capacity of successful learners).

Further qualitative studies could investigate children's cognitive processes in group creativity. This is an exciting area with the potential to improve how music and creative subjects are taught in groups. There is very little work in this area, with a couple of notable exceptions: Kanellopoulos (2000, 2007) and Sawyer (2008). However this thesis is a timely and useful exploration of how children understood improvising and how they developed conceptual tools to do so. It has valuable implications for approaches to teaching improvisation and much to offer the EY CfE. Returning to the educational outcomes specified for music in EY, it is interesting to note that the curriculum requires children to play music in an exploratory way, but also to be able to discuss it critically at an appropriate level.

1. I enjoy singing and playing along to music of different styles and cultures.
2. I have the freedom to use my voice, musical instruments and music technology to discover and enjoy playing with sound and rhythm.
3. Inspired by a range of stimuli, and working on my own and/or with others, I can express and communicate my ideas, thoughts and feelings through musical activities.
4. I can respond to music by describing my thoughts and feelings about my own and others' work. (Scottish Government 2008)

The children's musical, creative and cognitive skills progressed through the workshops, towards all four of these objectives and therefore there is strong potential to enhance EY education in music and in other subjects through such provision.

Building on the work in this thesis by refining and evaluating effective strategies in delivering these workshops, will provide the necessary tools for full implementation of the CfE in music.

In addition to refining strategies, consideration of the language used to describe improvisation activities is important. As seen in section 2.2.1 there are many definitions and applications of improvisation within music. Specialist music teachers often feel uncomfortable teaching improvisation (Larsson, 2019), therefore, teachers who identify as non-musicians face a form of double-barrier as non-musicians and non-improvisers. Framing musical improvisation for preschool children could be effectively realised through terms such as 'play' and 'exploration' rather than 'improvisation'. Recent research, for example Williams *et al.* (2015) shows shared musical activities in the home between parents and their young children having potential to positively impact other developmental competencies such as 'prosocial behaviour, attentional regulation and numeracy' (p113).

10.2.2 Workshop activities

This thesis has presented various novel pieces and exercises (see Appendices 4.10 and 8.3) whose impact and implementation should be investigated further in delivery by different teachers. As outlined in section 9.7, research was carried out in two nurseries with similar ratings (excellent and very good) from the national inspectorate; future research should take the workshops to nurseries with a wide range of ratings. In nurseries with low ratings from the Care Inspectorate (see p272), elements of their Activity Systems (e.g., community and rules) are likely to be distinct. Understanding of the wider applicability of the workshop programme can be enhanced through testing how these different elements may be engaged to enhance children's creative and cognitive development. I also recommend that teachers leading the workshops in future studies should be from different musical backgrounds and levels of musical training, so as to assess their effectiveness in a range of settings. Non-specialist teachers should also participate; future research will be more impactful if preschool teachers themselves gain relevant skills. The detailed analysis of my reflexive process in section 9.6, would provide a useful tool for evaluation. The Activity Theory framework gives a powerful and insightful means for a practitioner to document and reflect on their personal experience. As well as this, elements from different practitioner's activity systems can be compared. The constructs also provide a robust theoretical basis from which to create more workshop activities to develop CMA and S-MA which can also be compared and shared.

Another objective for further investigation would be alleviating tensions as seen in Figure 9.1 between the nursery teachers, my approach and the curriculum. More investigation of preschool pedagogy with a particular focus on uncovering additional teaching strategies would be useful. It was found that teachers used narrative strategies and children used descriptive phrases; this is a potential link, which can be usefully exploited to enhance teaching of music. A key point from this research is the importance of the children having agency in creating and defining narratives. In this sense, the constructs were flexible and my teaching approach allowed for most children to contribute in a way that was meaningful to them.

10.2.3 Methods

The methods used in this research have been crucial in capturing key aspects of the rich picture of my improvisation workshops. As recent studies have shown (e.g., Addressi *et al.*, 2017; Ilari *et al.*, 2017) researchers use mixed methods to reveal multiple aspects of their settings in improvisation education. This is vital, as contemporary understandings of improvisation recognise that it can be mediated by plural agents and artifacts. The methods used in this PhD can be used or adapted by other researchers wishing to capture multiple aspects of their setting. For example different MoC can be chosen to suit others' research questions. Importantly, this research has apprehended the perspectives of the children in this study, an area which is very scarce in both music education and general education research, especially at this age (Wassrin, 2016). The data gathering method (gathering all of the children's talk throughout the intervention) and the analytical method can be used by others to gain insight into an under reported yet crucial area on music education.

10.2.4 Cross-disciplinary areas

There is considerable potential for valuable future research applying the constructs of CM and S-MA in different disciplines. The constructs could form the principles on which to design educational activities. For example, in teaching drama using improvisation, CMA could become creative agency in making new action or text and S-MA could become a socio-gestural or socio-verbal response. I suggest multimodal video analysis in this particular setting as both creative initiatives and responses can be across several MoC. Similarly, in other creative group activities, (e.g., dance) the constructs are flexible and so can be adapted to suit the setting. An advantage for any potential transfer is that children develop creatively from their own starting points and frames of reference, with the group and teacher scaffolding the individuals' conceptual development. Recent work has begun to explore children's individual and creative embodied response to music which encourages children to 'move-as-they-wish' (Almeida, Overy & Miell 2017, p.5). In that study, music was fixed and movement was spontaneous, and with individuals rather than in a group; however an analytical framework was created to classify movement beyond coding as 'gesture' as in my study. A combination of my methodology with that of Almeida *et al.* offers a clear and testable way to assess gains in qualities that are seen as educationally valuable, but hard to define and so, difficult to capture.

Another area for cross-disciplinary investigation is in EY literacy. Literacy is defined in CfE (2017) as:

the set of skills which allows an individual to engage fully in society and in learning, through the different forms of language, and the range of texts, which society values and finds useful.

There is a broad range of suggestions for what comprises a ‘text’, including written material but also the spoken word, graphs, maps, comics, labels, signs, recipes and text messages (for full list see Scottish Government 2016, p.23). In EY an important aspect of developing literacy involves developing critical skills (Roche, 2015). These are to be able to discriminate elements of a ‘text’, to contribute to discussions and apply these skills in different areas of learning (Scottish Government, 2017). If music is reconceptualised as a ‘text’, then it can be seen in Chapters 7 and 8, that children in this study were able to discriminate between different musical and structural elements, and talk about them. Assessing transfer into new areas of learning provides the basis for future study in a key area of interest for Scottish educators.

This would be timely research as the Scottish Government have identified raising standards in literacy and numeracy as a primary way to alleviate educational disadvantage experienced by children from the poorest backgrounds (McCluskey, 2017). This ‘attainment gap’ between children from different social backgrounds is present from the EY stage and persistent through all stages of education (Sosu, 2014). Strategies to improve literacy and reduce the attainment gap include high quality early intervention (at nursery); children’s collaboration in groups through communicating and sharing stories in different ways, for example, in imaginative play, but more research is needed (Bradshaw, Lewis & Hughes, 2014; Sosu, 2014;

McCluskey, 2017). There is a research gap for investigating potential transfer of literacy skills and other impacts from a music intervention which uses the activities and methods of assessment developed in this thesis, as a component of high quality EY intervention.

10.3 Implications

A key implication is the need to expand knowledge about, and develop the perceptions of teachers and parents about music and creativity. A survey would be an appropriate method of understanding the prevalence of views expressed in this research. There is an increasing body of work emphasising that music and improvisation are inherent features of human communication from birth (Trevarthen, 2002; 2008) and we can all participate in creative musical activities on some level (MacDonald, Wilson & Miell, 2012). However, the interviews in this study suggest that parents and teachers do not have access to this discourse – which presents potential difficulty for teachers teaching creative music. CPD activities need to first change conceptualisations about music and creativity, as this thesis has shown, and how these attitudes are likely to impact upon children’s identity and development (musical and otherwise).

As well as amassing CMA and S-MA activities, future teachers need to possess teaching strategies that also form a resource to enable children’s creativity. Teachers should have a good bodily awareness as this has shown to be crucial for facilitating creativity in children of this age. Working in this area requires teachers themselves to improvise, and at times decisions in-the-moment do not always work. Systematic and regular reflecting on one’s own practice is key to making sense of how in-the-

moment decisions are made and thus, the reflexive process is key to improving teacher practice in teaching creativity through music (Thorpe, 2015). Reflective practice facilitates Scottish teachers' active contribution to improving their own practice but also education as a whole (Biesta & Priestley & Robinson, 2015). This PhD offers strategies for teachers to reframe this essential pedagogical process in musical creativity as well as an effective way to realise the progressive and exciting curriculum for EY music in Scotland. In addition, a recommended future direction is the development of an appropriate module for teacher education.

10.4 Conclusions

To conclude, music brings into play a diverse range of important skills. The understanding of music education as an ideal way to improve creativity, social skills and critical thinking, presents a powerful argument for teaching and valuing music on this basis from the start of young children's education. The original contributions to knowledge from this PhD offer promising and innovative ways to realise these crucial aspects of music in an engaging way for young children. With parts of this thesis published and presented at national and international conferences (see Appendix 1.1), I aim to continue my work as a researcher and practitioner in this valuable area. As outlined in Chapter 1, I have been privileged in my access to music education opportunities from a young age. These contributed to me becoming a professional musician working with orchestras, in all kinds of venues for improvised music and in community music, subsequently leading me to develop research and this thesis. Access for all children to participate in music improvisation has rich potential for personal, social and cognitive benefits, but also to spark curiosity and love for creativity and music.

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APPENDICES

APPENDIX 1.1 PUBLICATIONS

Various sections of this thesis have been published in three separate book chapters

1. *Arts-Based Methods in Education around the World*. Chemi, T. & Du, X. (eds.) (2018).

Chapter 4 in the above book: ‘Designing Activities for Teaching Music

Improvisation in Preschools–Evaluating Outcomes and Tools’ contains work derived from this PhD (sections 1.4; 3.11; 4.5; 8.3.1)

2. *Expanding the space for improvisation pedagogy in music: A Transdisciplinary Approach*, Johansen, G. G., Holdhus, K., Larsson, C. and MacGlone, U. (eds.) (2019).

Chapter 1 in the above book: ‘Expanding the space for improvisation pedagogy in music – an introduction’ contains work derived from this PhD (section 2.5.1)

Chapter 8 in the above book: ‘Young children’s talk about improvisation: How *conceptual tools* and *workshop roles* are formed through musical improvisation workshops’ is Chapter 7 of this PhD with the addition of section 4.7 and Appendix 8.8 Workshop model 3.

CONFERENCE PRESENTATIONS

Date	Conference	Presentation
June 2015	'The art and Science of Improvisation' Conference and Summer school Greig Research School and Stord/Haugeund University College, Stord, Norway.	Paper and poster
October 2015	SEMPRE conference on Music and Health Glasgow Caledonian University	Paper
May 2016	9 th Festival and Conference International Society of Improvising Musicians (ISIM), Wilfred Laurier University, Waterloo, Canada.	Paper and joint paper/presentation with Dr G.B. Wilson
July 2016	32 nd World Conference International Society for Music Education (ISME), RCS, Glasgow	Paper
August 2016	'Leading Education: The Distinct Contributions of Educational Research and Researchers' European Education Research Association (EERA), University College, Dublin.	Paper and Symposium
March 2017	Nordic Network on Music Educational Research Conference (NNMPF), University of Gothenburg.	Paper and Symposium
March 2017	'Improvisation: a catalyst for learning and child development' Jazz North Education Conference, Leeds.	Paper
April 2017	'Context matters' 6 th International Symposium on Assessment in Music Education (ISAME),	Paper

	Birmingham City University.	
September 2017	British Educational Research Association Annual conference (BERA) University of Sussex, Brighton.	Paper
April 2019	Research in Music Education Conference (RiME), Bath Spa University.	Paper and Symposium

Appendix 4.1 Research timeline

Data gathering phases are shown in blue, data analysis phases are shown in red.

Data type \ Timeframe	Video	Talk	Interviews	Rating test
Oct 2015 (Pilot)	Blue	Red		
Nov 2015 (Cycle I)	Blue		Blue	
Dec 2015 (Cycle I)	Blue		Blue	
Jan 2016 (Cycle I)		Red	Red	Blue
Feb 2016 (Cycle I)		Red	Red	Red
March 2016 (Cycle I)		Red	Red	Red
April 2016 (Cycle I/II)	Blue		Blue	Red
May 2016 (Cycle II)	Blue		Blue	
June 2016 (Cycle II)		Red	Red	Blue
July 2016 (Cycle II)				
August 2016 (Cycle II)		Red	Red	Red
Sept 2016 (Cycle II)		Red	Red	Red
Oct 2016 (Cycle II)				Red
Nov 2016 (Cycle II)				Blue
Dec 2016 (Cycle II)				Red

Appendix 4.2 Consent forms for pilot study



Una MacGlone
PhD Candidate
Reid School of Music
University of Edinburgh

Consent form – Pilot workshop on 9th October at Garnethill Multicultural Community Centre (GMCC)

The pilot workshop – to be held at GMCC at 1.30 in Glasgow on 9th October is a pilot study for Una MacGlone's PhD project.

The workshop will be a group music workshop using improvisation with techniques developed by Una MacGlone over the last 8 years.

The workshop will last for 25 minutes (maximum). There also be a short discussion with the children at the end of the workshop.

This workshop is entirely voluntary. If you or your child wishes to withdraw at any point before or during the workshop, this is absolutely fine and can do so without consequence.

The video data is for research purposes and the raw data, i.e., data which could identify your child, will only be seen by Una MacGlone and her two supervisors – Prof. Raymond MacDonald (head of the Reid School of Music) and Dr. Graeme Wilson.

Finally many thanks for allowing your child's participation, if you have any questions about the project then please email me here: s1271701@sms.ed.ac.uk

I (*parent/carer*) consent to/ do not consent to Una MacGlone

videoing participating in the music

workshop on 9th October at the CCA Glasgow

Signed:

Date:

Appendix 4.3 Workshop model 1 (before pilot)

Choose 1 or 2 activities in each line, move through the lines sequentially.

Join the
circle

Children's
choice

Soup song

3 listening
spaces

Play with
the
space(s)

explore
sounds

conduction

Lets go on
an
adventure

How are
we today ?

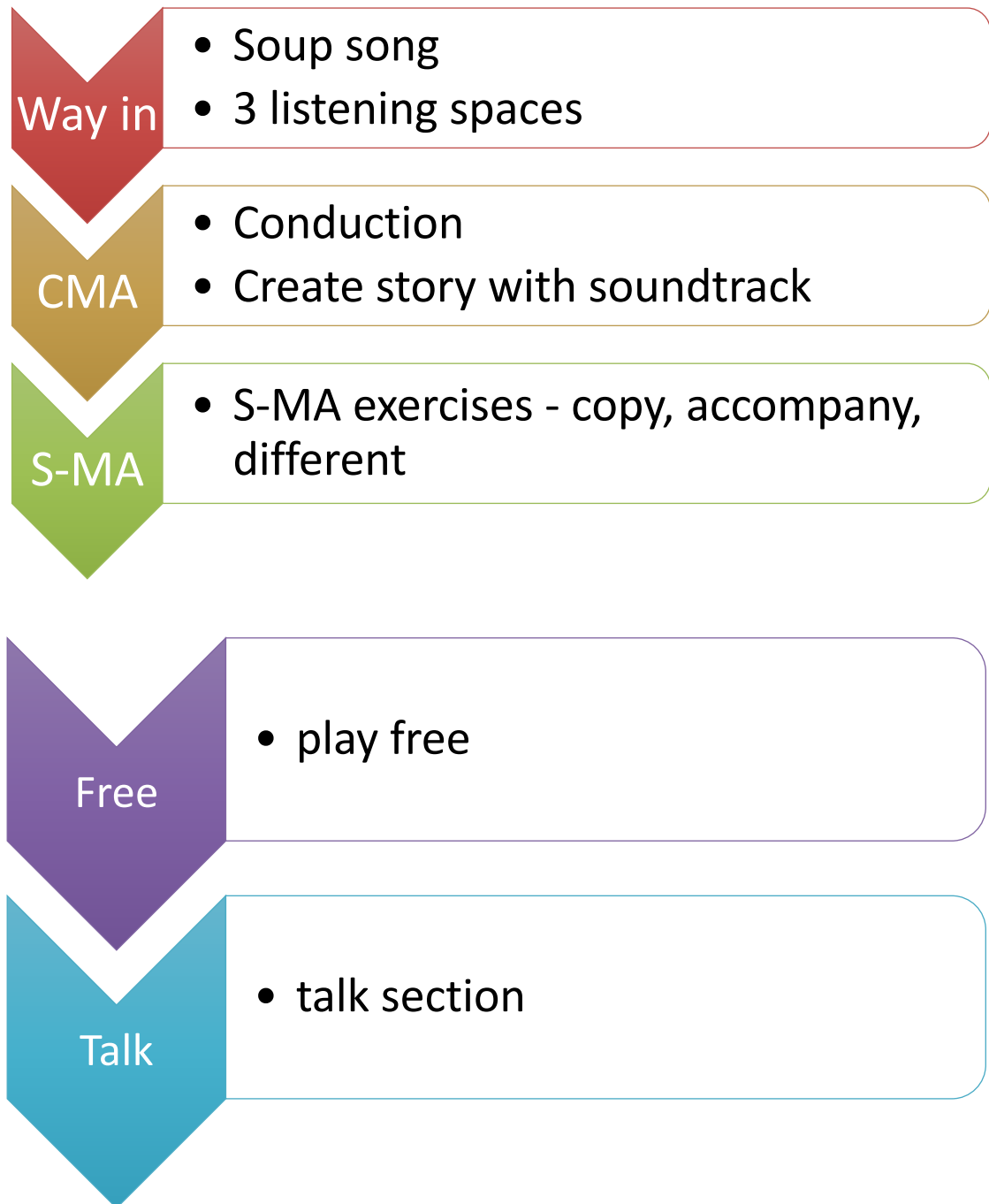
Revolving
duos + trios

Process
exercises

Free

talk

Appendix 4.4 Workshop model 2 (after pilot)



Appendix 4.5 PVG certificate

STRICTLY PRIVATE AND CONFIDENTIAL

Disclosure
SCOTLAND

PVG SCHEME RECORD
Scheme record disclosure issued under section 52 of the Protection of Vulnerable Groups (Scotland) Act 2007

APPLICANT COPY

MS UNA [REDACTED]
MACGLONE [REDACTED]
GLASGOW [REDACTED]

Disclosure Number: [REDACTED]
Date of Issue: 11/12/2013
Page 1 of 1

A copy of this disclosure record has also been sent to the registered body which countersigned the application and any authorised regulatory body.

Applicant Personal Details

Surname: MACGLONE
Forename(s): UNA [REDACTED]
Date of Birth: [REDACTED]
PVG Membership No. [REDACTED]

Statement of Scheme Membership

Membership Status
The applicant is a PVG Scheme member in respect of regulated work with children and, therefore, not barred from that type of regulated work.

Consideration Status
The applicant is not under consideration for listing by the Scottish Ministers for the workforce(s) to which this disclosure relates.

Vetting Information

Convictions
The applicant has no convictions for disclosure.

Cautions
The applicant has no cautions for disclosure.

Prescribed Court Orders & Sex Offenders Notification Requirements
The applicant has no prescribed court orders or sex offender notification requirements for disclosure.

Other Relevant Information
The applicant has no Other Relevant Information for disclosure.

END OF DISCLOSURE

[Barcode]

Appendix 4.6 Research proposal for ethics form

Research proposal – Una MacGlone

The research project will pilot a twice-weekly music intervention over six weeks for Nursery children (in their preschool year). The intervention, devised by the investigator will focus on developing the children's Creative Musical Agency* (CMA) and Socio-Musical Aptitude (SMA)** through free improvisation games and strategies. S-MA and CMA are two new theoretical categories developed from the researchers own practice and reading. *Socio-musical aptitude (S-MA) is the capacity to apprehend others' skills and personal qualities within a group improvising and to accommodate these in an appropriate musical response. Therefore, the improvisers' intent is both a musical contribution and an interpersonal positioning within the group improvisation. **Creative musical agency (CMA) is the capacity to invent new music and be able to contribute to an improvisatory context. Through this, the child is able to execute their personal musical aesthetic in an effective contribution to an overall group piece.

Developing these two capacities in young children is important because it enables the children to explore their own creativity and how it is negotiated within a group. This also ties in with educational approaches which have been recently applied in Scotland. The Curriculum for Excellence (2006) teaches every subject through four capacities - successful learners, confident individuals, responsible citizens and effective contributors. The following figure from Education Scotland describes these in more detail.

successful learners	confident individuals	responsible citizens	effective contributors
<p>attributes</p> <ul style="list-style-type: none"> enthusiasm and motivation for learning determination to reach high standards of achievement openness to new thinking and ideas <p>capabilities</p> <ul style="list-style-type: none"> use literacy, communication and numeracy skills use technology for learning think creatively and independently learn independently and as part of a group make reasoned evaluations link and apply different kinds of learning in new situations. 	<p>attributes</p> <ul style="list-style-type: none"> self-respect a sense of physical, mental and emotional well-being secure values and beliefs ambition <p>capabilities</p> <ul style="list-style-type: none"> relate to others and manage themselves pursue a healthy and active lifestyle be self-aware develop and communicate their own beliefs and view of the world live as independently as they can assess risk and make informed decisions achieve success in different areas of activity. 	<p>attributes</p> <ul style="list-style-type: none"> respect for others commitment to participate responsibly in political, economic, social and cultural life <p>capabilities</p> <ul style="list-style-type: none"> develop knowledge and understanding of the world and Scotland's place in it understand different beliefs and cultures make informed choices and decisions evaluate environmental, scientific and technological issues develop informed, ethical views of complex issues. 	<p>attributes</p> <ul style="list-style-type: none"> an enterprising attitude resilience self-reliance <p>capabilities</p> <ul style="list-style-type: none"> communicate in different ways and in different settings work in partnership and in teams take the initiative and lead apply critical thinking in new contexts create and develop solve problems

Delivering music through free improvisation and emphasising the two concepts of S-MA and CMA has potential to develop each of the four capacities. Attributes and capabilities are linked to relevant concept as follows. Under the successful learners category, the capability to think creatively and independently can be developed through CMA, as this aptitude has potential to cultivate the child's personal creativity, and agency in expressing this within a group. Through the confident individuals category, the capability relate to others and manage themselves can be realised through a child developing S-MA. S-MA develops the aptitude to respond to others through sensitive listening and playing. The responsible citizens section looks to prioritise respect for others; commitment to participate responsibly and understand different beliefs. Developing S-MA has potential benefits in this area as this aptitude requires listening and understanding another child's musical gesture and forming an appropriate response. The effective contributors capacity seeks to enable children to

take the initiative and lead. Cultivating the children's CMA, therefore gives them potential to express their personal creativity within a group - which requires initiative to realise.

Therefore this intervention has potential to enhance and develop current teaching practice by focusing on enabling these two concepts in preschool children. The intervention will be developed and refined through two cycles and through this, new pieces and exercises specifically designed to enable S-MA and CMA will be produced.

Research questions are as follows:

1. Can the children's Socio-Musical Aptitude (S-MA) and Creative Musical Agency (CMA) be quantified and assessed?
2. What are the teachers' and parents' views of the workshops and children's participation?
3. How do the children view the intervention and improvising?

Method

Design

Qualitative methods have been chosen as the most suitable for this intervention as the aims and questions of the project are exploratory. The two main strands of this project are to develop and refine the intervention itself and to develop and investigate two new theoretical concepts: S-MA and CMA. Therefore, this research will not attempt to generalise findings, but will seek to understand the processes of S-MA and CMA and how these two concepts may manifest in a group of preschool children. Action Research has been chosen as the procedure as it allows for development

through the research cycle of Study/Plan; Take action; Collect and Analyze Evidence; Reflect, (Townsend 2013). There will be two research cycles possible in the scope of this PhD.

Intervention

Each workshop session in the intervention will comprise five sections:

hello/welcome music; CMA games; S-MA games, free playing; talk. The researcher has devised specific activities for the first three sections of the workshop based on eight years of delivering improvisation workshops to children. It is anticipated that each section will take around 5 minutes. The intervention should take place in a self-contained room, so as to facilitate concentration and listening. There will be a mix of tuned and untuned percussion to give the children access to a range of instruments and the children should all play a different instrument. This will help the group differentiate the type of sound, who it comes from and therefore the possible intent. The workshop leader, in this project is the researcher, and she will, at all times aim to facilitate the children's own creative and musical ideas – rather than having the children play her ideas. She will encourage all suggestions made by the children and be supportive in developing their own critical appraisal skills.

Participants

The children participating will be in the preschool year of Nursery education, so will be aged between 3 years 10 months and 4 years 10 months. There will be eight children in the group - this is to ensure that the group is large enough for the children to have to consider and negotiate musical and social interactions but small enough to manage in terms of the volume and density of all the instruments playing together.

One parent of each participating child will be invited to give an interview at the end of the cycle so that up to eight parents will also participate (per research cycle). As well as this, interviews will be sought with the children's teachers, aiming for two teacher interviews per research cycle. Two preschool music education experts will view and discuss video footage per research cycle. Two experts have been approached: Dr Rachel Drury, whose doctoral thesis examined the impact of Kodály-based music intervention on the language development of children between the ages of 4 and 6 and Helen McVey who is head of the BMus course at the Royal Conservatoire of Scotland and an experienced educationalist. They will be involved in both cycles of research. Projected numbers for the whole project are below:

Total number of children = 16

Total number of parents = 16

Total number of teachers = 4

Total number of experts = 2

Data and Analysis

The intervention itself will be examined through different lenses: researcher field notes, group interviews with the children, and individual interviews with parents and teachers. S-MA and CMA will be investigated by sampling video data from the workshops where the children are playing music freely – i.e with no musical instruction, and also from the talk session which will finish the intervention. An example of a child showing S-MA would be for them to complement or match another's musical gesture on one or more parameters such as volume, pitch, texture, gesture, rhythm. CMA can be seen as the child initiating novel musical material or

varying existing material to take the improvisation in a new direction, and by executing this in the group improvisation.

Events of S-MA and CMA will be indexed through transcriptions of the music produced and the accompanying nonverbal behaviour which accompanies each S-MA or CMA event. If the children provide supporting evidence from the talk section, then this will be added to the event description. After exemplification and providing rich descriptions of the dimensions of these two constructs, experts in preschool music education will be asked for their views of these. Thus, the intervention itself will be examined through the views of the researcher, children and experts.

Video data sampled from the intervention will amount to two hours per cycle. One hour will be from the free section and one hour from the talk section. In the free section, events of S-MA and CMA will be examined and the nature of the phenomenon investigated through various lenses. Events of S-MA or CMA will be transcribed musically as well as whichever non-verbal behaviours are displayed during the event. It is anticipated that the children's gaze, facial expression and body orientation (i.e., leaning or turning towards other people) will be pertinent to these events, however this does not rule out examining other gestures, which may be present. The talk section of the intervention which will be the researcher holding a five minute discussion with the children about their thoughts and experiences of the intervention will be transcribed verbatim. Interviews with the parents and teachers will be semi-structured but will cover topics as follows: general picture of the child – likes, dislikes, whether they are confident or shy; how did the child engage with

music before the workshops, and, if this has changed through the course of the intervention or afterwards, in what ways.

Procedure

The Nursery school will be recruited by the researcher, who has many contacts in this area. The Nursery needs to have a separate room for the intervention to take place in, so this will be a factor in recruitment. All of the children in their preschool year in the Nursery will be eligible to take part in the project. If more than eight children wish to take part, then names will be chosen at random. Each participating child will have their parents' consent for their children to be videoed as well as the child's verbal assent. Interviews will be audio recorded with parents and teachers who have given informed consent. Children or their parents or teachers are free to withdraw from the research at any point without consequence, and this will be clear on the information sheet which the parents and teachers will be given before the project starts. Once all of the relevant paperwork is in order, the intervention will happen twice a week for six weeks on days agreed between the researcher and the Nursery Headteacher.

A teacher will always be physically present during the interventions; the researcher is registered with the Protecting Vulnerable Groups (PVG) scheme. For the purposes of establishing a group dynamic with the children the researcher will specify that the teacher only intervene if someone is upset for any reason or taken ill. The reason for this is that the children may look to their teacher for the 'right' answer in a musical game, and the researcher wishes to elicit the child's own response.

Teacher interviews will be held in the Nursery or in a room at the University of Edinburgh. Parent interviews will be held in a room at the University of Edinburgh.

Analysis and Data handling

There will be three types of data arising from this project, audio recordings of interviews, transcriptions of interviews and video recordings of workshops.

Thematic analysis, a form of interpretation that requires the researcher to engage in an iterative process of critical thinking, questioning, and categorising, Smith (1992) has been chosen as the most suitable form of analysis for this project. The research is at the stage of developing theory for how improvising works in groups and ways in which it can be applied in preschool education. For this reason, it appears that an analytical framework that does not have a theoretical position - the theory is generated by the context – not the analytical framework is the most suitable fit.

Hard copies of data will be stored in a locked filing cabinet in a locked office in Alison House, Nicolson Square at the University of Edinburgh. All of the three types of data will be also stored in digital format on the researcher's password protected hard drive and backed up on a University server. The data will be kept for ten years after completion of the PhD to enable further analysis.

References

Scottish Executive (2006) Curriculum for Excellence: Building the Curriculum 1: the contribution of curriculum areas, Edinburgh: Scottish Executive.

Smith, C. P. (1992). Motivation and Personality Handbook of Thematic Content Analysis. Cambridge, Cambridge : Cambridge University Press.

Townsend, A. (2013). Action research. [electronic resource] : the challenges of understanding and changing practice, Maidenhead, Berkshire, England : Open University Press, McGraw-Hill Education.

Appendix 4.7 Ethics form

Research Ethics Checklist: Levels Two and Three

This code applies to all research carried out in the CHSS, whether by staff or students. The checklist should be completed by the Principal Investigator, leader of the research group, or students in collaboration with their supervisor. Those completing the checklist should ensure, wherever possible, that appropriate training and induction in research skills and ethics has been given to researchers involved prior to completion of the checklist, including reading the College's Code of Research Ethics.

This is particularly important in the case of student research projects.

If the answer to any of the questions below is 'yes,' please give details of how this issue is being/will be addressed to ensure that ethical standards are maintained.

1 THE RESEARCHERS	
Your name and position	Una MacGlone, PhD student.
Proposed title of research	Investigation of a music education intervention for preschool children using improvisation.
Funding body	N/A
Time scale for research	One year of data gathering: September 2015- September 2016
List of those who will be involved in conducting the research, including names and positions (e.g., 'PhD student')	Una MacGlone (PhD student)
2 RISKS TO, AND SAFETY OF, RESEARCHERS	
Those names above need appropriate training to enable them to conduct the proposed research safely and in accordance with the ethical principles set out by the College	No
Researchers are likely to be sent or go to any areas where there safety may be compromised	No
Could researchers have any conflicts of interest?	No
3 RISKS TO, AND SAFETY OF, PARTICIPANTS	
Could the research induce any psychological stress or discomfort?	No
Does the research involve any physically invasive or potentially harmful procedures?	No

<p>Could this research adversely affect participants in any other way?</p>	<p>No</p>
<p>4 DATA PROTECTION</p>	
<p>Will any part of the research involve audio, film or video recording of individuals?</p>	<p>Yes.</p> <p>The fieldwork section of the research will comprise a twice-weekly music intervention over six weeks for Nursery children (in their preschool year). There will be two cycles of the intervention during the timeframe. The purpose of the research is to develop children's creativity and social skills through free improvisation games and strategies. Therefore a key part of the methodology will be analysis of video recordings of the workshop sessions at which a nursery teacher will always be present. Children to be videoed and the children's verbal assent will be required. Interviews will be audio recorded with parents and teachers who have given informed consent.</p> <p>Children or their parents or teachers are free to withdraw from the research at any point without consequence, and this will be clear on the information sheet which the parents and teachers will be given.</p>
<p>Will the research require collection of personal information from any persons without their direct consent?</p>	<p>No</p>
<p>How will the confidentiality of data, including the identity of participants (whether specifically recruited for the research or not) be ensured?</p>	<p>The hard copies of consent forms will be stored in a locked cabinet in a locked office. Additionally, consent forms will be assigned a participant number and only the researcher will know the connecting code. Recorded interviews will be transcribed with names and other identifying features removed. If screen grabs of video data are used then faces of participants will be obscured.</p> <p>It is anticipated that it may be necessary to have contact details for parents as they will be interviewed. These details will be stored in the same way as the detailed for consent forms (see above).</p>

Who will be entitled to have access to the raw data?	Una MacGlone Prof. Raymond MacDonald (1 st supervisor) Dr Graeme Wilson (2 nd supervisor)
How and where will the data be stored, in what format, and for how long?	There will be three types of data arising from this project, audio recordings of interviews, transcriptions of interviews and video recordings of workshops. Hard copies of data will be stored in a locked filing cabinet in a locked office in Alison House. All of the three types of data will be also stored in digital format on Una MacGlone's hard drive and backed up on a University server. The data will be kept for ten years after completion of the PhD to enable further analysis.
What steps have been taken to ensure that only entitled persons will have access to the data?	The data will be securely stored in a password protected hard drive in a locked filing cabinet in a lockable office.
How will the data be disposed of?	The raw video data will be cleared from all digital devices by either deleting and overwriting the files, or by destruction of the device. The University's data management system will be informed that the data stored there is to be cleared.
How will the results of the research be used?	To inform the PhD project and additional publications and presentations which may arise from the research
What feedback of findings will be given to participants?	Yes. A summary of the findings will be made sent to the Nursery to distribute to parents and teachers involved in the research.
Is any information likely to be passed on to external companies or organisations in the course of the research?	No
Will the project involve the transfer of personal data to countries outside the European Economic area?	No
5 RESEARCH DESIGN	
The research involves living human subjects specifically recruited for this research project <i>If 'no' go to section 6</i>	Yes
How many participants will be involved in the study?	16 children, 16 parents, 4 teachers and 2 experts will be involved in the research, this accounts for two cycles of research.
What criteria will be used in deciding on inclusion/exclusion of participants?	Any child who is in their preschool year attending the Nursery will be eligible. If there are more than 8 eligible children, then 8 will be picked at random.

How will the sample be recruited?	The Nursery will be recruited by the researcher, who has many contacts in this area. The Nursery needs to have a separate room for the intervention to take place in, so this will be a factor in recruitment.
Will the study involve groups or individuals who are in custody or care, such as students at school, self help groups, residents of nursing home?	No
Will there be a control group?	No
What information will be provided to participants prior to their consent? (e.g., information leaflet, briefing session)	An information leaflet will be distributed to the parents of potentially participating children. A short briefing session will take place for parents – this will comprise a description of the musical games and strategies to be used in the intervention as well as the data gathering methods.
Participants have a right to withdraw from the study at any time. Please tick to confirm that participants will be advised of their rights	✓
Will it be necessary for participants to take part in the study without their knowledge and consent? (e.g., covert observation of people in non-public places)	No
Where consent is obtained, what steps will be taken to ensure that a written record is maintained?	Consent will be obtained by return of a signed form. These forms will be securely stored in a locked filing cabinet kept in a locked office in Alison House at the University of Edinburgh.
In the case of participants whose first language is not English, what arrangements are being made to ensure informed consent?	If any of the parents of participants have English as a second language and need additional support in reading and understanding consent forms, the Nursery has access to a translation service.
Will participants receive any financial or other benefit from their participation?	No
Are any of the participants likely to be particularly vulnerable, such as elderly or disabled people, adults with incapacity, your own students, members of ethnic minorities, or in a professional or client relationship with the researcher?	No
Will any of the participants be under 16 years of age?	Yes. Due to the age of the children (range from 3 years 10 months to 4 years 10 months), consent for participation will be obtained from the children's parents. The children's

	<p>assent in the project is viewed as on going throughout the project, therefore this will be checked verbally and frequently by the researcher. It will be made clear to the parents on the consent form that their child is free to withdraw from the research at any point without consequence. The voluntary nature of the research will be reinforced by the Nursery teachers and the researcher. There will be a teacher present in the room at all times during the intervention, therefore, if a child becomes ill or upset, there is a known adult to assist them.</p>
<p>Do the researchers named above need to be cleared through the Disclosure/Enhanced Disclosure procedures?</p>	<p>Yes. The researcher is a member of the PVG scheme and will apply for updated status when final arrangements have been made with the participating Nursery. This update takes between 7-10 days to process.</p>
<p>Will any of the participants be interviewed in situations which will compromise their ability to give informed consent, such as in prison, residential care, or the care of the local authority</p>	<p>No</p>
<p>6 EXTERNAL PROFESSIONAL BODIES</p>	
<p>Is the research proposal subject to scrutiny by any external body concerned with ethical approval?</p>	<p>No</p>
<p>If so, which body?</p>	
<p>Date approval sought</p>	
<p>Outcome, if known <i>or</i></p>	
<p>Date outcome expected</p>	
<p>7 ISSUES ARISING FROM THE PROPOSAL</p>	
<p>In my view, ethical issues have been satisfactorily addressed, OR</p> <p>In my view, the ethical issues listed below arise and the following steps are being taken to address them:</p> <p>Signature</p> <p>Date</p>	

8 Ethical consideration by School

The following section should be completed by the Research Director once the proposal has been considered by the School's research group.

I can confirm that the proposal detailed above has received ethical approval from the School [* subject to approval by the external body named in section 6]

Signature

Date

* Delete as appropriate

Appendix 4.8 Information form for parents

Una MacGlone
PhD Candidate
Reid School of Music
University of Edinburgh
s1271701@sms.ed.ac.uk

RE: Important information about a research project being conducted at your child's school

Dear Parents / carers,

My name is Una MacGlone and I am a researcher in the Reid School of Music at the University of Edinburgh. My research project is exploring the development of social skills, communication skills and creativity through music improvisation, specifically with young children. The study is being supervised by Prof. Raymond MacDonald, who is head of the Reid School of Music.

Your Headteacher would like your school to participate in the project. I would be most grateful if you would allow your child to take part. There will be workshops twice a week for 6 weeks which we plan to begin after the October/Spring holidays. The workshops will include fun and creative music activities specially designed for this age group.

I am an experienced researcher and musician and have several years of practical experience in conducting this type of workshops. I will have an up to date PVG certificate from Disclosure Scotland. As well as this, the research has been reviewed by the University's Ethical Review committee to ensure that it meets ethical guidelines. Studies involving children are subject to the fullest review by the committee.

The project will be videoed which I will need parent/carer's permission for and the video is strictly for research purposes. I would also need to speak to one of the participating children's parents after the workshops have finished – a short informal chat to get a rounded picture of the child. If you agree to your child taking part then we will complete the permission forms before the project begins.

Finally, although this is research, children taking part in these workshops do enjoy them - and creating a positive experience for the children is a very important aim in my work.

Thank you for your time in reading this, do not hesitate to contact me at the email address if you have any questions about the project.

Best Wishes,

Una MacGlone.

Appendix 4.9 Consent form (Cycle I and Cycle II)



Una MacGlone
PhD Candidate
Reid School of Music
University of Edinburgh

OPT IN PERMISSION LETTER

Dear Parents / carers,

Further to my information letter about my PhD research project, I now seek your permission for your child's participation and video recording of this. In summary there will be two workshops per week for 6 weeks. The workshops will be approx. 25 minutes long and are designed to develop your child's social skills, communication skills and creativity through music improvisation.

I will video each workshop for the purpose of seeing if the children's creativity and socio-musical interactions develop through the course of the workshops. The video is strictly for research purposes and your child's identity will be made anonymous by pixelating video screen grabs and/or giving them a different name in written material.

I now require individual permission from parents to allow children to participate. If you are happy for your child to take part, please return a signed copy of the form below.

If you have any further questions please do not hesitate to contact me here: s1271701@sms.ed.ac.uk. Please note you or your child can withdraw from the project at any stage without consequence. If you have any concerns about the project you can contact Prof. Raymond MacDonald here: Raymond.MacDonald@ed.ac.uk

Thanks for your co-operation.

Sincerely,

Una MacGlone.

Please read the statements below and tick which answer applies to you and then sign to give your permission for your child to participate.

I have read and understand information about the project:

yes no

I understand I can ask Una MacGlone any question about the project:

yes no

I understand that I or my child can withdraw from the project at any time without consequence:

yes no

I understand that the data will be anonymised and for research purposes only:

yes no

I give permission for my child to participate and be videoed in Una MacGlone’s PhD project.

Name of pupil.....

Signature of parent /carer.....

Date

Appendix 4.10 Workshop Activities

These notes for workshop activities should be read with the workshop model.

Each section should take no more than five minutes, so the workshop model offers a choice in activity in each section. The workshop leader will choose the activity based on the children's preference.

Way in pieces

Soup song- the workshop leader goes through the song (see Appendix C) and then asks for suggestions for ingredients to put in the soup. Any suggestion is accepted! This is to let the children know that all of their suggestions will be valued and that they can be as creative as they like.

Three listening spaces – Firstly, the group listens to the sounds in the room and then describes what they hear – this can be literal (I heard a buzzing sound) or descriptive (I heard a giant bee). Then the group listens to sounds outside the room (but still within the building) and describes again. Finally the group listen to sounds they can hear from outside the building they are in and describe them. Again all answers are acceptable – if the children imagine dinosaurs outside the building and describe the sounds a dinosaur may make, then this is acceptable.

CMA activities

Conduction involves a system of hand signs which a 'conductor' shows to an improvising ensemble. This system can shape improvisations or create whole pieces depending on how much or how little the hand signs are used. The American improviser Lawrence D 'Butch' Morris had a system of over 50 signs which he used

in around 200 performances with different ensembles all over the world. These can be found in 'The Art of Conduction: A Conduction Workbook' (2017). However, it is important to note that conduction is used by many improvising groups all over the world and groups such as the London Improviser Orchestra have developed many of their own signs¹⁴.

In the context of these preschool workshops the following will be used: long note, short note, ledger lines solo, loop, stop, unvoiced, sound like, contrast (see appendix D for conduction signs). The signs are to be interpreted as follows: long note: sing or play a long note for the duration of time the finger touches the palm; short note: make a short note when the finger taps the closed fist; ledger lines: sing or play a higher or lower note depending on the horizontal finger moving up or down; solo: the child plays soloistically with material of their own choosing; loop: create a short looped material; stop: stop playing or singing; unvoiced: make a sound that is not recognisable to being either a voice or the instrument being played; sound-like: imitate the indicated player as closely as possible; contrast: play or sing something which contrasts with the existing music.

These signs have been chosen as they are simple instructions that can nevertheless create complex music depending on how they are used. For example a conductor can direct one half of a group to sing long notes and the other half of the group to sing short notes simultaneously. The purpose of using conduction is to give a variety of creative possibilities to one child at a time who can create different sounds in how

¹⁴ <http://www.londonimprovisersorchestra.co.uk/lexicon.html>

they juxtapose instructions. This in effect, creates an instrument (the group) that has a potentially wide range of sound and texture for the children to experiment with.

After short demonstrations of each sign, the workshop leader passes over to the children who take turns to try signs out and make up little pieces.

Create story with soundtrack

This piece has a collaboratively created narrative and music that acts as a soundtrack to the story. It starts with singing the ‘walk song’ in a circle. Participants walk for the word walk, stop on the rest and run for the running lyrics, repeating this as often as desired. When ‘arrived’ ask the children about what they see (imagine) – this could be anywhere. At this point the workshop leader, together with the children make up little pieces about where everyone imagines themselves to be. For example in a jungle there could be lions, snakes and creepers and each feature has its own music created for it spontaneously by the children. The workshop leader then has the children repeat their sounds and music for each animal and tells the whole story with the children creating the soundtrack. The children then have the option to make up another story with the animals (and so the newly created sounds and music) in a different order.

S-MA exercises

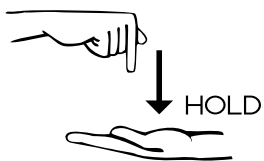
Accompany, Copy, Different

The workshop leader plays and asks the children to accompany her, copy her, and play differently to her. These are all specific playing relationships which are both social and musical. Practising each playing relationship will give the children experience in thinking about using music to communicate. The teacher then chooses a child or pairs of children for the rest of the group to relate to musically.

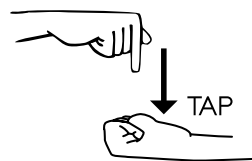
Conduction signs



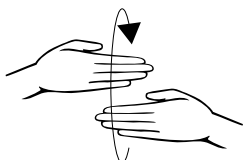
LEDGER LINES



LONG NOTE



SHORT NOTE



SOLO



LOOP



STOP



UNVOICED



SOUND LIKE



CONTRAST

Appendix 4.11 Video transcript extract

Time	Participants	General action	Verbal	Music	Gaze	Gesture
0s	Una, Tess, Katie, Jane, Dan, Ben, Christine (in that order, Una at 12'o clock, Tess at 2 o'clock and so on)	Participants moving and setting in circle			U to B T to U K unseen J to U D to U B to door C to wall	
1s			U: "Music that sounds like rain music"		U to D T to U K unseen J to U D to U B unseen C to wall	
2s					U to B T to D K unseen J to U D to U B unseen C looks at B then away (into distance)	U shrugs
3s			D : "Yeaahh" (loudly) U: What's that		U to D T to U K unseen J to U D to U B unseen C into distance	

Time	Participants	General action	Verbal	Music	Gaze	Gesture
4s			U: Sound like?	D (sings loudly) "rain, rain,	U to D T to U then D K unseen J to U D to U B unseen C to D	D Moves arms in time with singing
5s				D (sings loudly) Go away	U to D T to D K unseen J to U D to U B unseen C into distance	U copies D's arm gestures mouths words at D
6s					U to D T to D K unseen J to U D to U B unseen C into distance	U arms wide palms facing ceiling moves hands/forearms up and down
7s			U: Yeah yeah	U sings: Rain rain	U to D T to U then back to D K unseen J to U D unseen B unseen C to U briefly then into distance	
8s				U sings: Go Away	U to D T to D K unseen J to U D unseen B unseen	

					C into distance	
Time	Participants	General action	Verbal	Music	Gaze	Gesture
9s		B gets up on knees and shifts from one knee to another	U: but what do the raindrops go like?		U to T and K T to D K to wall and back to circle J to U D to U B gaze shifts around C into distance	U Makes raindrop gesture with fingers, hands move in a downwards direction Shrugs at end of gestures
10s		B shifts from one knee to another	Multiple vocalisations from most of the children	K sings on one note: "drop drop drop drop"	U to K T to K then back to D K to U J looks down D to K B gaze shifts around (not at a person) C into distance	D copies "raindrops" gesture from U
11s		D gets up and turns around		K sings on one note: "drop drop drop drop"	U to K T to D K unseen J to floor D unseen B gaze shifts around (not at person) C into distance	

Appendix 4.12 List of interview topics with prompts

Questions for teachers

Can you tell me a bit about each of the children? (6 children)

Prompts: Temperament, what things do they like playing at in the Nursery? Do they play well with others?

How do the children (all 6) usually act in groups? (Both in informal free play and in formal learning groups.)

Prompts: Are they happy to speak? How do they concentrate on tasks?

How can you describe the children's musicality?

Prompts: Do they like singing? Do they like playing with instruments? Do they make up songs or music in their friendship groups or by themselves?

How do you feel about teaching music?

Prompts – ask about resources, guidance from the curriculum. Would they like any more support with this? Is it a priority in this nursery? Do the teachers see themselves as musical/creative – and is this important in teaching music/creativity.

Do you think (child's name) is creative?

Prompts how do they show this? Don't specify art form!!

What educational/personal benefits do you think there are in fostering creativity in children

Prompts more important in EY? Do you think children are naturally creative?

Show the workshop model

What did you understand the children's participation to be in these workshops?

Prompts – talk about activities the teachers saw – which were more/less effective?

Any comments about particular children in particular activities.

Any feedback about the level of the tasks appropriate to the children's stage of development.

As workshop leader I felt a challenge in allowing the children freedom of expression but maintaining a calm working environment. What kind of rules or strategies do you think are important in achieving this balance?

Prompts can you tell me more about strategies you have for working together in groups?

Did the children talk about the workshops? Or did you see any play which may have been influenced by the workshops?

Questions for parents

Does your child enjoy music at home?

Prompts: Do they participate in the following activities? Listening to music, experimenting with instruments or sound, singing with parents, siblings or friends (grandparents)

Do you like music?

Prompts: Do listen to music? How/when. Do you play anything, do you sing with your child?

Can you tell me a bit about your child?

Prompts: Temperament, what kind of activities does your child like? What interests do they have?

Do you think your child is musical?

Did your child talk about the workshops or any of the activities? Don't worry if not! Or did you see any play which may have been influenced by the workshops?

Appendix 4.13 Transcription notation system

“...” denotes a pause (the length of pause is represented by the repetition of ellipses)

“--“ denotes overlapping speech

“ _____ ” denotes a direct quote

Appendix 4.14 Information sheet for raters

Information sheet for raters

You will be presented with a series of clips (39) of preschool children improvising.

They are taken from two different nurseries and the numbers of children in each clip varies from clip to clip.

Your task is to say in each clip, whether you think the children are demonstrating:

1. Creative Musical Agency (CMA)

Child creates novel musical material independently and executes this in the group improvisation.

And/or

2. Socio-Musical Aptitude (S-MA)

Child creates a musical response in relation and with reference to another child's musical idea in the group improvisation. This can draw on a range of parameters such as pitch, articulation, rhythmic properties or dynamic.

or

3. Neither

Appendix 4.15

Extract from ratings sheet

	Creative Musical Agency	Socio-Musical Aptitude	Neither
Demo Clip			
Clip 1			
Clip 2			
Clip 3			
Clip 4			
Clip 5			
Clip 6			
Clip 7			
Clip 8			
Clip 9			
Clip 10			

The boxes continued until Clip 39 in the ratings sheet used in the test

Appendix 8.1 Musical parameters workshop by workshop in Cycle I

Chart 1 showing % of children utilising musical parameter of TEMPO – CMA and S-MA in Cycle I by workshop

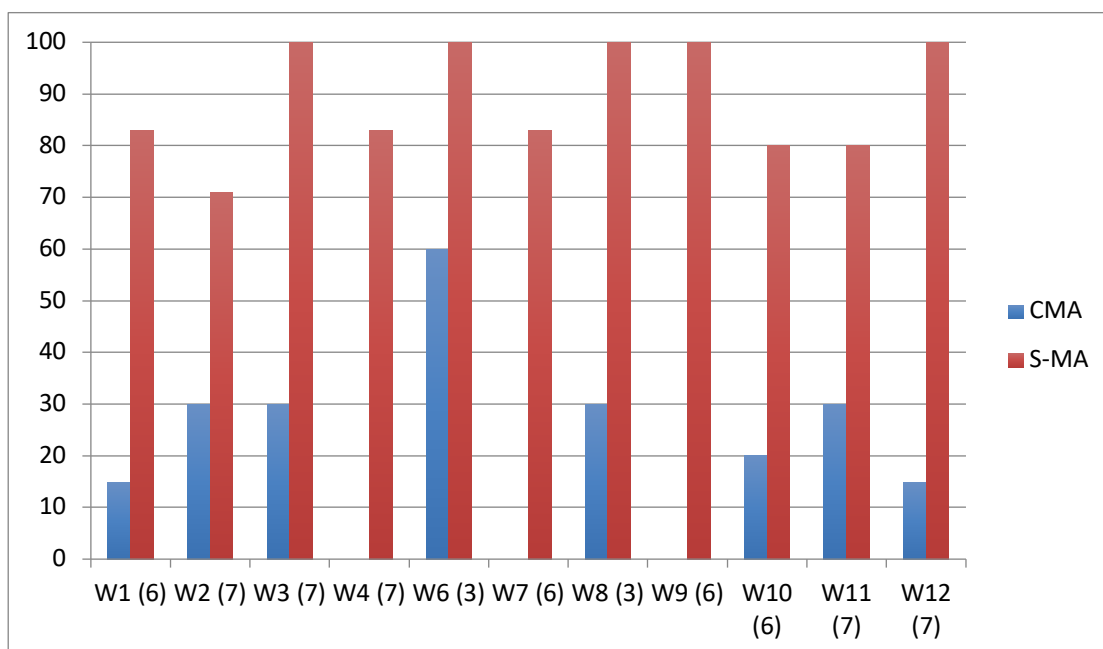


Chart 2 showing % of children utilising musical parameter of DYNAMICS – CMA and S-MA Cycle I by workshop.

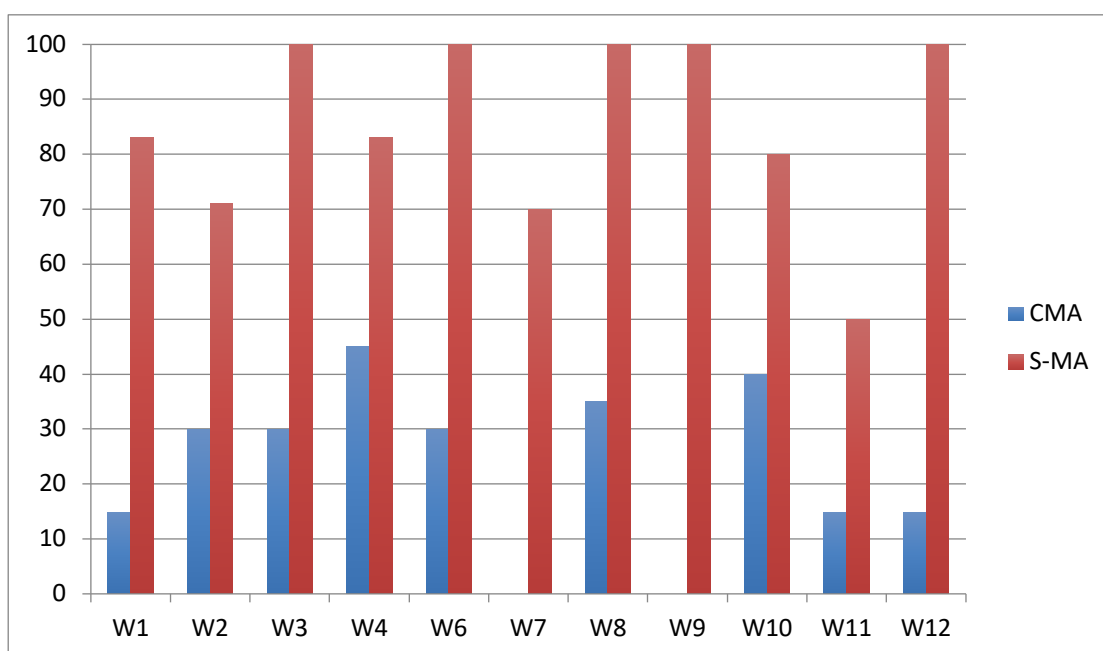


Chart 3 showing % of children using musical parameter of ARTICULATION - CMA and S-MA, Cycle I by workshop

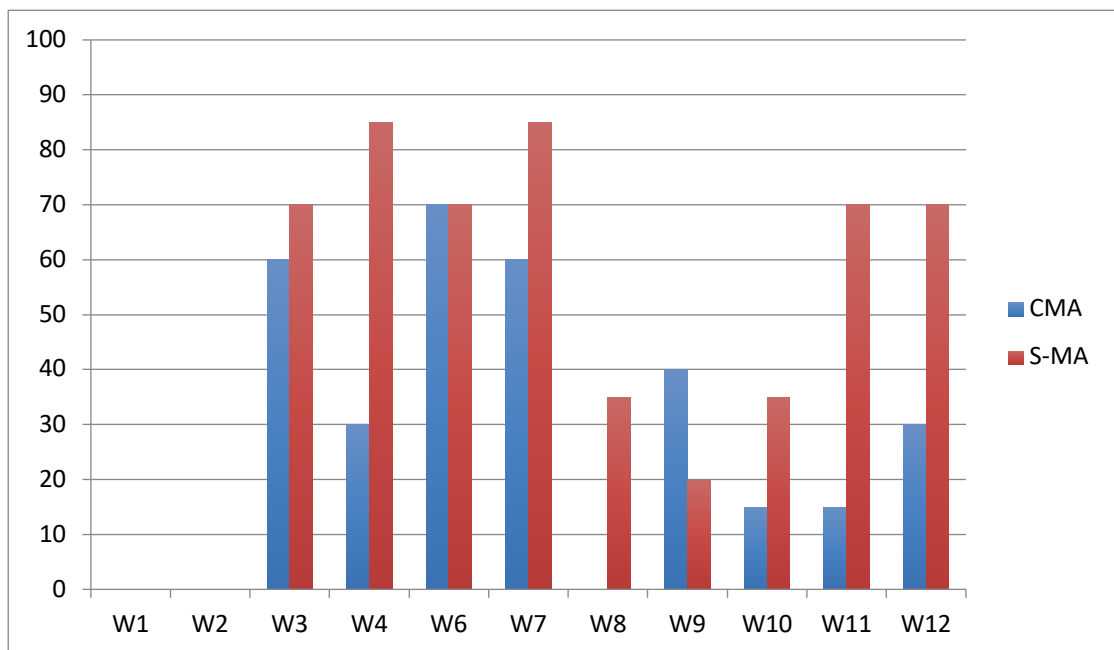


Chart 4 showing % of children using musical parameter of SIGNS - CMA and S-MA, Cycle I by workshop.

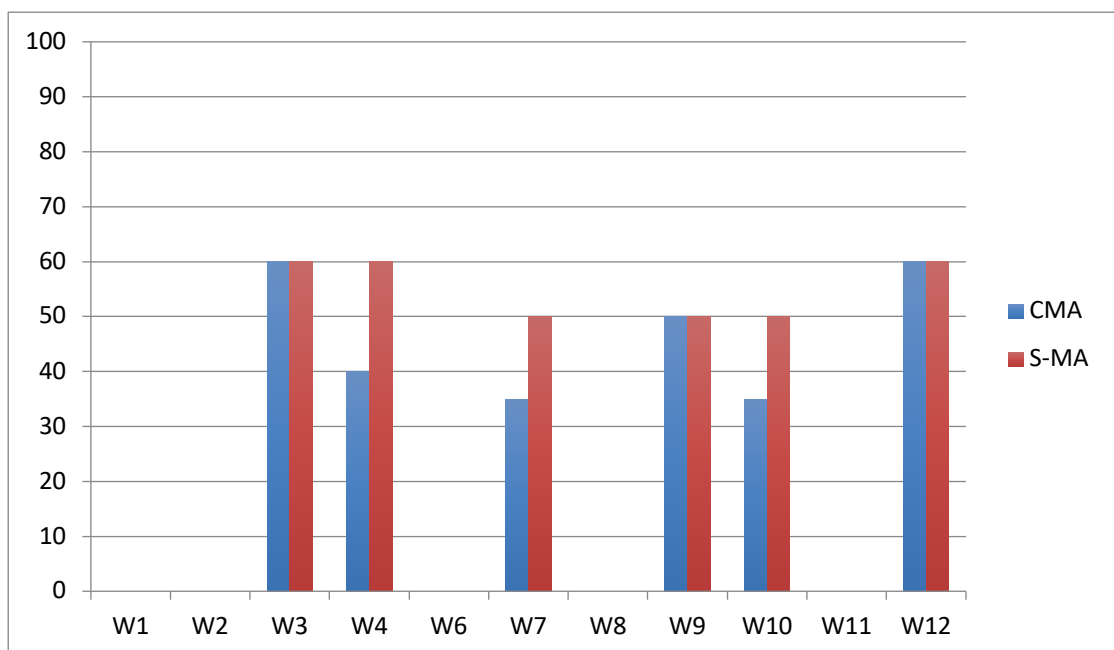


Chart 5 % of children using musical parameter of PITCH - CMA and S-MA, Cycle I by workshop.

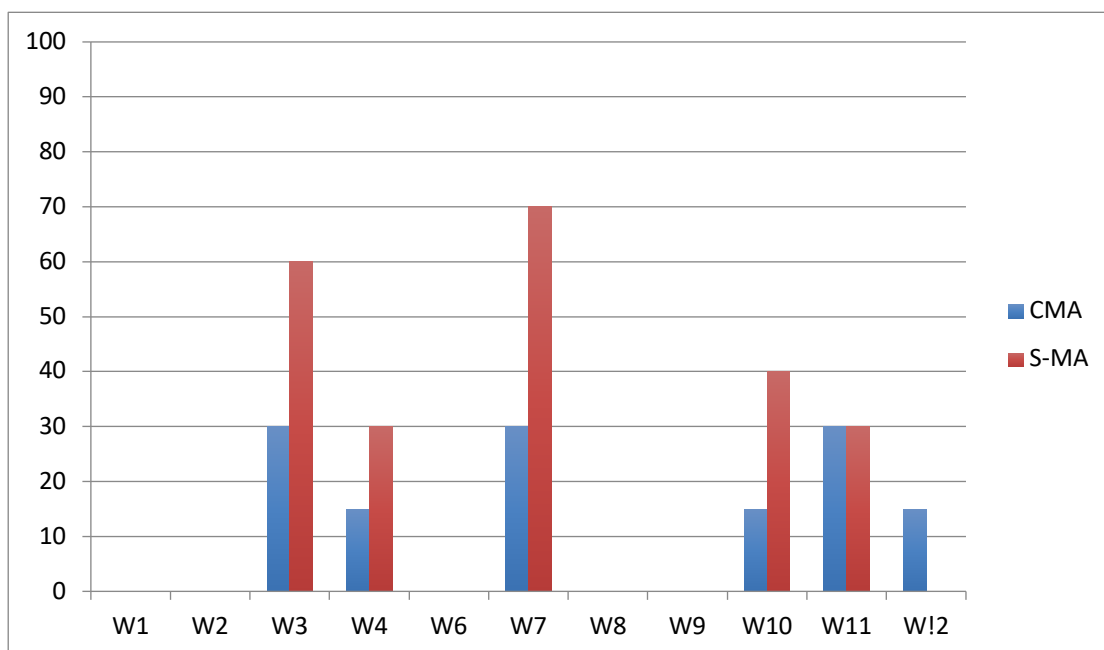


Chart 6 % of children using musical parameter of ARRANGEMENT - CMA and S-MA, Cycle I by workshop

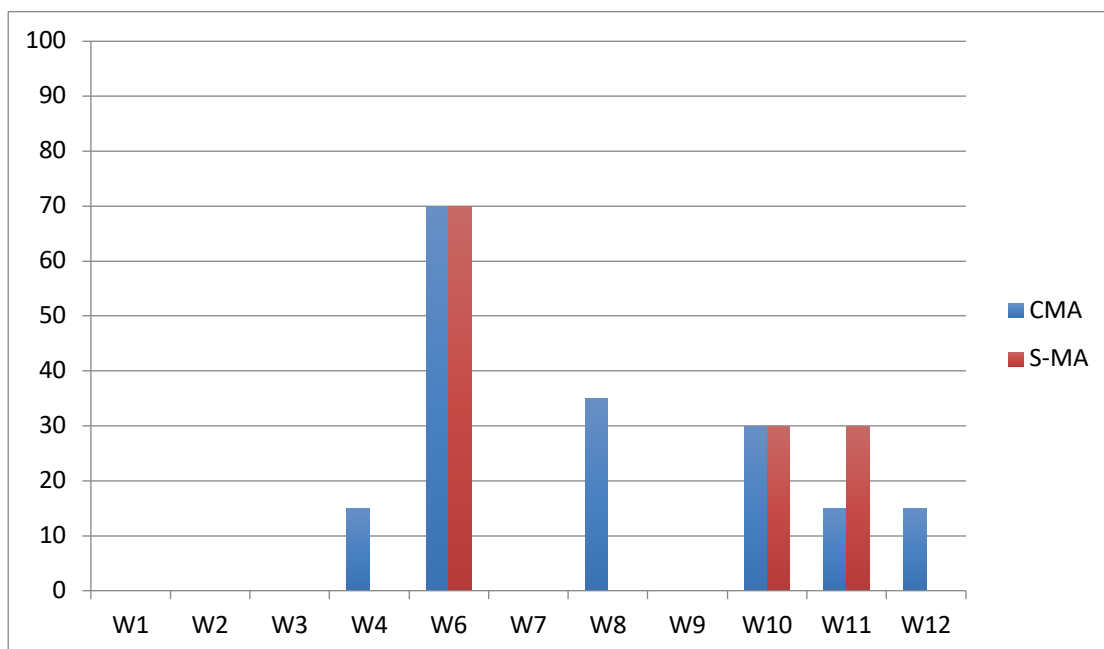


Chart 7 % of children using musical parameter of BODY-PERCUSSION - CMA and S-MA, Cycle I by workshop

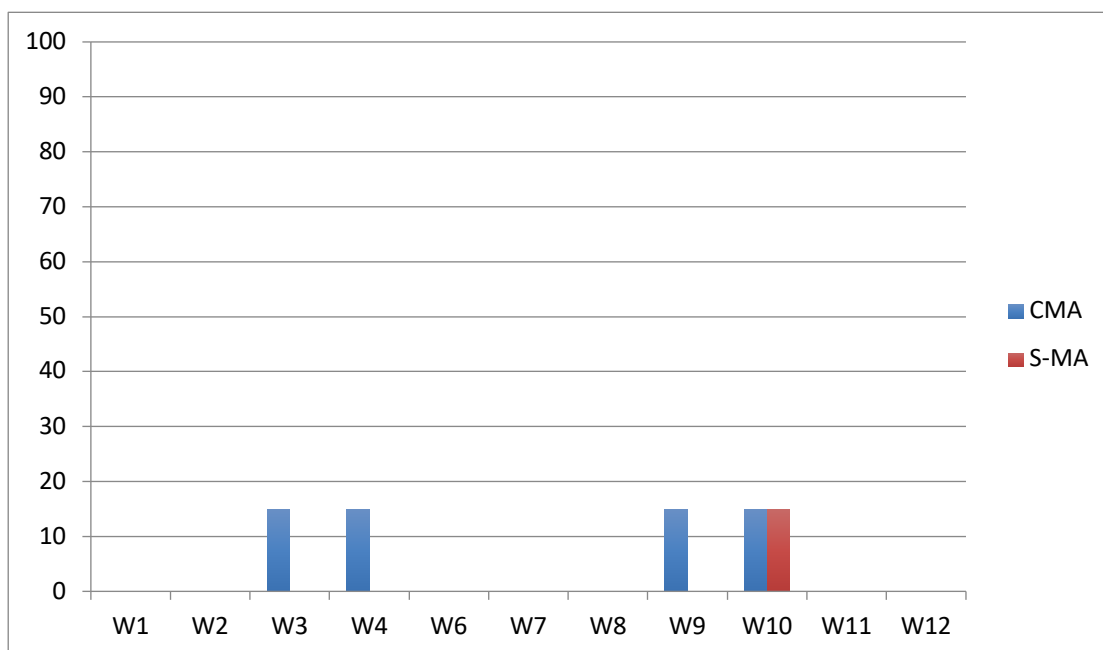
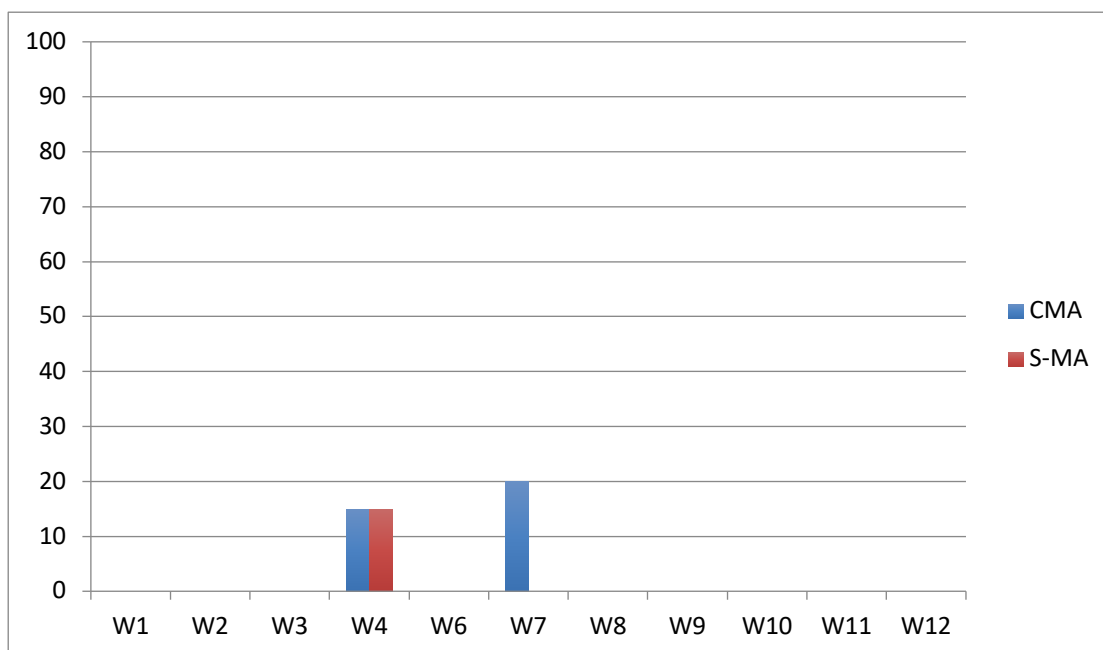


Chart 8 % of children using musical parameter of ALTERNATIVE VOCALISATION - CMA and S-MA, Cycle I by workshop.



Appendix 8.2 Workshop log of activities, Cycle I

Workshop number	Activities
Workshop 1 Mainly singing, some perc	Make a circle Hellos Walk, walk/chop chop Conduction Instruction “just play”
Workshop 2 Mainly singing, some perc	Make a circle Hellos Walk, walk/chop chop Conduction Instructed improv: “play with child X” Instruction “just play”
Workshop 3 Mainly singing, some perc	Make a circle Hellos Conduction Narratives “where are we now” – e.g., improvise a rainforest Vocal instructed improv: descriptive “what do fireworks/stars sound like”
Workshop 4 Mainly singing, some perc	Make a circle Hellos What did we do last time? talk Conduction Narratives
Workshop 6 Some singing, mainly perc.	Hellos What did we do last time? Narrative Conduction Instructed improv: directed, “play with” Instruction “just play”
Workshop 7 Mainly singing some perc.	Hello Conduction Descriptive instruction Graphic score Instruction “just play”
Workshop 8 Half singing, half perc	Hello Conduction Descriptive instruction: what do cats/ sound like Instruction directed “play with” Graphic score Instruction “just play”

Workshop 9 Mainly singing, some perc	Hello Conduction Descriptive instruction: Hedgehog Instruction directed “play with” Graphic score – 2 children Instruction “just play”
Workshop 10 Some singing, mainly perc.	Hello Conduction Descriptive instruction: Instruction directed “play with” Graphic score – 3 children Instruction “just play”
Workshop 11 Some singing, mainly perc	Hello Conduction Descriptive instruction: Instruction directed “play with” Graphic score 2 children Instruction “just play”
Workshop 12 Some singing mainly perc	Hello Conduction Descriptive instruction: Instruction directed “play with” Graphic score Instruction “just play”

Appendix 8.3 CMA and S-MA game

Directions: For the size of group, have the same number of the shapes below printed on thick card.

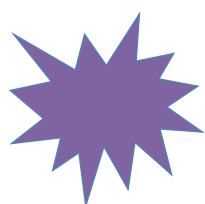
For the CMA sign the instruction is “idea” i.e., if the child has this card, then at some point during the improvisation they have to play their own idea.

For the S-MA card the instruction is “listen then play” i.e., if the child has this card then their playing has to be in relation to music they have heard.

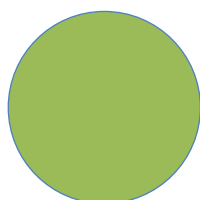
Distribute the cards, to begin with, only one child should have a CMA card and the rest have S-MA cards. Make this section seem as if the distribution is by chance but on repeated turns, make sure a different child gets the CMA. Divide the cards out face down and instruct the children only to look at their own card.

After the children have played a short improvisation based on the cards they have, the workshop leader can then ask questions such as ‘who do you think had the “idea” card? Other questions can be to evaluate the effectiveness and the children’s perception of S-MA, or open questions about their thoughts on the piece.

CMA sign:



S-MA sign



Appendix 8.4 Musical parameters workshop by workshop in cycle II

Chart 1 % of children utilising musical parameter of TEMPO – CMA and S-MA, Cycle 2 by workshop.

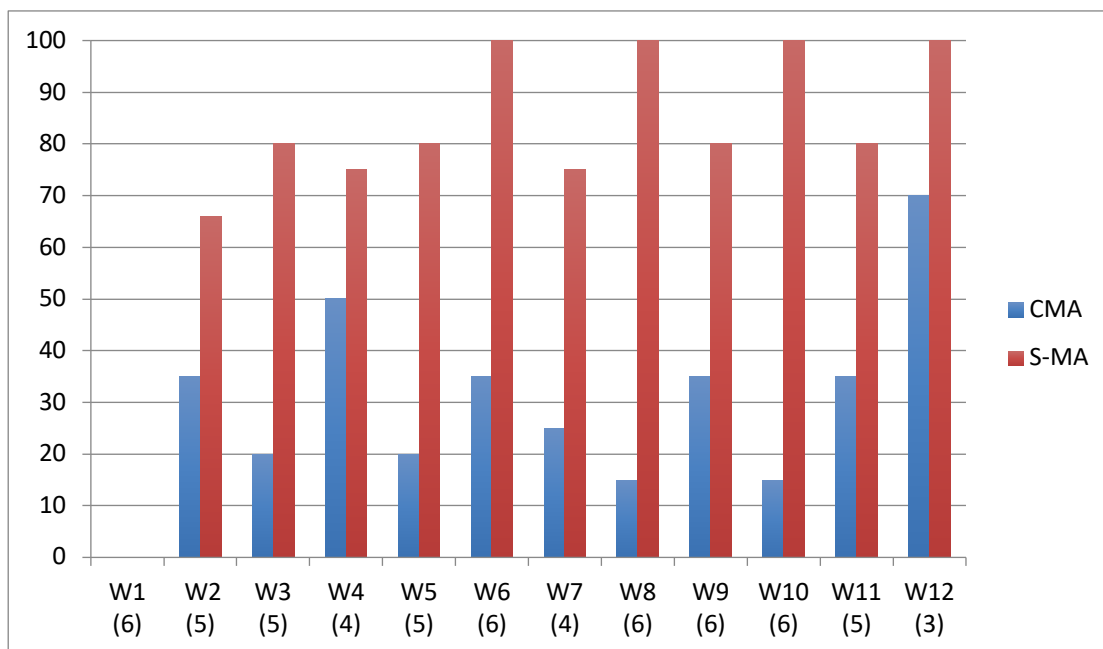


Chart 2 % of children utilising musical parameter of DYNAMICS – CMA and S-MA Cycle 2 by workshop

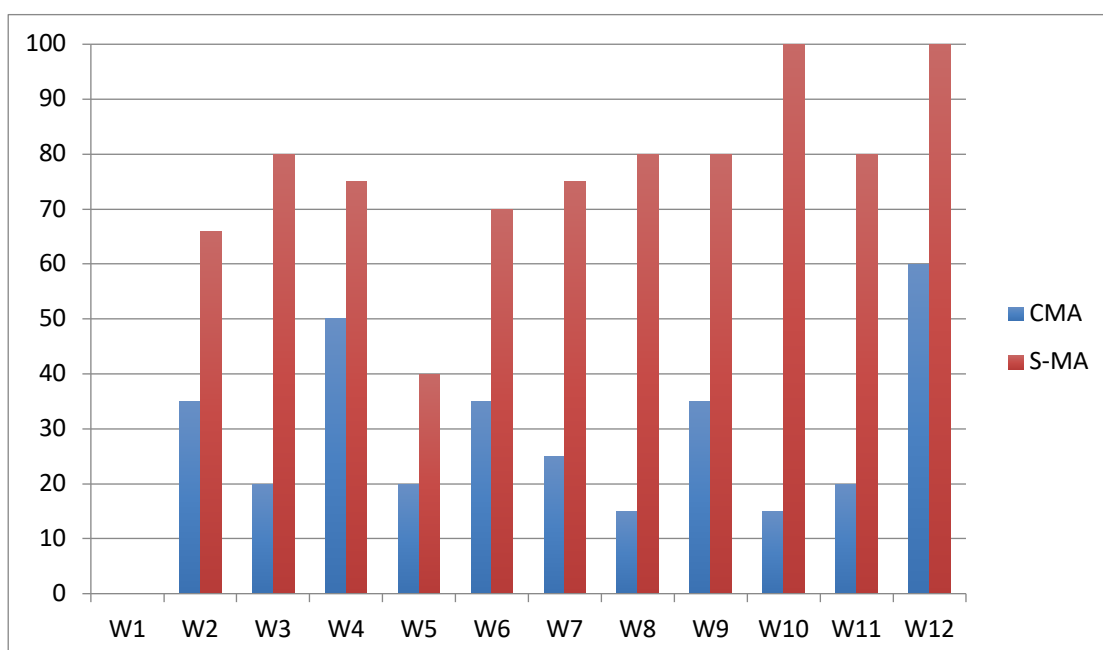


Chart 3 % of children utilising musical parameter of ARTICULATION – CMA and S-MA Cycle 2 by workshop

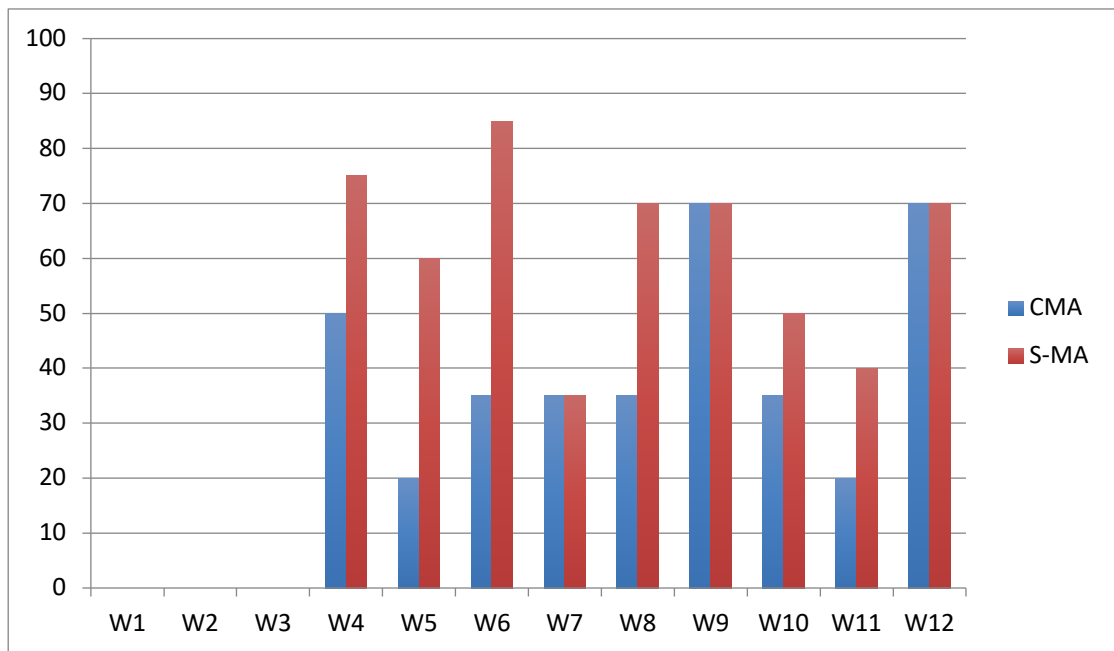


Chart 4 % of children utilising musical parameter of SIGNS– CMA and S-MA Cycle 2 by workshop

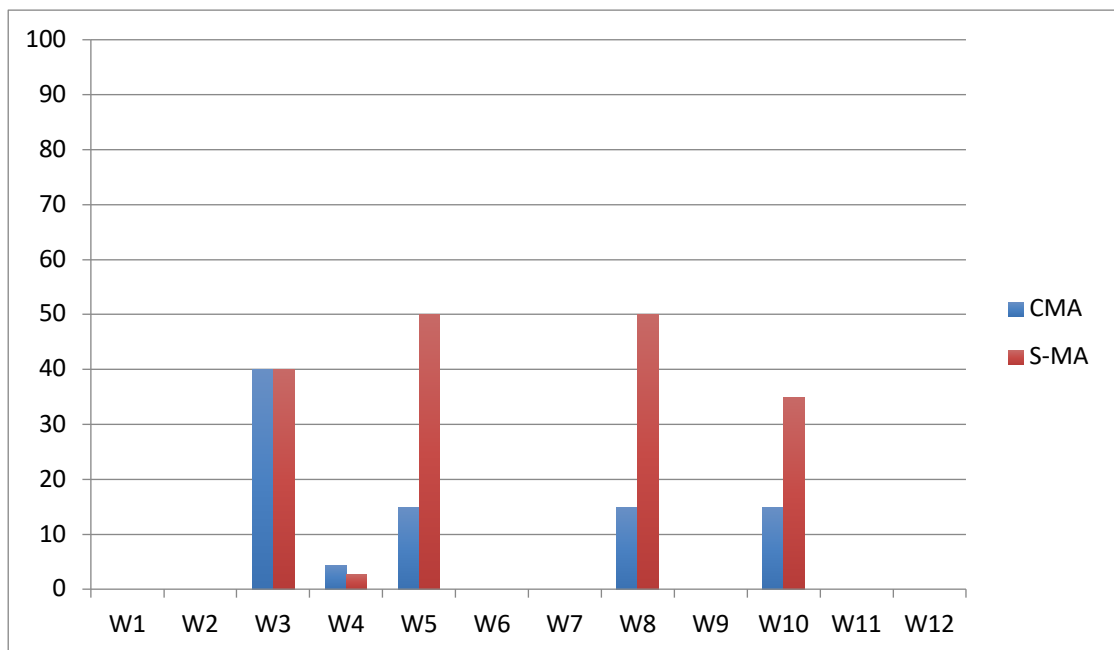


Chart 5 % of children utilising musical parameter of PITCH– CMA and S-MA Cycle 2 by workshop

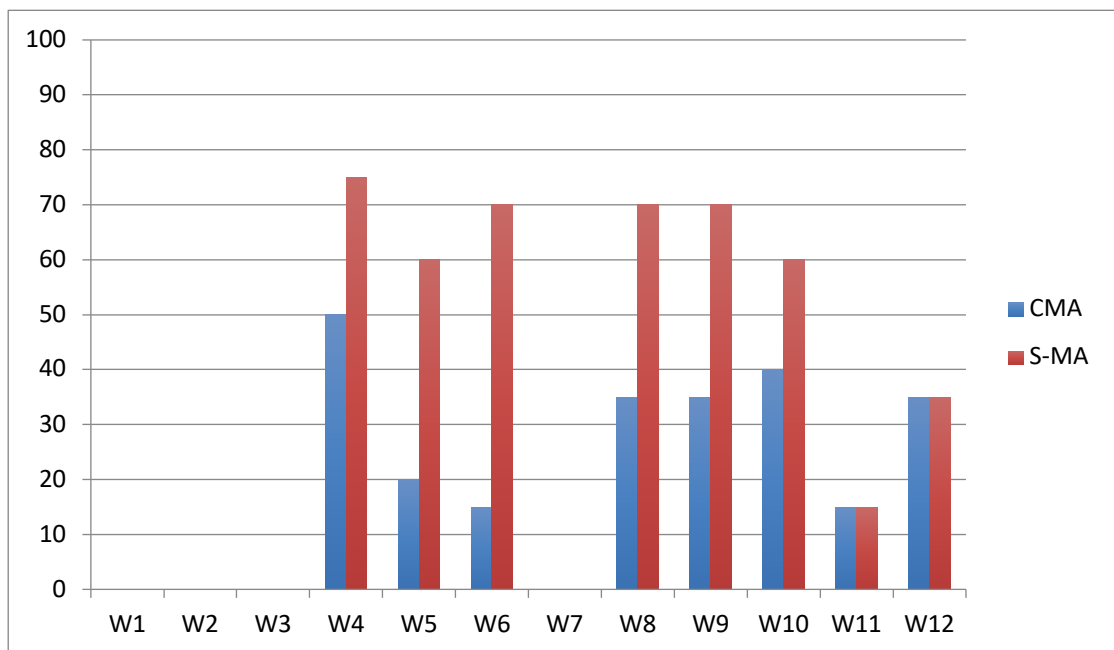


Chart 6 % of children utilising musical parameter of ARRANGEMENT– CMA and S-MA Cycle 2 by workshop

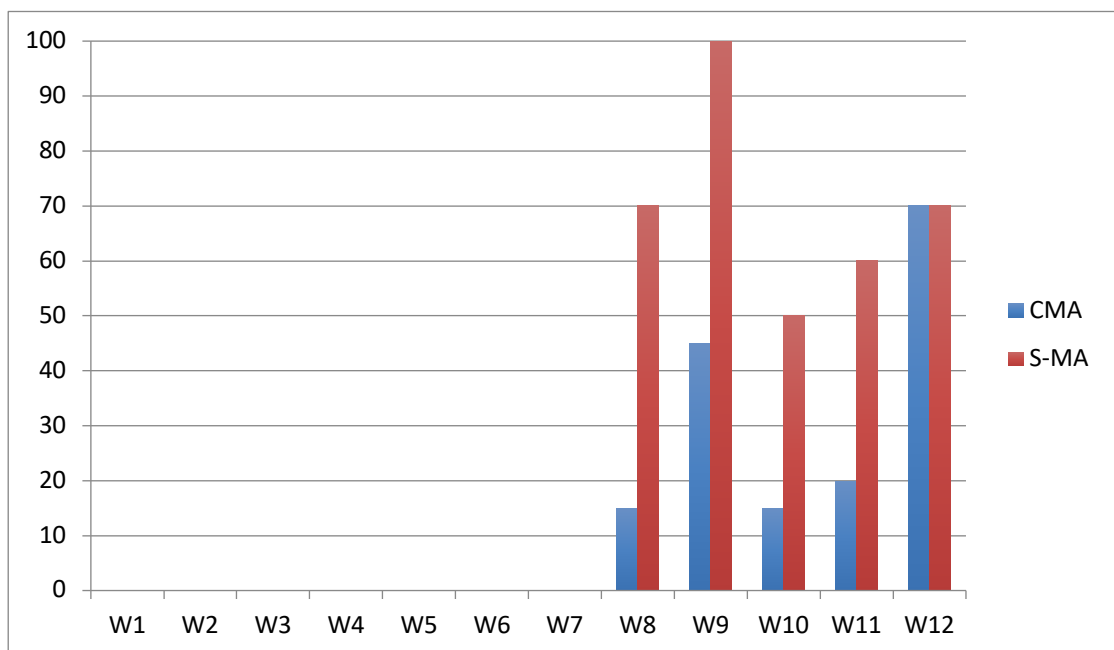


Chart 7 % of children utilising musical parameter of BODY-PERCUSSION – CMA and S-MA Cycle 2 by workshop

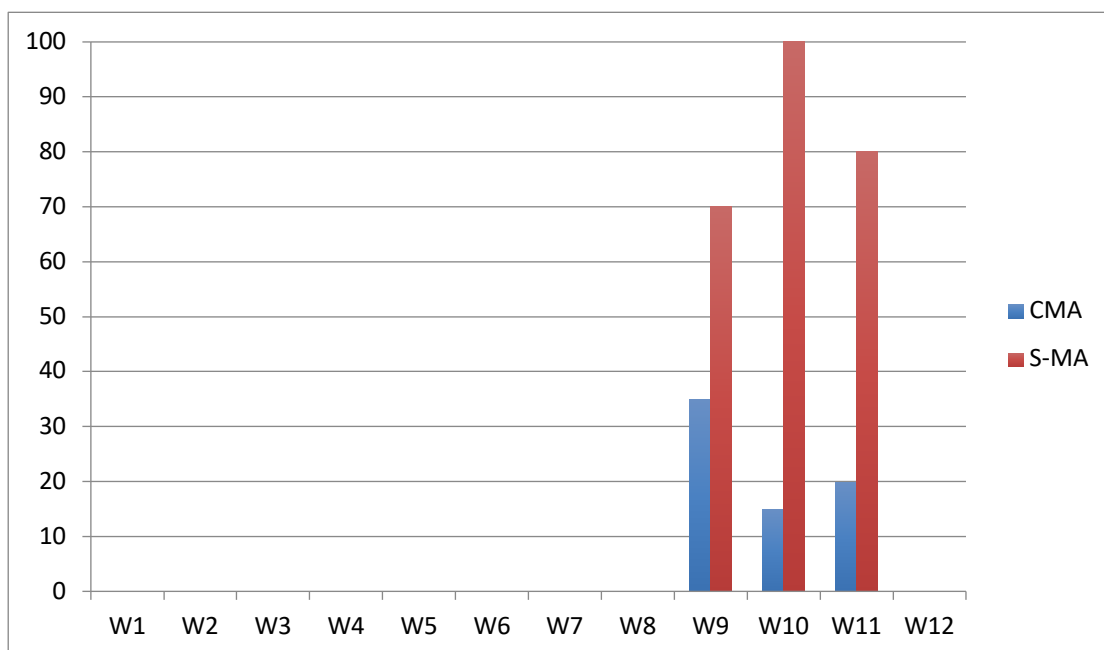


Chart 8 % of children utilising musical parameter of ALTERNATIVE VOCALISATIONS – CMA and S-MA Cycle 2 by workshop

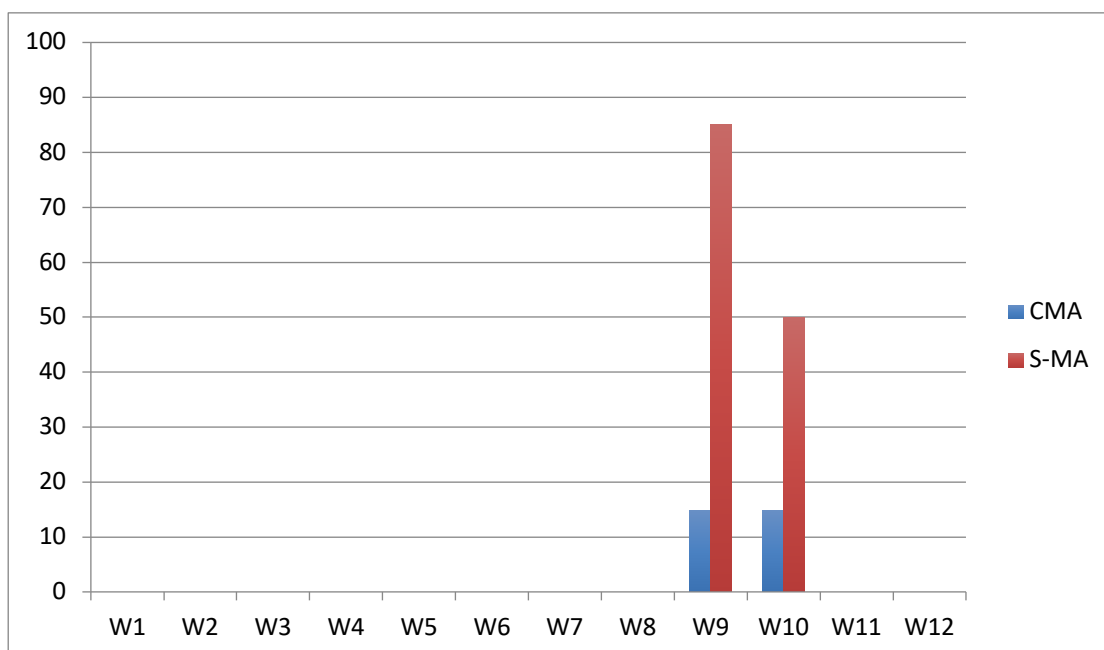


Chart 9 % of children utilising musical parameter of SUNG MATERIAL (in an instrumental piece) – CMA and S-MA Cycle 2 by workshop

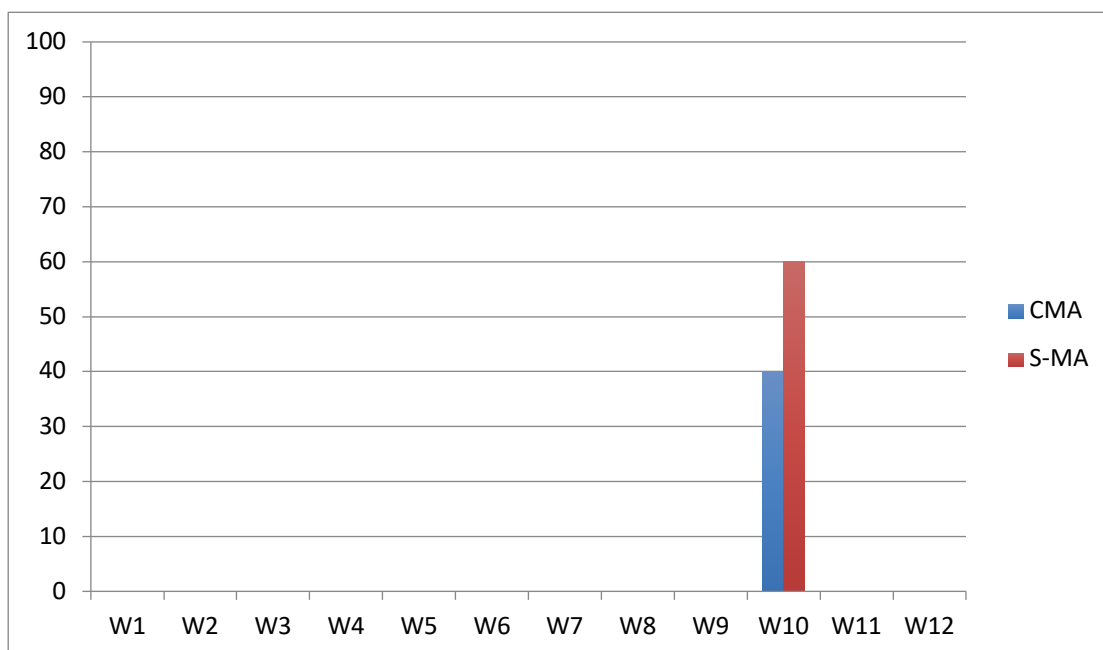
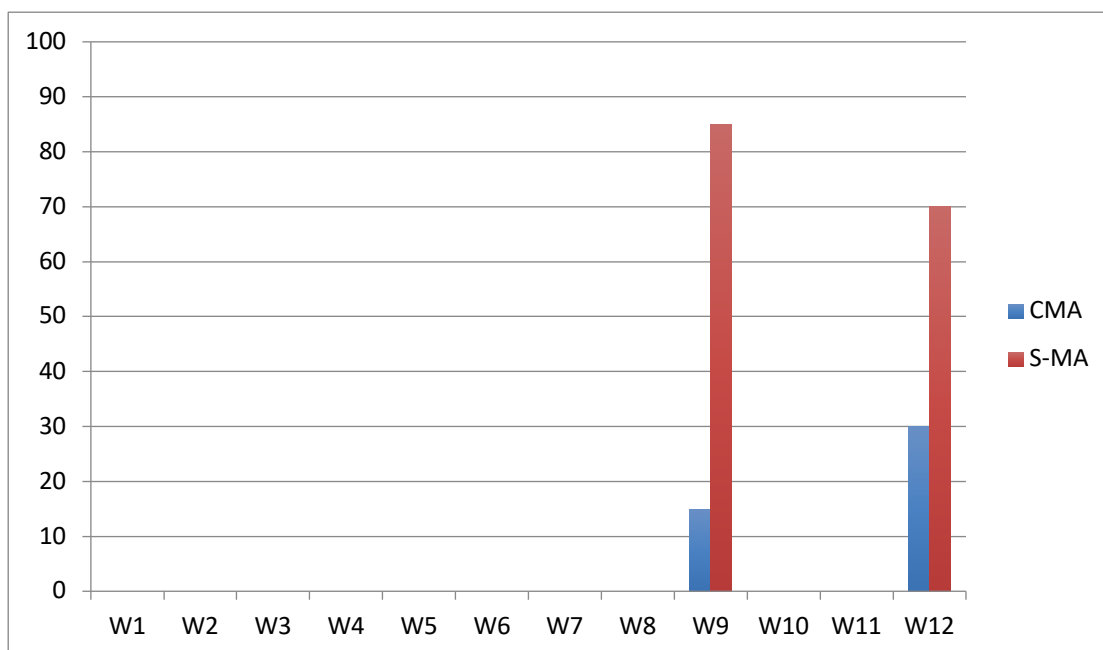


Chart 10 % of children utilising musical parameter of SPOKEN WORD– CMA and S-MA Cycle 2 by workshop



Appendix 8.5 Workshop log of activities in Cycle II

Workshop number	Activities
Workshop 1 Some singing, mainly percussion	Make a circle Hellos (with bear) Pass clap/sound Conduction Instruction “just play”
Workshop 2 Mainly singing, some perc	Make a circle Hellos (with bear – discussed name, called Rosie) Conduction Instruction “just play” Descriptive instruction robot/weather
Workshop 3 Mainly singing, half perc.	Make a circle Hellos (with bear) Conduction Instruction “just play” Descriptive instruction robot/weather/animals
Workshop 4 Half singing, half perc.	Hellos (with bear) Pass clap/sound Conduction Narratives Instruction “just play”
Workshop 5 Some singing mainly perc	Hellos (with bear) Interesting sounds Signs Descriptive instruction weather/animals Instruction “just play”
Workshop 6 Some singing, mainly perc.	Hellos (with bear) Interesting sounds Signs Symbols (CMA + S-MA) Descriptive instruction weather/animals
Workshop 7 Some singing, mainly perc.	Hellos Symbols (CMA + S-MA) Descriptive instruction weather/animals Instruction “just play”

Workshop 8 Some singing, mainly perc.	Symbols (CMA + S-MA) Descriptive instruction weather/animals Narratives Instruction “just play”
Workshop 9 Some singing, mainly perc.	Symbols (CMA + S-MA) Descriptive instruction weather/animals Narratives Instruction “just play”
Workshop 10 Mainly singing, some perc	Symbols (CMA + S-MA) Descriptive instruction weather/animals Narratives Lawnmower music Instruction “just play”
Workshop 11 Some singing, mainly perc.	Symbols (CMA + S-MA) sometimes 2 sometimes 1 Descriptive instruction weather/animals Narratives - fire engine music Instruction “just play”
Workshop 12 Some singing, mainly perc.	Symbols (CMA + S-MA) Descriptive instruction weather/animals Narratives Instruction “just play”

Appendix 8.6 Cycle I individual charts for CMA and S-MA

Chart 1 for Jess from Cycle I CMA and S-MA events per workshop

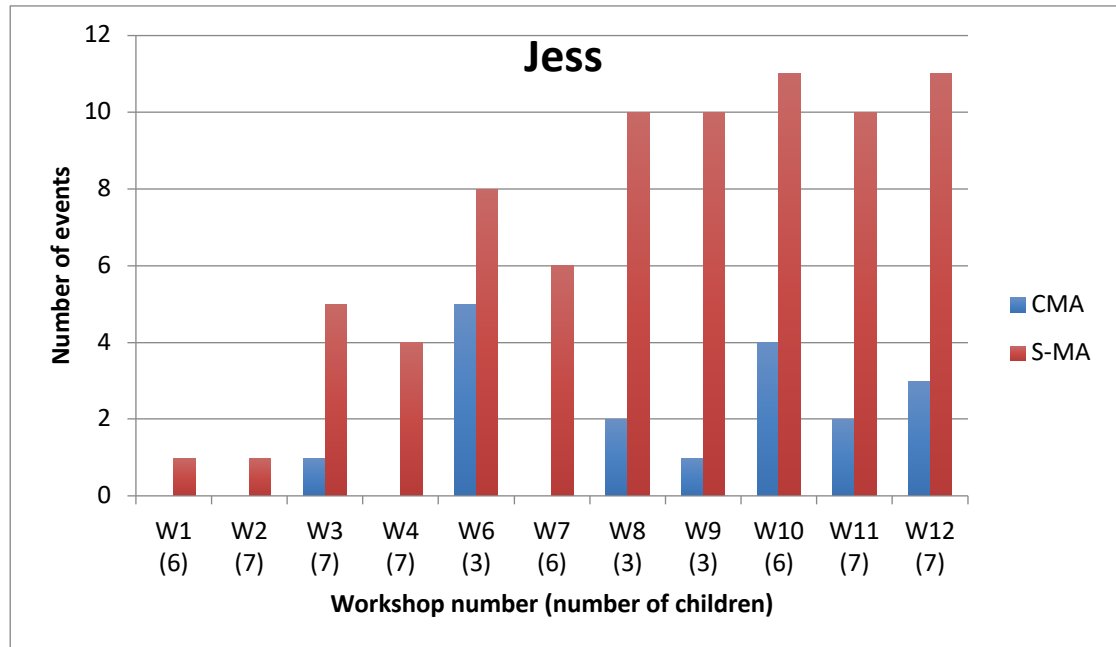
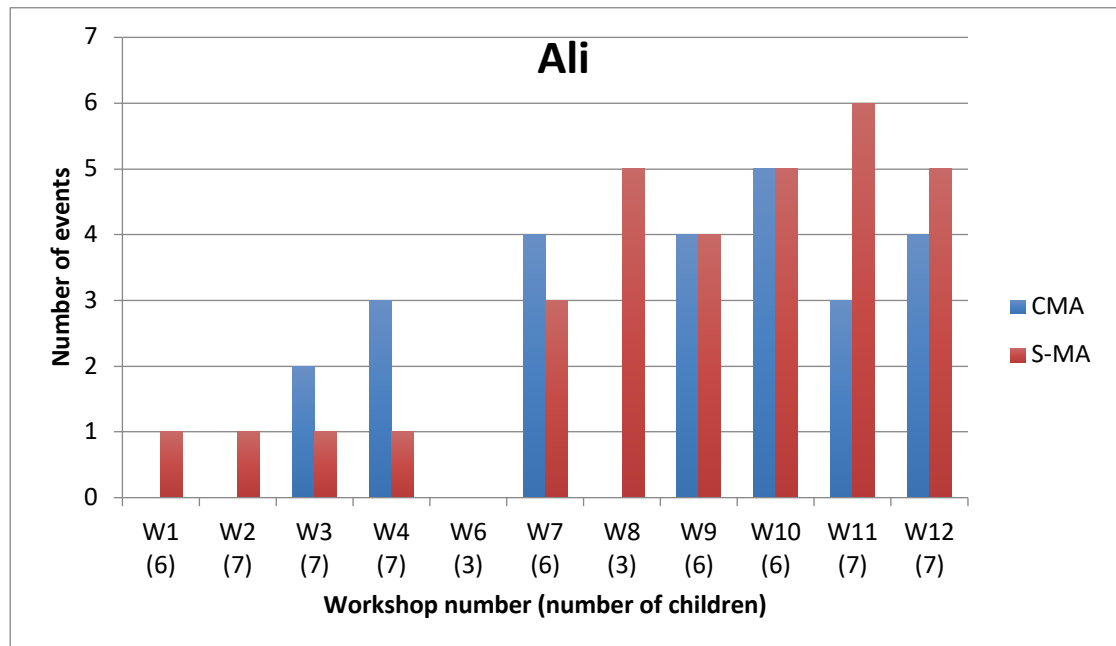
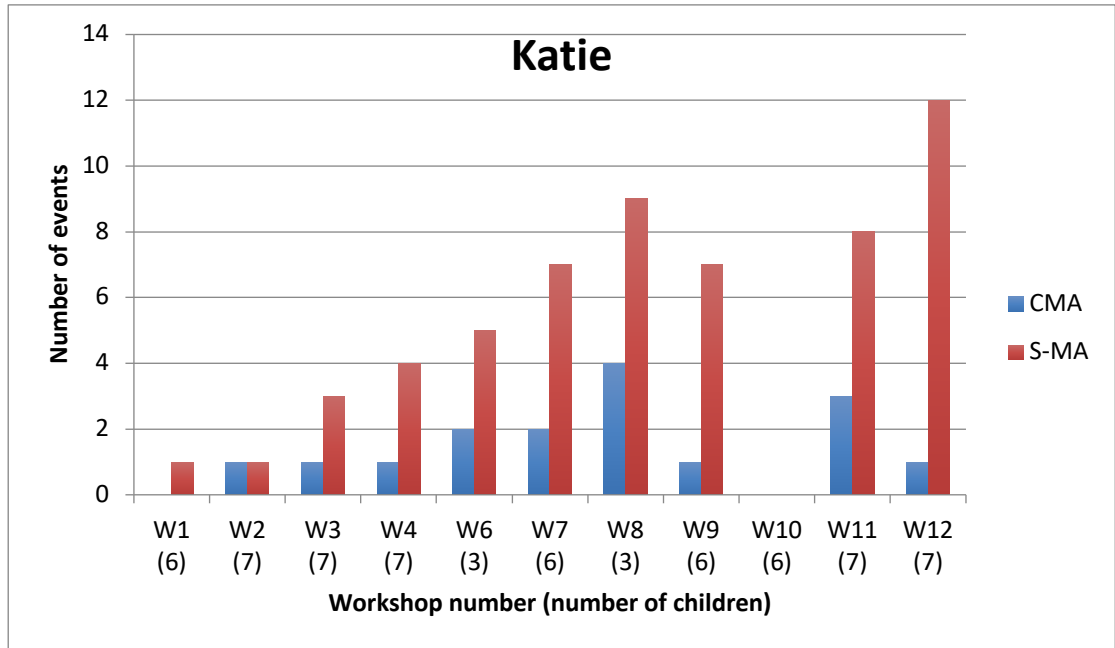


Chart 2 Ali from Cycle I CMA and S-MA events per workshop



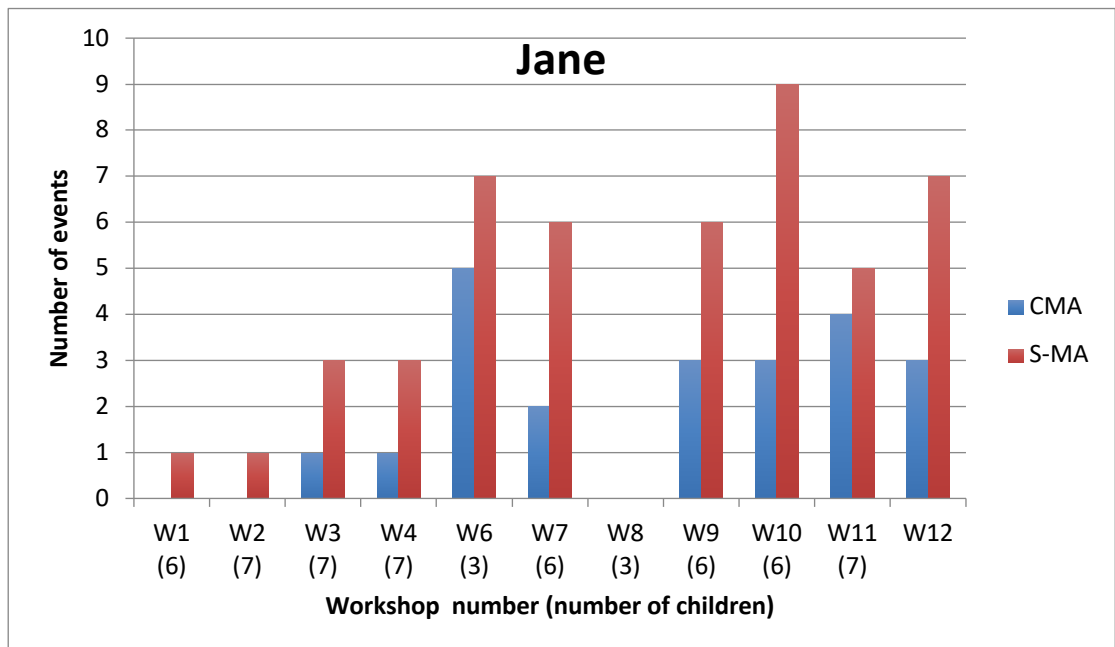
Ali was absent from school for W6

Chart 3 Katie from Cycle I CMA and S-MA events per workshop



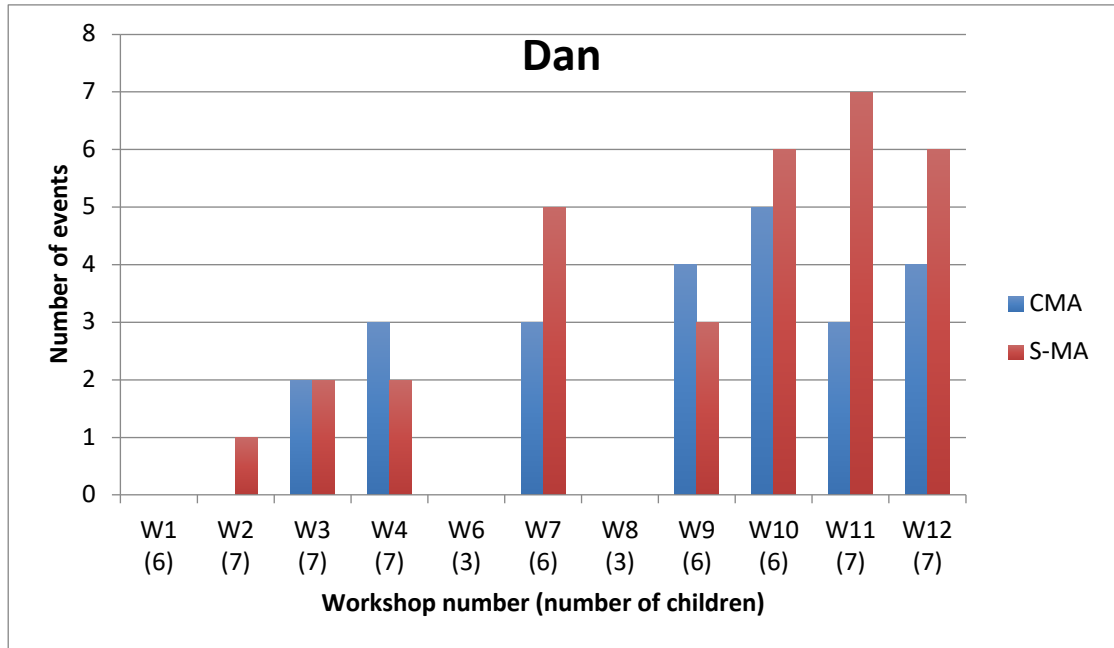
Katie was absent from school for W10.

Chart 4 Jane from Cycle I CMA and S-MA events per workshop



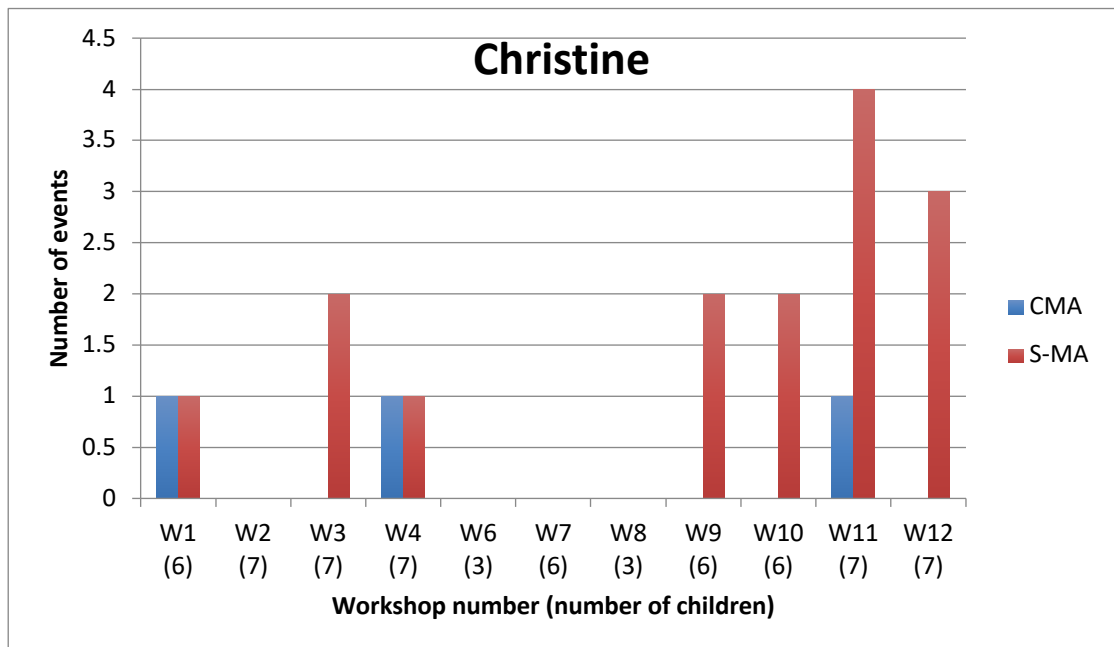
Jane was absent from school for W8.

Chart 5 Dan from Cycle I CMA and S-MA events per workshop.



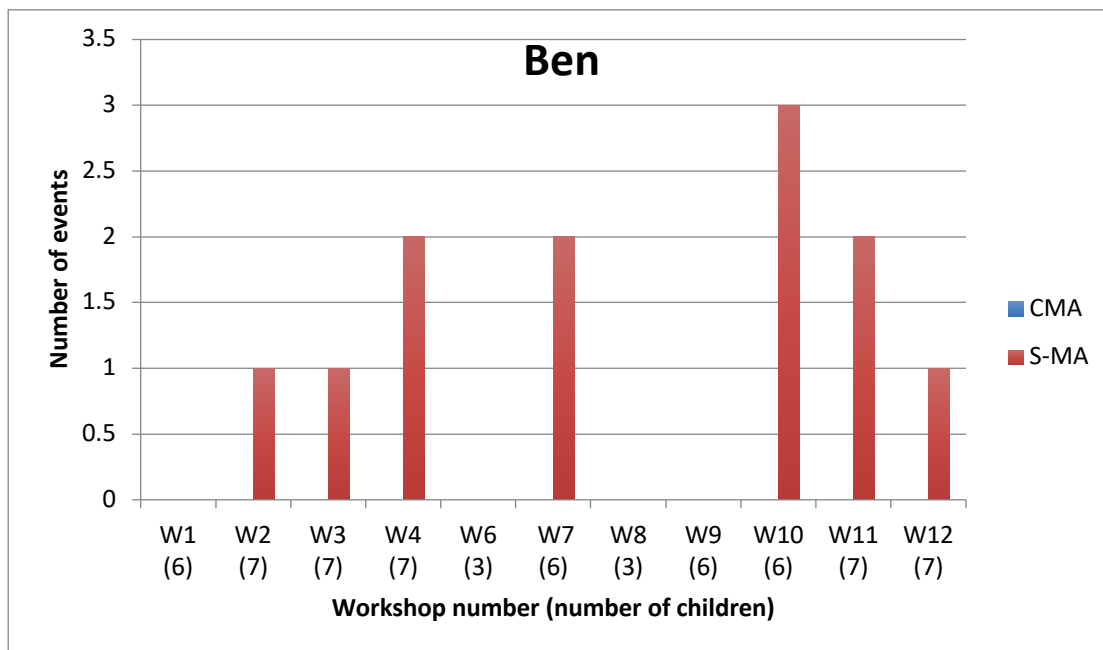
Dan chose not to attend W6 and was absent from school for W1 and W8.

Chart 6 Christine from Cycle I CMA and S-MA events per workshop.



Christine was absent from school on W6 and W7 and chose not to attend W8.

Chart 7 Ben from Cycle I CMA and S-MA events per workshop.



Ben was absent form school for W1, W8 and W9

Appendix 8.7 Cycle II individual charts for CMA and S-MA

Chart 1 Lachie from Cycle II, CMA and S-MA events per workshop

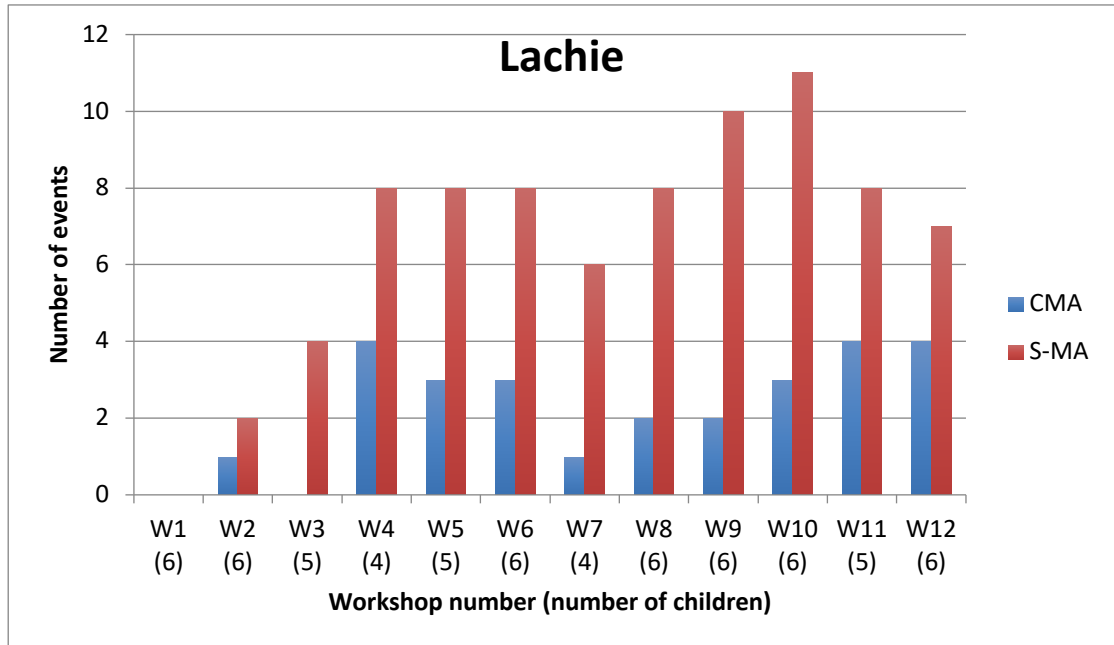


Chart 2 Tim from Cycle II, CMA and S-MA events per workshop

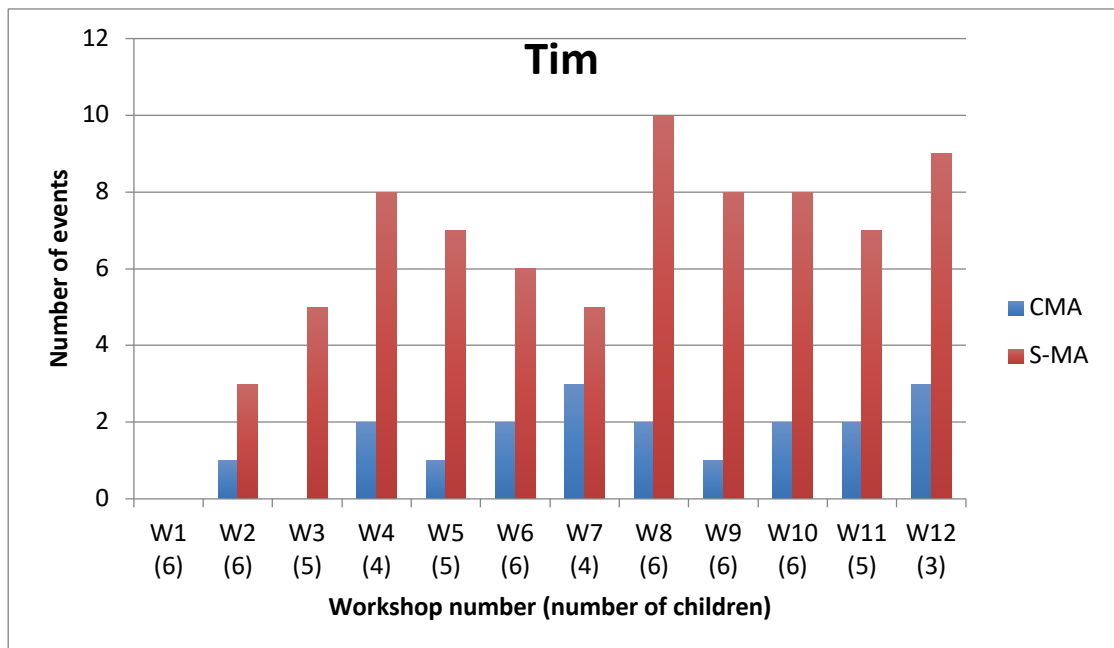
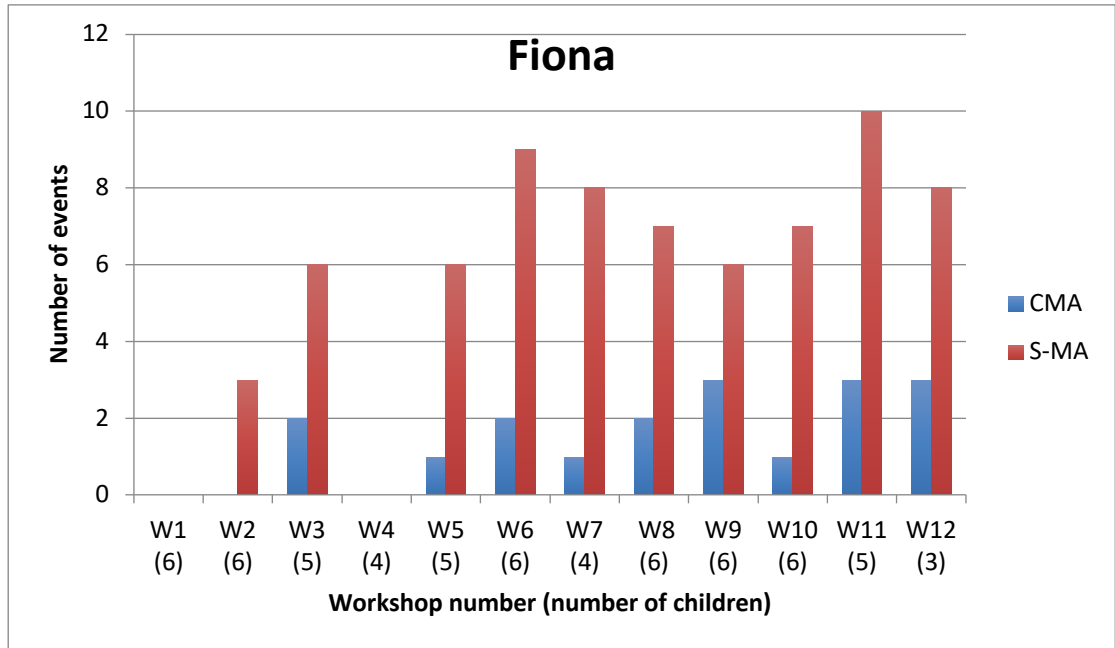
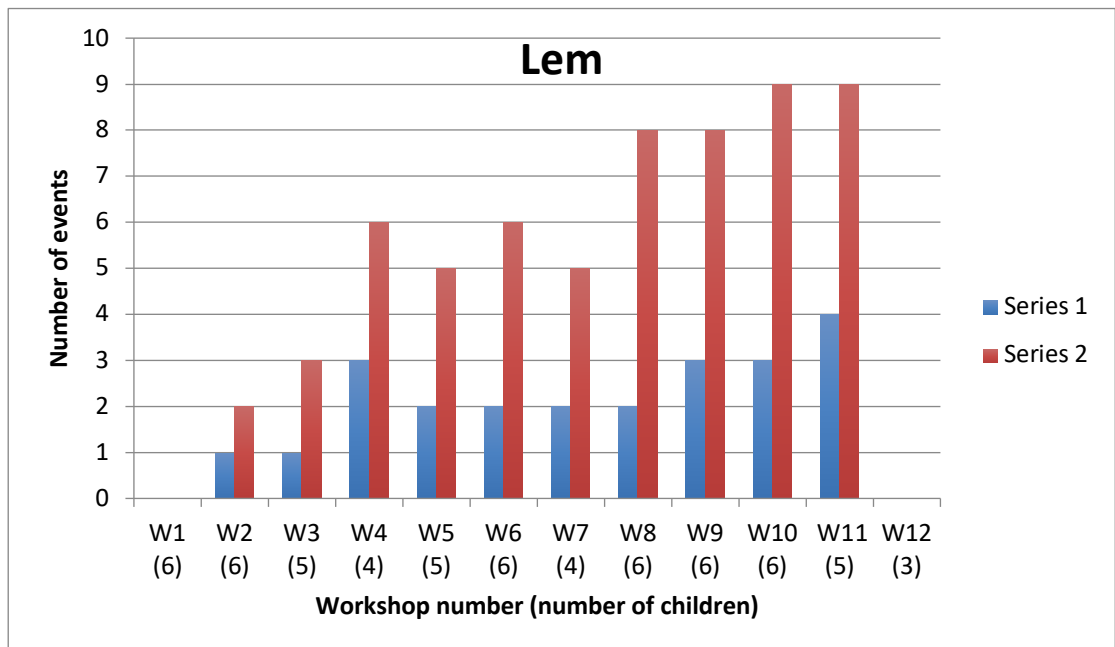


Chart 3 for Fiona from Cycle II, CMA and S-MA events per workshop



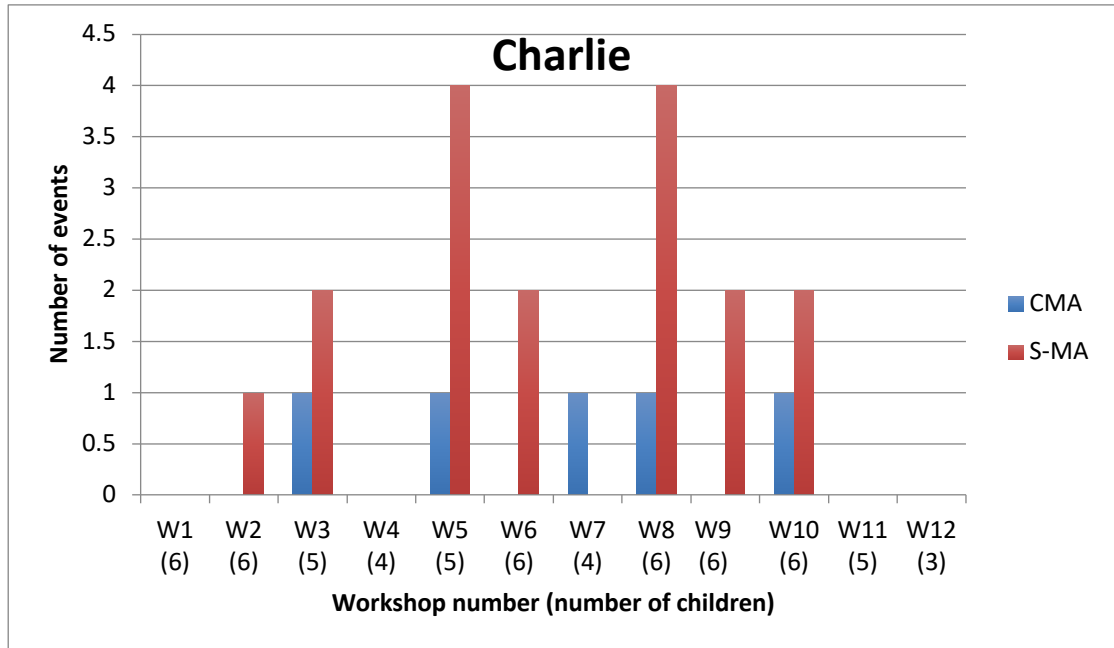
Fiona was absent from school on W4

Chart 4 for Lem from Cycle II, CMA and S-MA events per workshop



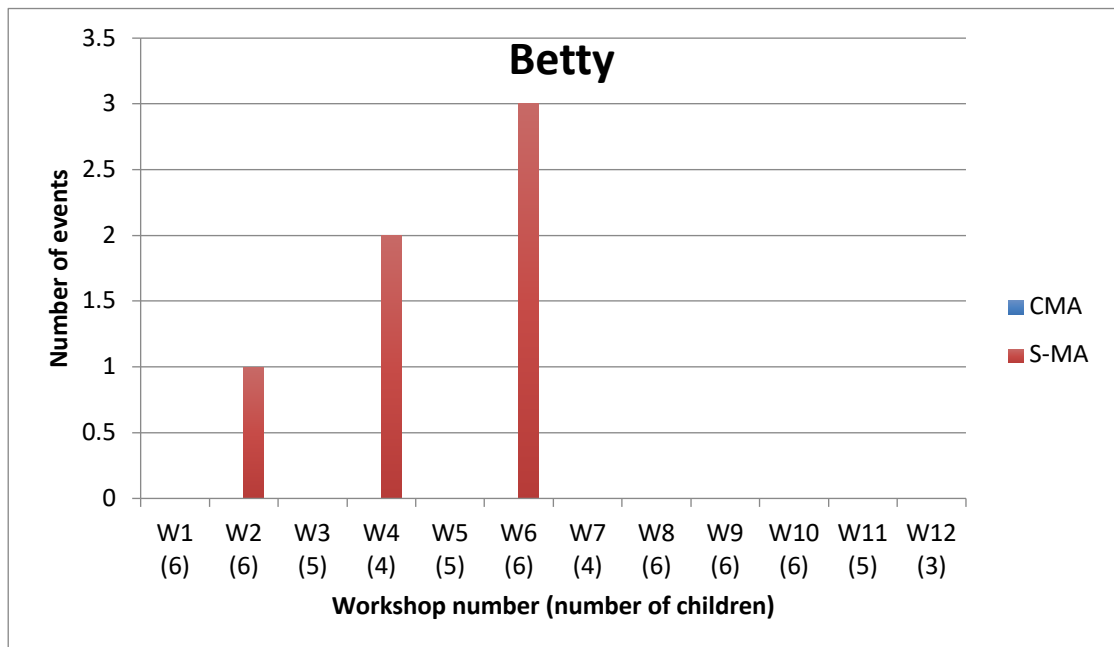
Lem was off school W12

Chart 5 Charlie from Cycle II, CMA and S-MA events per workshop



Charlie was absent for W11 and chose not to attend W4 and W12

Chart 6 Betty from Cycle II, CMA and S-MA events per workshop



Betty was absent from school on W3, W5 and W12

Appendix 8.8 Workshop model 3 (before Cycle II)

