To what extent do intervention music classes impact on seven and eight year old children presenting with social, emotional and behavioural difficulties?

A study of student learning in a deprived school setting.

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A thesis submitted for the degree of Doctor of Education

University of Bath
Department of Education

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Abstract

This qualitative case study, set within the sociocultural field of education, examined how intervention music lessons over the duration of one school year may have shaped the development of two seven and eight year old children presenting with social, emotional and behavioural difficulties.

The students in the context of this research were selected from mainstream classes due to the emotional and behavioural difficulties they had exhibited. Through analysis of field notes, student iPad diaries and formal and informal interviews, an exploration into the impact of active and collaborative music learning and teaching on the social, emotional and behavioural learning of these students took place. The music learning and teaching was based around Eun’s (2010, p. 405) socioculturally informed instructional model, which offers eight interrelated principles for instruction, namely that they should be: mediated; discursive; collaborative; responsive; contextualized; activity-orientated; developmental; and integrated.

In examining the social and emotional development of these children during the music lessons, the emergent findings suggested that the intervention classes positively benefitted the children’s development in three main thematic areas, namely in personal competence, task competence and social competence. Although both children responded to the intervention music lessons in strikingly different ways, key findings highlighted substantial increases for both children in their self-esteem, possibly due to their success and achievements in music. The second pertinent finding was that the duration of the intervention programme itself was an important factor, with substantial increases being made in their affective development by the late research phase.

Overall, this study highlighted the prominence of achievement in student’s affective development and I suggest that utilizing music as a vehicle for accomplishment for children presenting with SEBD, is a potentially powerful and influential resource.
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADHD:</td>
<td>Attention Deficit Hyperactivity Disorder (Cooper, 2011)</td>
</tr>
<tr>
<td>ALN:</td>
<td>Additional learning needs (Welsh Assembly Government, 2002)</td>
</tr>
<tr>
<td>AOSA:</td>
<td>American Orff-Schulwerk Association</td>
</tr>
<tr>
<td>ASD:</td>
<td>Autistic spectrum disorder</td>
</tr>
<tr>
<td>BERA:</td>
<td>British Educational research Association</td>
</tr>
<tr>
<td>CD:</td>
<td>Conduct Disorder</td>
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<tr>
<td>DCMS:</td>
<td>Department for Culture, Media and Sport</td>
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<tr>
<td>DfES:</td>
<td>Department for Education and Skills</td>
</tr>
<tr>
<td>IEP:</td>
<td>Individual Education Plan</td>
</tr>
<tr>
<td>ICT:</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>IIM:</td>
<td>Identities In Music – such as the crucial roles by which musicians are identified, such as a composer (Hargreaves et al, cited by Barrett, 2010, p.419)</td>
</tr>
<tr>
<td>MII:</td>
<td>Music In Identities – how music shapes identities, such as exploration of different musical styles, functioning as a resource (Hargreaves et al, cited by Barrett, 2010, p.419)</td>
</tr>
<tr>
<td>NIHCE:</td>
<td>National Institute for Health and Clinical Excellence</td>
</tr>
<tr>
<td>Ofsted</td>
<td>Office for Standards in Education (re: <a href="http://www.ofsted.gov.uk">www.ofsted.gov.uk</a>)</td>
</tr>
<tr>
<td>SEBD:</td>
<td>Social, Emotional and Behavioural Difficulties (Cooper, 2011)</td>
</tr>
<tr>
<td>SEAL:</td>
<td>Social and Emotional Aspects of Learning (Department for Education and Skills, 2005)</td>
</tr>
<tr>
<td>TAF:</td>
<td>Team Around the Family (Estyn, 2013)</td>
</tr>
<tr>
<td>UNCRC:</td>
<td>United Nations Conventions on the Rights of the Child</td>
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ZPD: Zone of Proximal Development (Vygotsky, cited by Daniels, 2010, p.18)
Chapter 1: Introduction

1.1 Statement of the substantive topic and its significance

Music can make a significant contribution to the education and development of children (Department for Culture Media and Sport, 2011, p.42), having benefits which range from enjoyment and therapy, creativity and thinking, communication and expressive, personal and social (Harland et al, 2000). It is ‘the universal language of mankind’ (Henry Wadsworth Longfellow) and a unique form of communication that can impact on the way pupils think, feel and act (DCMS, 2011, p.42). Music can provide pupils with a different way of learning and the process of making music requires high levels of social skills, empathy, concentration and self-confidence (Ofsted, 2009, p.59). Through the collaborative, shared music making process all pupils can make a significant contribution to a shared performance, whatever their level of musical ability, thereby gaining in self-esteem and confidence (ibid.).

However, Hallam and Prince (2000, p.9), whilst constructing a compelling argument regarding the importance of music, suggesting that it plays a role in every known society, state that we know little about how music affects our emotions and behaviour and that ‘we tend to take music, and the role it plays in our lives, for granted.’ Similarly, in the Ofsted Report (2009) entitled ‘Making more of Music’ one of the key findings was that despite the belief that music made a difference to pupils’ development, personally as well as musically, ‘most of the schools visited did not capitalise on its potential. There was a tendency for schools simply to offer opportunities rather than to use them actively to engage or re-engage pupils’ (ibid., p.6).

This study aims to research the extent to which intervention music classes impact on students presenting with social, emotional and behavioural difficulties. Addressing the needs of these vulnerable children and developing strategies to help them in a school setting is a major educational issue today due to the number of school exclusions (Daniels, 2010, p.140) as students exhibiting social, emotional and behavioural difficulties (SEBD) pose enormous challenges to social and educational institutions (Cooper, 2011, p.71). One may define social, emotional and behavioural difficulties (SEBD) as being interrelated and referring to:

‘Behaviours or emotions that deviate so much from the norm that they interfere with the child’s own growth and development and/or the lives of others.’ (Woolfolk, Hughes and Walkup 2010, p.165)

Cooper (2011, p.71) cites the range of problems exhibited within SEBD include emotional problems (such as anxieties), self-harm, conduct disorders (CD), attention deficit hyperactivity disorder (ADHD) and autistic spectrum disorders (ASD).
Some of the obstacles to learning that students with SEBD exhibit in a classroom setting may be ‘disruptive/acting out’ classroom behaviours (Barth et al, 2004; Altepeter and Korger, 1999), but equally some students exhibit ‘withdrawn/acting in’ behaviours. However, evidence suggests that both of these attitudes may seriously impact on educational functioning (Schoenfeld and Janney, 2008). Cooper states that contribution of skills learned via intervention strategies, such as behavioural programmes, can promote social and emotional competence for all students and may lead to improvements in educational engagement (2011, p.81).

Therefore, it is crucial that schools actively employ intervention strategies (Cooper, 2011, p.80) but additionally, seek out new pedagogical ideas (Davydov, 1999, p.137) which focus on strategies that may help students exhibiting SEBD tackle some of their barriers to learning and ultimately encourage, interest and inspire children to engage in the process of learning.

This study is an investigation into the impact of music intervention classes on students presenting with social, emotional and behavioural difficulties. It seeks to uncover indications whether or not this subject may have the power to help students with SEBD develop strategies to cope with some of the barriers to learning that they exhibit.

The next section will offer an explanation for the motivation of this research, some of the associated issues in the field and how it could possibly fit with the work of other researchers and/or practitioners.

1.2 Explanation of motivation for the study and how it fits with other work

I have been teaching music in a school classroom setting for twenty years, and I have witnessed the importance of music in children’s lives, not only due to the enjoyment it can bring (Hallam and Prince, 2000, p.68; DCMS, 2011, p.8; Harland et al, 2000, p.26) but the improvements in pupils’ learning dispositions, confidence, social development (Ashley, 2002; Clift and Hancox, 2001) and ‘enhanced self-worth and self-esteem’ (Harland et al, 2000, pp.148-152). Additionally, music may break down social and cultural barriers amongst pupils, and may provide ‘a method of narrowing the gap between children from deprived backgrounds and their peers, in terms of aspiration, attainment and behaviour’ (DCMS, 2011, p.20).

As a music educator and qualified primary classroom practitioner, I concur with the comments made by the Ofsted inspectors in their evaluation of music in schools (2009) that music is a ‘powerful’ tool that is not fully utilized in schools with children ‘in need’ (pp. 25, 59). Improvements in the behaviour of children with learning difficulties, including a higher self-esteem, lower self and reported anxiety and improved attitudes to peers have been noted in response to active music participation (Hillier et al, 2012,
and also increased feelings of belonging and social connectedness (Dingle et al., 2013, p.405).

Some research on the impact of music on personal, social and emotional development has been conducted (Hallam, 2010a and 2010b; Juslin and Sloboda, 2001; Harland et al., 2000). However, my research differs from this since it offers the perspective of a small scale, qualitative case study that aims to view this topic through the experiences of two children presenting with SEBD. It documents the impact of music classes on their social, emotional and behavioural development over a school year, during music lessons designed and administered by myself as the teacher researcher.

Further relevant research includes investigations into aspects such as the impact of music on the effects and effectiveness of the arts curriculums (Harland et al., 2000) and music as emotional self-regulation (Saarikallio, 2011, 2007). However, more research is needed in order to assess the impact of music on our emotions and behaviour (Hallam and Prince, 2000, p.9) and in particular, the impact of music on the emotions and behaviour of students presenting with SEBD.

Whilst there is a substantial body of literature regarding the impact of intervention strategies on the emotions and behaviour of students with SEBD, such as research on nurture group intervention (Cooper, 2011; Bennathan, 1997; Hester et al., 2004; Lucas, 1999), and nurture group evaluation (Ofsted 2011a), research into the possibilities of music as an intervention tool is lacking. Hillier et al (2012) conducted insightful research on the use of a musical intervention programme for adolescents and young adults on the autistic spectrum but the focus of this research was not on music as a school based subject with school-aged children.

However, in my experience as a music specialist and a primary educator, the main philosophical questions for me are not simply why music might be a relevant and potentially useful school subject to utilize as an intervention strategy but how to select and organize the learning curricula. Firstly, I suggest that an essential curricula ingredient is a focus on stimulus in order to motivate students, thereby maximizing their engagement and interest. This is emphasized by:

‘The problem of interest of instruction is not whether or not the children learn with interest; they never learn without interest.’ (Vygotsky, cited by Karpov, 2009, p.167)

Secondly, I suggest that curricula should be organized in order to encourage children to think, to apply concepts learned and to solve educational problems. Davydov (1999, p.132) states that the theory of learning activity is aimed at the goal of developing capacity for dialectical thinking in all matters and states:

‘(Students) development of creative abilities, initiatives, self-understanding, and finally, the development of their personality depends on it.’
Furthermore, I concur with the concept in sociocultural theory that ‘social interaction, self, and motivation are dialectically related within learning activity’ (Lompscher and Hedegaard, 1999, p.17) therefore, I believe that a curriculum organized around collaborative activities is of paramount importance. In sum, the organization of a curriculum is vitally important in terms of developing the ‘whole child’ (Karpov 2009, p.201; Davydov, 1999, p.125).

This study takes as its theoretical framework the sociocultural approach to education, which offers some insightful pedagogical advice regarding how to organize school based curricular. Several researchers (Daniels, 2010; Kozulin 1998, 2002, 2003; Moll, 2002) have linked the sociocultural approach to human development and learning and have highlighted various implications for educating children in diverse contexts (Eun, 2010, p.401). I suggest that strong pedagogical links exist between sociocultural approaches to education, which are traditionally linked to the learning theory of Vygotsky (Eun, 2010, p.401), and the music learning that occurs in many school settings whereby development occurs through social interaction, collaborative activities and problem solving (Ofsted, 2009). Whilst there are diverse approaches within the sociocultural suggestions regarding education, a common link among these approaches is a focus on learning as developing through social interaction (Twining, 2012). Additionally, the traditions of sociocultural or cultural historical theory and its ‘close relative’ activity theory, are an attempt to provide an account of learning and development as a mediated process (Daniels et al, 2011, p.2) drawing parallels with the music teacher’s role, often viewed as that of ‘facilitator’ (Shamrock, 1997, p.43).

Further clarification, discussion and development of the main elements of my research will be offered in the next section.

1.3 Background to the research

Music could be regarded as a ‘leading activity’ of childhood (Karpov, 2009), because it is a natural, instinctive activity which may begin as early as the first year of life with vocal interaction, considered to be the ‘bedrock of early music-making and musical communication’ (Papousek, 1996, p.42). Further, Welch et al indicate that the available research evidence concerning the ‘typical development’ in infancy suggests that there is ‘a universal predisposition to musical behaviour’ (2009, p.350). Therefore, it is possible that music may be a ‘leading activity’ in childhood in much the same way as ‘socio-dramatic play’, an aspect of early childhood (three to six years old), is acknowledged to be a ‘leading activity’ by the Neo-Vygotskians (Karpov, 2009, p.139). Further, in middle childhood and adolescence, music, particularly popular music, could be perceived as the link that may bond students together and bridge the gap between cultural practices at home and school, thereby socioculturally informing the teaching and learning. I have previously noted the comments from the 2009 Ofsted report on music suggesting that schools could expand the teaching of music to particularly support those students as identified by the school as ‘in need’, thereby maximizing the ‘powerful
contribution music can make to student’s personal development to help them succeed’ (pp. 25, 59). Using a sociocultural approach in school to learn music, whereby the environment encourages a social, collaborative, interactive atmosphere, with extensive dialogue would provide advice regarding organization of the music curricula, and might highlight more implications regarding educating children within this approach.

My study focuses on the impact that music intervention in a socioculturally informed classroom setting may have on two children aged seven and eight years who are presenting with social, emotional and behavioural difficulties. The school, in Wales, is designated by the local authority to be one of the most ‘deprived’ schools in the region (School’s Estyn Report, 2009). In particular, I wish to examine whether the use of music as the academic domain may enhance students’ social, emotional and behavioural development as it may provide common practices of home and school. Additionally, topics such as popular music, ‘take(s) seriously the social and cultural texts that are authorized by youth’ (Vanderheyden cited by Pennycook, 2008, p.144) thereby engaging student interest, which is essential for effective learning to take place (Davydov, 1999, p.129).

I hope that my research will reveal that there is scope for developing school intervention policies for children ‘in need’ (Ofsted, 2009, pp.25, 59) by engaging students in the process of musical teaching and learning within the sociocultural education approach. Lompscher and Hedegaard (1999, p.12) suggest that the ‘study of interrelations between individual and cooperative learning is one of the tasks not yet sufficiently accomplished by researchers of learning and instruction’. Despite the fact that research in the field of collaborative learning in a classroom setting has made progress (Hmelo-Silver et al, 2007; Liu, and Hannafin, 2010), it is hoped that my research may reveal useful suggestions regarding teaching and learning within the sociocultural approach, which may inform classroom practice across several academic domains, in addition to music.

Wortham (2011, p.vii) identifies the topic of understanding youth as being of importance to teachers and stated that ‘insightful comments of youth…..often yield or buttress policies’ and help educators work more successfully with them and ‘educate more effectively’. I believe that this research addresses one of the central questions for educational research, which is: ‘how can the ways in which children learn and the means by which schools achieve their goals be verified, built on and extended?’ (Cohen et al, 2001, p.181).

1.4 The concept of ‘learning’ in the context of this study

For the purposes of this study, it is important to clarify the concept of ‘learning’. In previous sections I suggested that social interaction, self and motivation are related within learning activity (Lompscher and Hedegaard, 1999, p.17). Indeed, for children presenting with SEBD, Boxall (2013, p.133) states that a ‘holistic learning experience of intermeshing emotional, social and cognitive developmental strands cannot be separated
out’. The intervention music lessons in my research were devised with this ‘holistic’ lens in mind. However, since my study focuses on the development of the children’s affective domain, it is helpful to consider Ockelford’s (2000, p.197) view that learning through the musical domain may occur on two levels, containing two distinct strands: music ‘in its own right’ (to promote musical skills, knowledge and understanding) and music ‘to promote wider learning and development’ (such as increased social and communication skills). Whilst Ockelford’s suggestions on the two strands of learning are related to students with severe or profound learning difficulties, I suggest that this perspective regarding learning within the musical domain is helpful in the context of my research. Therefore, through learning opportunities presented in music, where students learn to express themselves through sharing their creative ideas and suggestions during collaborative group investigations, this study investigates the learning outcomes from the ‘wider’ area of music, and considers how these may have shaped the social, emotional and behavioural development of students presenting with SEBD.

Following this overview of my study, I will now present my research question in the next section.

### 1.5 Research question

My research question is as follows:

> ‘How do intervention music lessons, which utilize sociocultural educational principles, relate to the three interconnected aspects of social, emotional and behavioural development of two children aged between seven and eight years old in a mainstream school setting in Wales?’

This research question has derived from the thought processes as outlined in previous sections, predominantly including the relationship between music teaching and sociocultural educational principles and how the combination of these educational aspects may shape student affective development.

I will now briefly introduce the research methodology, data collecting strategy and context within which my research inquiry is based.

### 1.6 Research methodology and overall data collection strategy

As this research aims to investigate how intervention music learning and teaching in a socioculturally informed classroom setting may relate to the development of seven and eight year old students in a school in which ‘93% of the pupils live in the most deprived areas of Wales’ (school’s 2009 Estyn report) presenting with social, emotional and behavioural difficulties, I will operate within an interpretive paradigm (Johnson and Onwuegbuzie, 2004, p.20). This seems appropriate, as my design is based on induction,
whereby I aim to avoid assumptions about what the research findings may look like before the collection and analysis of data (Kelly, 2005, p.131). Therefore, I believe that a qualitative approach could have advantages over a quantitative one as it emphasizes the manners in which individuals interpret their social world, interests and broader perceptions, an aspect that certain authors suggest may ‘defy’ quantitative research (Holliday, 2005, p.4). Additionally, since my research projects a view of social reality as a changing property made up by the individuals’ creation (Bryman, 2001, p.20), I think that operating within a qualitative paradigm is more suitable as it attempts to represent what is a complex reality (Holliday, 2005, p.6). Therefore, my paradigm is interpretive, since I concur with Holliday that I can ‘explore, catch glimpses, illuminate and then try to interpret bits of reality’, as opposed to a quantitative approach, which is normative and may suggest that there could be a ‘normality’ in this setting which the ‘researcher might fathom, understand and master by statistics and experiment’ (ibid., p.5).

The data collecting strategy will consist of the combination of certain ethnographic techniques such as participant observer, and ‘formal’ and ‘informal’ interviews (Spradley, 1980, p.123). Additionally, the participants will use iPads to create their own diary entries, rather like the use of the ‘Diary Room’ in Channel Four’s reality television show, ‘Big Brother’. This latter strategy may be effective in grounding my research in the participant’s ‘emic’ perspective (Harvard Education Site, 2014) without ‘filtering the views through the researcher’s pre-established constructs and categories’ (Spicer, 2005, p.299).

1.7 Summary and statement of the broad issues or problems linked to the substantive, theoretical, methodological aims and issues of this study

This section offers a concise summary of the substantive, theoretical and methodological aims and associated issues of this study in relation to the research question.

1.7.1 Substantive aims and issues

My substantive aim is to determine how music intervention classes may relate to the affective development of seven and eight year old children presenting with social, emotional and behavioural difficulties. I feel that a substantive problem could be the lack of information and research on music intervention classes for children presenting with SEBD, therefore, I will have to draw on the research in the wider field of literature pertaining to music and also intervention procedures.
1.7.2 Theoretical aims and issues

Since I want to determine how intervention music classes, within a socioculturally informed classroom setting, may relate to the three interconnected aspects of social, emotional and behavioural development of two children, I believe that Eun’s (2010, p.405) socioculturally informed instructional model could offer clear guidance for my study and provide the conceptual framework through which I may view the social phenomena. The rationale for choosing to place my research within the sociocultural or cultural-historical theory and its ‘close relative’ activity theory (Daniels et al, 2011, p.2) is twofold. Firstly, these theories attempt to provide an account of learning and development as a mediated process (op. cit.). Secondly, I posit that music teaching is a ‘special kind of activity, directed towards the acquisition of societal knowledge and skills through their individual re-production by means of special learning actions upon learning objects (subject matter methods and knowledge)’ (Lompscher and Hedegaard, 1999, p.12). Music, in my opinion, is a specific learning domain, as separated from every day communication and play, and is ‘based on a logic of learning material representing different domains of societal experience and activity’ (op. cit.), therefore music teaching in a classroom setting would appear to possess a natural affinity with the socioculturally informed educational theories.

However, since this field is a broad theoretical framework that is developing under the influence of the writing of Vygotsky in which there are several interpretations and extensions (Daniels, 2010, p.2), I select to view the sociocultural field through the lens of Eun (2010) and her collation of differing perspectives within this field in her socioculturally informed instructional model. This model offers a holistic perspective of the sociocultural education approach, which could be significant in helping me gain a number of key insights into aspects of my substantive topic.

The associated issue with my theoretical aim is I think that guidance on the development of affective progress is lacking as an explicit focus in Eun’s (2010) model. Although it does offer excellent guidance regarding application of sociocultural theory to classroom instruction, in providing overall assistance on how to teach music, whereby the overall model is based on the sociocultural principle that development proceeds from the social plane (intermental place) to the individual plane (intramental plane) (ibid., p.403) through the means of eight instructional principles.

Therefore, in order to address this I will adjust the model to incorporate the work of Karpov and Haywood who distinguish two major types of mediation from the writings of Vygotsky: metacognitive and cognitive (1998, p.27). They state that metacognitive mediation refers to children’s acquisition of semiotic tools for self-regulation, such as self-planning, self-checking, self-monitoring and self-evaluating, and cognitive mediation refers to children’s acquisition of cognitive tools that are necessary for solving subject-domain problems (ibid., pp. 27-28). Further, they state that acquisition of these semiotic tools can help children to overcome impulsive action, to plan a solution to a problem prior to its execution and to master their own behaviour (op. cit.).
In incorporating metacognitive mediation into Eun’s (2010) model, I hope to uncover pertinent information, which may contribute towards refinement of the theory, as my research will provide a unique example of real people in a real situation.

1.7.3 Methodological aims and issues

Finally, as this research aims to implement a particular design within a unique context, an interpretive qualitative approach seems appropriate. In order to find answers to my substantive question, the method I will use is mainly the ethnographic ‘participant observer’.

The methodological problems that concern me are whether I can access the children’s thinking and understanding of how music lessons might relate to their affective development. Therefore I realise that I need to develop some specific research tools within the context of ethnography in order to address this issue. Consequently, in order to gain an ‘emic’ (Harvard Education Site, 2014) perspective I have decided to trial the implementation of using iPads as a personal ‘diary’ for the children.

1.8 Structure of the Thesis

Chapter two will review the appropriate literature, pertaining to the three most relevant aspects of the study, namely the general field of music, due to limited research on young children’s responses to music in an educational context (Hallam, 2010c, p.792), literature detailing intervention strategies for children presenting with SEBD, and lastly literature from the sociocultural approach to education. Chapter three will include a discussion of the study’s design and methodology, including a rationale as to why this research is an ethnographic case study, and also introduce the participants and describe the data collection and analysis methods. Further, it will contemplate the study’s reliability and validity, as well as the issues of reflexivity and reactivity. Lastly it will consider the study’s important ethical issues. Chapter four will present and analyse the findings and a discussion of the findings will be contained in chapter five. Lastly, conclusions from the research will be drawn, and pertinent implications and recommendations for policy and practice will be offered in chapter six.

1.9 Summary

In this chapter, I have offered a statement of and motivation for the substantive topic and put forward an argument for the relevance and educational importance of why music as a school based subject may provide an effective intervention strategy for students exhibiting SEBD. Further, I have reviewed the importance of focusing on how to organize the music teaching and learning, and suggested that Eun’s (2010) eight
principles for sociocultural education would offer useful guidance on this point. Contextual background to the research has been introduced and the study’s substantive, theoretical and methodological aims and issues have been presented.

Further work needs to be done in the educational research field of music, notably more research in order to explore the impact of music on students ‘since little is known about how music affects our emotions and behaviour’ (Hallam and Prince, 2000, p.9). This research aims to contribute to this gap in the literature through an in-depth exploration of how music lessons in an intervention context in a mainstream school may shape the affective development of children presenting with SEBD.
Chapter 2: Review of the Literature

2.1 Introduction

I have surveyed literature relevant to my research from the general field of music, due to limited research in the field on young children’s responses to music in an educational context (Hallam, 2010c, p.792), also from literature detailing intervention strategies for children presenting with SEBD, and lastly from the sociocultural approach to education. Therefore it is sensible to outline the ‘literature boundaries’ of this study in order to define the gap that my research attempts to address since it is potentially enormous (Murray, 2011, pp.131-133). As stated in Chapter 1, my main research question was:

‘How do intervention music lessons, which utilize sociocultural educational principles, relate to the three interconnected aspects of social, emotional and behavioural development of two children aged between seven and eight years old in a mainstream school setting in Wales?’

Figure 2.1 highlights these three main literature areas, at the intersection of which lies the focus of my literature review.

Firstly, whilst the therapeutic effects of arts education, leading to a sense of ‘calm’ and ‘well-being, have been noted (Harland et al, 2000, p.26), this study is concerned with music as a teaching domain and not music therapy, because I am a trained teacher and not a trained music therapist. Additionally, the question in this research is how music lessons within a classroom context may shape the social, emotional and behavioural development of students presenting with SEBD, and not on intervention music therapy strategies. Secondly, inclusion of relevant literature concerning children and young adults presenting with social, emotional and behavioural difficulties has focused on the rationale for and use of intervention strategies. Finally, this research does not comprise a comprehensive view of all of the education initiatives espousing a Vygotskian root, but attempts to view the possibilities via the theoretical lens of Eun’s model, which highlights the interrelationships among the instructional principles (2010, p.405). In so doing, I aim to explicate how this aforementioned model has guided and informed the research, by ‘providing concepts and relationships that can be checked out against my actual data’ (Strauss and Corbin, cited by Silverman, 2013, p.341).

2.2 Why teach music?

In Chapter One, I noted reasons why music plays an important role in the lives of children, not only due to the enjoyment it can bring (Hallam and Prince, 2000, p.68; DCMS, 2011, p.8; Harland et al, 2000, p.26) but the improvements in pupils’ confidence (Ashley, 2002) social development and sense of well-being (Ashley, 2002; Clift and Hancox, 2001), and ‘enhanced self-worth and self-esteem’ (Harland et al, 2000, pp.148-152). But, as Hallam points out (2010c, p.792), there is a ‘long standing debate’ about
the aims of music, in particular, whether it should be taught as a school subject. This section advocates the teaching of music as a school based subject and is divided into two strands: the first deals with *why* teach music as a school subject and the second discusses the curriculum implications of music and specifically, *what* to teach.

**Figure 2.1**

2.2.1. **Why teach music as a classroom subject?**

This section reviews the rationale behind teaching music as a classroom subject, discussing the potential benefits highlighted from research in both the general field of music and music education.

Elpus (2007, p.13) states that music teachers and educators are ‘continually having to advocate the importance of music as a school subject’ because too many administrators ‘see little or no value in music as a core subject’. Similarly, Reimer (2005, p.140) notes that music educators have always had to ‘plead in favour’ of it because ‘music is often
regarded to be essentially different from those subjects requiring the development of the intellect’.

Music is an expensive subject to equip fully, and if research evidence suggests that the major impact of music is seen to be affective rather than intellectual (Hallam, 2010c) then ‘how can one justify its inclusion in a climate where education is seen to be an important element in maintaining prosperity in a global economy, enjoyment may be viewed as a luxury that cannot be afforded’ (ibid., p.796)?

I would argue that, firstly, the affective benefits from music cannot be underestimated, especially since approximately 18% of students in ordinary classrooms in mainstream schools at some time in their school career need extra help or equipment to enable them to take part in education (Warnock, 2013, p.16). Secondly, the ‘Music in the National Curriculum for Wales’ (Welsh Assembly Government, 2008, p.9) partially answers this question where it states that ‘in music, learners develop transferable skills and attributes, through making music individually and in groups.’

In addressing the question of music advocacy more fully, I will review some relevant literature in the field. In doing so I only focus on the affective domain, which might relate to the ‘transferable skills’ in the above quotation, since this is most relevant to the study’s research question and a comprehensive review of both affective and cognitive benefits would be outside the scope of this discussion. Further, as noted earlier, since there is less research on young children’s responses to music (Hallam, 2010c, p.792), I have reviewed some literature involving adult responses to music per se. However, it must be noted here that whilst my focus is how music may shape student affective development, I believe music to also be of great benefit within the cognitive domain and direct the reader to Hallam (2010b) for a discussion of how active engagement with music and development of music skills may transfer to other activities such as language development, literacy, numeracy, measures of intelligence and general attainment.

The possible affective benefits gained during the course of properly organized music lessons, whereby an emphasis on collaborative group music making focuses the children on the empathetic feelings and opinions of others (Rabinowitch et al, 2013) and on the opportunity for children to create and enjoy improvisational/compositional activities (Koutsoupidou and Hargreaves, 2009, p.268), may impact positively on emotions. One such positive impact noted by Harland et al (2000, p.148) was the ‘significant and frequent claim’ made by teachers that the arts gave students an increased sense of self-esteem, and the majority of these claims linked this increase in self-worth to achievement. The pupil perspective substantiated this claim also (ibid., p.149) and in addition, younger students noted that receiving compliments about their work from others made them feel good about themselves (ibid., p.151). Increased self-confidence was another affective benefit noted (ibid., p.157), particularly in relation to musical performances. Denora states that emotion, mood and embodiment are now an area of central concern in sociology because they provide both ‘foundation’ and ‘medium’ of action and cognition (2010, p.160), and she concludes, that the concern with the
‘feeling’ basis of social organization, has persisted and has ‘established itself across a range of sociological perspectives, which have all highlighted emotion’s role in relation to action and social structure’ (ibid., p.161). The connection between emotion and music has seen a surge in interest in the last decade, and will be discussed next.

The use of music in people’s everyday lives has become a new, fast growing topic within music psychology (Sloboda, 2010, p.493), such as the use of recorded music to arouse certain emotions and manipulate certain moods (Hallam, 2010c, p.791). The issue of whether music evokes a genuine emotional response in listeners (the emotivist position) or whether listeners merely perceive emotions expressed in the music (the cognitivist position) was investigated by Lundqvist et al (2008). In order to do this they measured self-reported emotion, facial muscle activity and autonomic activity in thirty-two participants while they listened to popular music composed with either ‘happy’ or ‘sad’ expression. Their study provided support for genuine emotional responses to music, which is consistent with the emotivist position (ibid., p.75). Additionally, research by Graham et al (2009, p.491) showed that the presence of music minimized the attentional mechanisms associated with threat, thereby lending support to other research that music demonstrates potential as therapeutic intervention for individuals experiencing acute anxiety states.

Indeed, Thayer et al (1994) state that music is one of the ‘common categories’ along with exercise to aid self-regulation of a bad mood, raise energy and reduce tension. Furthermore, Saarikallio (2011, p.307) states that self-regulation is acknowledged as one of the most important reasons for musical engagement at all ages, whereby ‘emotional self-regulation’ refers to the process of modifying various aspects of emotions, such as regulation of the behavioural expressions related to emotions. Her research uncovered comprehensive information about the characteristics of emotional self-regulation through music, such as ‘happy mood maintenance, revival and relaxation, diversion, discharge (or venting), mental work, solace and ‘psyching up’ (ibid.). Additionally, pertinent findings from her earlier research on the exploration of the role of music in adolescents’ mood regulation (2007) were that adolescents use of music assisted in regulating elements of mood state, by helping to control mood and feeling good, and that music helped the ‘ability to voluntarily experience preferred moods and aim to achieve them’ (ibid., p.102). These findings are relatively consistent with North et al (2000) except that one of their conclusions drawn was that music allowed adolescents to ‘portray a particular image to the outside world’ (ibid., p.255). Another unanticipated conclusion was that respondents attitudes to classical music was negative, with the only perceived benefit to be pleasing teachers and parents (ibid., p.265). Collectively, the studies discussed here have been largely based on self-report, which is a limitation noted by Saarikallio (2011) herself due to the difficulty in objectively interpreting subjective experiences.

However, Hallam and Price (1998) tested the notion that listening to music can physically calm children in an educational context by providing background music in the mathematics classroom of ten children who were attending a school for children
with emotional and behavioural difficulties. These children exhibited a high frequency of disruptive behaviour during lessons but the findings noted that physiological, behavioural and concentration changes were demonstrated in response to ‘calming’ background music during their mathematics lessons. These findings are consistent with Savan (1999) whose research highlighted that playing Mozart in the background of Science lessons of pupils presenting with SEBD, reduced their aggressive and disruptive behaviour, possibly because of the improvements noted in their co-ordination skills and the subsequent reduction of feelings of frustration when conducting practical work (ibid., p.138).

Altogether, these researchers have identified that listening to music is a regulatory strategy, which is consistent with other studies (Silk et al, 2003; Van den Tol and Edwards, 2014). However, what are the research implications regarding the possible impact of active participation in music on the affective domain?

Research concerning active participation and engagement in music with regard to choir singing were investigated by Dingle et al (2013) with a group of adults of whom 89% experienced chronic mental health problems. Their findings concluded that overall the experience of choir singing increased the well-being of participants, with benefits such as ‘positive emotions’ experienced and ‘enhanced mood’, ‘emotional regulation as it helped them to reduce stress and tension’, and a ‘sense of connectedness’ (ibid., pp.412-414). Similarly, research by Clift and Hancox (2001, p.253) in a study of members of a university college choral society, report results that indicate high levels of self-reported well being linked to singing. Further, they noted that 87% said they benefitted socially from active participation in a choral group (ibid., p.248). The findings of increased sense of well-being due to choir singing are consistent with Ashley’s ethnographic case study research (2002) which attempted to gain an understanding of 18 boys’ experiences of singing in a church choir, and to explore the implication of these experiences and meanings in relation to not only well-being but also to a sense of identity. The conclusions drawn were that despite all the boys experiencing a high level of engagement in singing, some of them ‘experienced conflict between private and public selves’ wherein they felt obliged to maintain a ‘macho’ image in public (ibid., p.184). Ashley does not explore this notion of ‘multiple identity’ and being viewed as a ‘certain kind of person’ in a given context (Gee, 2001, p.99) but focuses on the gender implications from his research.

However, in Barrett’s (2011) narrative three-year longitudinal project with young children aged 18 to 48 months, she does discuss the contemporary emphasis on identity as multifaceted and draws particularly on the work of Hargreaves et al (2002) to discuss music and identity. Barrett outlines the suggestion of Hargreaves et al that identity in music may be viewed in two ways (2011, p.406): as ‘Identities in Music’ (IIM) and ‘Music in Identities’ (MII), whereby the former refers to the cultural roles and musical categories by which musicians are identified, example, a composer and the latter refers to the ways in which music shapes identities, functioning as a resource. Her findings conclude that music was ‘embedded in the emotional landscapes, routines and structures
of (Beatrice’s) (main participant) life’ and that through her music making, she ‘fashioned different versions’ of musical self (IIM), such as singer or dancer, and of herself in music (MII), such as exploring different musical styles (ibid., p.419). Through a discussion of music and identity, this research helps us understand the role and functions of music in the lives of young children (ibid., p.420).

Finally, Hillier et al (2012) conducted a pilot music intervention program for adolescents and young adults with autistic spectrum disorder. Their study involved an eight–week program consisting of 90-minute weekly music sessions, where the main project in the curriculum involved participants creating a short film with accompanying music composition, created using the looping programme, ‘Garage Band’ (ibid., p.204). Participants worked on activities for which there were ‘no right or wrong answers’ so ‘failing was impossible’ and this contributed to the ‘participants having a successful working relationship with others by the end of the intervention’, which was ‘something they may not have thought possible at the beginning of the intervention’ (ibid., p.210). Their findings, from pre and post-outcome measures showed a significant increase in self-esteem, reduced self-reported anxiety and more positive attitudes towards peers. These are consistent with the research in the field (Trevarthen, 2002; Shore, 2003; Allen et al, 2009). Whilst this research is associated with the autistic spectrum community I suggest that this intervention programme has significant implications for students presenting with SEBD due to possible impact on self-esteem and social connectedness.

Much of the research discussed in this section was conducted with adults, outside the school context, since there is less research on young children’s responses to music (Hallam 2010c:792). Further, some of the research was based on self-report, which is an epistemological issue noted by Ashley (2002:181), however, he states:

‘In recognizing the validity of spirituality, culture, religion and personal beliefs as a domain of well-being, the World Health Organisation has recognized that such data can be as valid as any other employed for the assessment of health.’

The next section discusses the music curriculum design within the boundaries of the Welsh National Music Curriculum.

2.2.2 What to teach? Music curriculum implications

Chaiklin (2009, p.167) states that ‘to find a theory of subject-matter teaching and learning that also provides conceptual analysis for how to organize specific instructional activities for supporting personality development is rare’. My premise is that education should develop the whole child, and although the focus of my research is on the affective development of children presenting with SEBD, in order to research this through music teaching and learning, it is necessary to discuss what to teach, that is the music curriculum design.
This section takes as its starting point a review of the aims of ‘Music in the National Curriculum for Wales’ (Welsh Assembly Government, 2008). In examining its directives, programme of study and attainment targets, I suggest that the curriculum’s breadth offers scope and opportunity for the music teacher to formulate their own comprehensive curriculum, based on the programme of study and attainment targets offered within. With this in mind, I explore the possibilities of music curriculum design in a Primary School Context, utilizing the overall curriculum design considerations of Chaiklin (2009, pp.167-180). Possibilities for curriculum content are explored through the teachings of the musical great, Carl Orff, founder of Orff-Schulwerk.

The ‘Music in the National Curriculum for Wales’ (Welsh Assembly Government, 2008, p.4) document, begins by outlining the broad aims of the programme which encourage inclusive education, that ‘develops personality to the full’ and ‘reduces(s) social barriers to inclusion and offer(s) opportunities for all learners to achieve their full potential.’ Addressing these aims is implicit in the inclusion of broader skills in the document such as ‘skills across the curriculum’, (for example, ‘developing’ thinking, communication ICT and number) (pp.6-7) and ‘learning across the curriculum’ (such as access to music from Wales, Europe and the World, Personal and Social Development and Careers) (pp.8-9).

Music is one of the compulsory subjects in maintained schools in the curriculum of Wales up until Key Stage 4, which is students aged fourteen to sixteen, and it has a national programme of study together with attainment targets which stipulate the expected standard for pupils’ achievement (p.2). The programme of study set out for Key Stage 2 is extremely broad, consisting of three main curricular elements, namely, composing, performing and appraising around the musical elements (pitch, duration, pace, timbre, dynamics, structure and silence) (p.12). This breadth makes it possible for individual teachers to adopt different approaches to achieve the same aims, which is a possibility already noted by Hallam (2010c, p.796).

Devising a comprehensive music curriculum based on programme aims contained in a national curriculum document is something I have done several times in my career. Chaiklin (2009, p.170) defines curriculum design as ‘the systematic description of the topical knowledge and skills to be acquired from teaching’ and he states that it should be carried out in coordination with subject matter analysis. Key considerations are what ‘disciplines’ should be included in a school programme and what ‘topics’ should be taught for the selected disciplines. Although ‘Music in the National Curriculum for Wales’ (Welsh Assembly Government, 2008) outlines the ‘key disciplines’ that should be included, that is performing, composing and appraising, the ‘topics’ to be taught are not specified. Whilst stipulations are made regarding inclusions of areas ‘skills across the curriculum’ (such as developing thinking, ICT, number and communication) and ‘learning across the curriculum’ (such as access to music from Wales, Europe and the World, Personal and Social Education and Careers), these are very broadly specified, allowing much scope for the music teacher to develop curriculum activities which meet the programme of study and attainment target criteria.
In developing these types of activities, the work of one of the great musical educators of the twentieth century, Carl Orff, the founder of Orff Schulwerk (American Orff-Schulwerk Association, 2014), may provide excellent advice. Throughout my career as a music teacher, I have utilized the various techniques as advocated through Orff-Schulwerk because it is based on learning experiences where music is its main thrust but it also has ‘strong implications’ for social and cultural learning as well with an emphasis on the capabilities and interests of the children in the group (Shamrock, 1997, pp.41-42).

I draw on the expertise of Professor Mary Shamrock, a past president of the American Orff-Schulwerk Association (AOSA), to describe some of the elements contained within this method. The Orff-Schulwerk approach to primary music education promotes active learning, through singing, saying, dancing, playing, improvisation and creation of new forms, all contributing to an integrated approach, which incorporates aspects of all the performing arts (Shamrock, 1997, p.41). In this programme, rhythm is the starting point, with speech patterns the basis for rhythmic development, and this develops into harmony by using simple drone and ostinato and simple primary chord changes (I, IV, V) (ibid., p.42). The original published volumes of the Orff-Schulwerk are filled with songs, especially folk tunes, instrumental accompaniment sample rhythms, little performance pieces for instruments. As noted by Shamrock, in its restricted sense, Orff-Schulwerk can refer to the repertoire contained in the original or adapted volumes but I have adopted it as a general pedagogy for guiding children through: exploration (discovery of sound); imitation (basic skills in rhythm); improvisation (composition of new patterns and sound scapes); creation (using movement, singing, instruments) (ibid., p.43). The important point about this pedagogy is that it is considered a ‘process’ rather than a ‘product’, but if some commendable pieces emerge from the process, then they can be shared in assemblies or class performances (op. cit.).

In drawing this section to a close, I reiterate my stance, which is that although the focus on my research is on the affective development of the students, I argue that a holistic approach to education should be the goal of schools, which is why it is necessary for this case to discuss the music curriculum itself and implications for design. Indeed, the importance of considering cognitive and affective goals alongside each other for students presenting with SEBD is a point noted by the Ofsted inspectors (2004, p.12) in their report on special educational needs. This will be discussed further in the next section entitled ‘Intervention practices for students presenting with SEBD’.

2.3 Intervention practices for students presenting with SEBD

The first part of this section considers the ‘The SEN Code of Practice for Wales’ (Welsh Assembly Government, 2002) in order to provide background and context to the study. In consideration of this and other pertinent documents, a discussion regarding inclusive educational practices for children presenting with SEBD in the Welsh and English context follows. Although Wales has a ‘distinctive’ set of educational policies to England since the devolution of power in 1999 (Reynolds, 2008, p.743), the rationale
behind including the English context in this discussion is that the English policies of inclusiveness in education (Warnock, 2013) and concerns for multi-agency working with children, young people and their families (Children’s Trusts, 2008) provide relevant literature on which to draw for this discussion. This leads to consideration of and justification for intervention practices that focus on ‘individual’ needs in order to ‘support’ and ‘help’ learners ‘overcome barriers to learning’ (National Assembly for Wales, Circular 17/2006, p.v).

Secondly, this section reviews possible intervention strategies for children presenting with SEBD, and it examines some of the best practice highlighted by several authors and research in the field.

2.3.1 Background and rationale for intervention

The statutory framework for Wales with regard to SEN is outlined in the Education Act 1996 and the SEN and Disability Act 2001 (Education and Lifelong Learning and Skills Committee, 2006, p.4). The first ‘Code of Practice’ came in to place in 1994 and the current Code has been in use since 2002 (op. cit.). The Welsh Assembly Government has recognised a wider term than ‘Special Educational Needs’ for those learners who require additional support and they wish to instil the concept of ‘Additional Learning Needs.’ (National Assembly for Wales, Circular 47/2006, section 1, p.2) Therefore the term ‘additional learning needs’ (ALN) is used to identify pupils whose learning needs are additional to the majority of their peers and the term ‘special educational needs’ (SEN) is a subcategory of additional learning needs, used to identify those learners who have ‘severe/complex and/or specific learning difficulties’ as set out in The Education Act 1996 and ‘The SEN Code of Practice for Wales’ (2002) (op. cit.). Children presenting with SEBD are included in one of the four categories defined within SEN (Education and Lifelong Learning and Skills Committee, 2006, p.4).

The basic principles of the Code (2002, p.xii) are inclusive education, working in partnerships with parents, pupil participation and working in partnership with other agencies. Regarding inclusive education in Wales, the vision for this was set out in the National Assembly Circular 47/2006 ‘Inclusion and Pupil Support’ Guidance (Estyn, 2013, p.1). The voice of the pupils is central to this initiative (Welsh Government, 2012), with the National Assembly for Wales stating that they are committed to following the United Nations Convention On The Rights of The Child to ‘guide its work with the children and young people of Wales’ (National Assembly for Wales, Circular 47/2006, section 1, p.14).

However, inclusion is not an easy concept to practically implement and as noted by the Education Lifelong Learning and Skills Committee, inclusion is a ‘cause for concern for certain educationalists’ (2006, p.9). Indeed, there is a large number of children, ‘the largest number of SEN’ (Warnock, 2013, p.35) who for emotional, behavioural or cognitive reasons find learning in a classroom situation difficult and who distract other
children if they are placed there (Warnock, 2013, p.35). The Ofsted inspectors identified in their 2004 report on ‘Special Educational Needs and Disability’ (p.17) that many schools were finding it difficult to manage pupils with social and behavioural difficulties and it was noted that especially in secondary schools, behaviour was ‘often disruptive’ and ‘sometimes very poor’. These implications on student learning are twofold: education is potentially disrupted for both the student presenting with SEBD and their classmates.

Regarding the educational development of the vulnerable students themselves, the Ofsted inspectors noted in the 2004 report ‘Special educational needs and disability’ (p.12) that assessment and planning for pupils presenting with SEBD were ‘often particularly weak’ and that individual education plans (IEP’s) for these pupils:

‘often did not bring together targets for both improved behaviour and improved learning, despite the fact that generally the two are closely connected with pupils learning more as their behaviour improves and vice versa.’

These comments highlight the importance of inclusive school curriculums that are holistic, providing both an affective and cognitive focus on learning, which is consistent with the views of other practitioners and researchers (Boxall, 2013, p.133; Daniels, 2010, p.174; Ofsted, 2011a, p.10)

The National Assembly for Wales recognises that a focus on the individual (National Assembly for Wales, Circular 17/2006, p.v) is important in order to overcome barriers to learning and it acknowledges that ‘different schools will take account of the Code in different ways’ (Education and Lifelong Learning and Skills Committee, 2006, p.4). The importance of focusing on the needs of the individual was documented by the Ofsted inspectors in their 2004 report who stated that in order to effectively implement the inclusive policies of education in England, a key concept of the 1981 Education Act (Warnock, 2013, p.14), schools need to adapt the curriculum to meet the pupils’ needs (p.15). However, they noted that only a third of English secondary schools inspected were effective in meeting the individual needs of students with emotional or behavioural difficulties (op. cit.). Furthermore, they highlight three barriers to learning in particular: high staff turnover; poor attendance; schools seldom addressing the quality of provision and its effect on achievement and self-esteem (pp.17-18). Cooper (2008, p.14) suggests that lack of ‘attachment to school’ may be an additional barrier to learning, as he states that it is a ‘crucial factor that can be both cause and an effect of SEBD.’ He defines ‘attachment to school’ as the ‘degree of commitment to and engagement with schooling that students feel’ and he states that students who have a weak attachment to a school may be characterised by indifference or hostility to teachers and ‘scepticism about the value of schooling’ (op. cit.). So what are some of the solutions suggested by policy makers, researchers and practitioners in order to address the teaching and learning needs of students presenting with SEBD? This is an important educational concern since there exists today much concern about the extent to which pupils are excluded from school
whose behaviour is regarded as ‘problematic, challenging and inappropriate’ (Daniels, 2010, p.140)?

Intervention programmes are one solution offered. The next section will discuss some intervention strategies utilized in mainstream schools in England and Wales, together with a review of effective practice of intervention strategy by researchers and practitioners.

2.3.2 Educational intervention for students presenting with SEBD

Intervention possibilities may involve utilization of greater curriculum flexibility to include curriculum adaptation in order to embed multi-agency working into classroom practice, whereby social workers and therapists may work together with teachers and assistants (Estyn, 2013, pp.11-14). This approach was also highlighted as good practice by the Ofsted Inspectors, who specified one school where certain students spent less time on some subjects in order to fit in a range of other provision such as counselling and anger management sessions (Department for Education and Skills, 2004, p.13). This multi-agency, whole school attitude to strategies and interventions, working with parents and multi-disciplinary approaches is a method that several authors consider to be extremely important (Cooper, 2011; Hallam et al, 2006; Humphrey et al, 2008). In Wales, this approach is referred to as ‘Team Around the Family’ (TAF), which involves a multi-disciplinary team of practitioners established on a case-by-case basis to support a child, young person or family (Estyn, 2013, pp.11-14). In the 2013 Estyn Report ‘Working together to tackle the impact of poverty on educational achievement’, which scrutinised the partnership between schools, local authorities and various agencies and services, one of the findings was that pupils in schools that are involved in TAF approaches benefit from multi-agency working ‘because it means that the pool of skills within the team means that the health, domestic and social welfare concerns of learners and their families can be addressed’ (p.5).

In addition to multi-agency approaches and curriculum adaptation to incorporate outside agencies into school learning, intervention strategies to support pupils presenting with SEBD include teacher training initiatives (Welsh Government, 2011) and the use of specific teaching strategies such as therapeutic and psychological approaches (Cooper, 2011, 1999; Evans et al, 2004; Squires and Caddick, 2012). However, further educational interventions may be required for some children who have an ‘undeveloped sense of self’ and ‘weak communication and social skills’ and an ‘environment that is more intimate, thereby being able to focus on addressing their emotional needs and security’ may be beneficial (Cooper, 2008). These children may need a more ‘targeted approach’ as opposed to a ‘universal’ or whole school approach (National Institute for Health and Clinical Excellence, 2008), but Humphrey et al (2008, p.12) note that there is comparatively little research in the area of ‘whole school’ and ‘targeted’ interventions.
One of the targeted approaches utilized in the UK is the ‘classic’ nurture group, which is recognised as a highly effective intervention practice (Bennathan, 1997; Bani, 2011; Cooper and Lovey, 1999; DfES 2002; Ofsted 2011a). The nurture group is located in a mainstream school and is a discrete class for 10-12 pupils, staffed by a teacher and a teaching assistant (Cooper, 2008, p.19). The main purpose is to provide children, whose social, emotional and behavioural needs are unable to be met in mainstream education, with a learning environment that is geared to address these needs through opportunities to re-visit early missed ‘nurturing’ experiences (Bani, 2011, p.48). Further, research suggests that developing a sense that the children belong to a group is particularly important (Cooper and Whitebread, 2007) and enhancing this feeling of ‘group belonging’ is an essential aspect of nurture group facilitation (Boxall, 2013, p.44). There is also the option for ‘part-time’ participation in the nurture group, where children in special need are in the nurture group for two to three sessions a week (Boxall, 2013, p.182; Binnie and Allen, 2008).

Other ‘targeted’ (NIHCE, 2008) approaches include the use of programmes such as ‘The Social and Emotional Aspects of Learning’ (DfES, 2005), which is an English initiative first implemented in 2003 as part of the national ‘Behaviour and Attendance Pilot’ (Humphrey et al, 2008), and may be used as a small group intervention for children considered to require additional support to develop their social and emotional skills (ibid., p.5). These lessons are delivered in a weekly 40-minute session and they concentrate specifically on five broad aspects of emotional learning (ibid., Appendix 1) which are self-awareness, managing feelings, motivation, empathy and social skills. Research from the evaluation of this programme indicates that overall there is significant evidence that small group work had positive benefits (Humphrey et al, 2008, pp.6-8) but pertinent key recommendations were that the allocated time frame needed to be extended to at least the full length of one term, 12-16 sessions, with the intensity of two sessions per week. The current practice at the time of the evaluation was 6-8 weekly sessions per annum of 40 minutes each session, and its was considered to be a ‘light touch intervention’ (ibid., pp.99-100). Collectively much can be learned from the effective practice contained within these types of aforementioned intervention strategies and this will be the focus of the next discussion point.

Research suggests that the quality of the teacher-child interaction is one of the factors that may influence the behaviour of the child (Hester et al, 2004, p.6) and that the skills of the facilitator in intervention programmes may be a crucial success factor (Humphrey et al, 2008, pp.6-8). Further, problematic relationships with teachers have been identified as a source of difficulty for students presenting with SEBD (Cooper, 2008, p.15; Pomeroy, 2000) whereas teachers who demonstrate emotional warmth and supportiveness have been shown to improve student well being (Cooper, 2011, p.74). Additionally, Boxall (2013, p.133) states that teacher encouragement can instil into children the ‘sense that someone has faith in them, which motivate(s) them to achieve’. Lawrence (cited by Swinson, 2008, pp.165-166), who concentrated his studies on the self-esteem of children, makes a connection between the child’s self-esteem and interaction with adults:
‘Self-esteem is a result of a series of value judgements made by children as they grow up, in which they attempt to sort out ideas that they develop about their abilities, attributes and appearance. These they acquire by their perceptions of how they are accepted and valued by adults.’

This is consistent with Boxall’s observations of nurture group students for whom ‘the response of the adults to their achievements means as much or even more than the achievement itself, so great is their need to be valued’ (2013, p.133). The use of verbal and non-verbal praise from adults is considered an effective positive intervention instrument for children presenting with SEBD (Bani, 2011, p.47; Swinson and Cording, 2002, p.72). Research findings indicate that the use of verbal praise is effective when it is ‘personal, genuine, contingent, and descriptive (mentioning desired behaviour), and provided specific information, where the pupil understood why they were being praised’ (Bani, 2011, p.62). However, Sutherland (cited by Swinson and Cording, 2002, p.74) argues that singling out individuals for an award or special attention may be detrimental from two perspectives, due to disenchantment from students not receiving awards and also from the individual who may cease to work hard when rewards are discontinued. Therefore, rewards awarded on a group basis or feedback given privately are recommended (op. cit.).

Indications from research suggest that schools which ‘do best’ for children presenting with SEBD have a strong ‘values structure’ based on appreciating all children in the school community and ‘ensuring that all pupils have access to the experience of success’ (Cooper, 2008, p.17). Further, Cooper (2001) states that ‘Students learn better when they feel safe and secure and the risk of failure is not experienced as a threat.’ This is consistent with Boxall’s observations that many children in nurture groups ‘want to succeed in school’ and are ‘potentially able’, and when they build up an integrated skill, they ‘gain a sense of organization, orderliness and sequence, and the pleasure of achievement’ (2013, p.146). In helping the child to access success, it is important to understand that for vulnerable students, their behaviour is often ‘communication’ (ibid., p.63). For example, Boxall (ibid., p.51) states that some of the ‘nurture group’ children may initially be overwhelmed in certain situations and want to either ‘grab’ everything and not know what to do with it, ‘bang’ and then ‘discard items out of frustration’, or ‘roam around, momentarily glancing and briefly touching’. Therefore, strategies such as ‘limited’ choice in the earlier stages, because some children have to ‘learn to choose’ (ibid., p.52), with ‘manageable routines and security’ are effective (ibid., p.63).

Two further approaches highlighted as effective methods within these intervention strategies are the incorporation of ‘circle time’ (DfES, 2005, Appendix 5; Cooper, 2008, p.19) and the use of a ‘soft toy’ (Boxall, 2013, p.111) into classroom routines. Firstly ‘circle time’ is described as a ‘therapeutic application’ which may aid social, emotional and behavioural development as it emphasises importance of articulating thoughts and feelings, listening to others and respecting the rights and opinions of others (Cooper, 2008, p.19). It involves all participants sitting in a circle exchanging ideas on a range of issues and feeling that are important to them, including behavioural and emotional
issues (DfES, 2005, Appendix 5). Secondly, strategies such as the use of a soft toy can be very successful in certain situations, for example, in attracting children’s attention and interest (Boxall, 2013, p.57), they can be ‘comfortable and comforting’ for nurture group children, being ‘the object and vehicle of raw feelings of love and hate...are hugged and cuddled’, and they can be a support for ‘good’ behaviour and an outlet for bad behaviour’ and can become an important group member (ibid., p.111).

This section has acknowledged some of the intervention possibilities for children presenting with SEBD and it has reviewed aspects of good practice contained within these interventions. In particular, the indication from research that the facilitators of the intervention strategies play a crucial role in the success of the intervention is highly pertinent (Humphrey et al, 2008, pp.6-7; Hester et al, 2004, p.6; Cooper, 2008, p.15). Further teaching strategies and perspectives will be explored in the next section via the theoretical framework of Eun’s (2010) sociocultural educational principles.

2.4 Principles of the sociocultural approach to education

This section offers a rationale for selecting Eun’s (2010) model, which outlines eight interrelated sociocultural principles for education, as the study’s theoretical framework and it reviews the model in relation to its guidance potential for how to teach. It must be acknowledged here that many sociocultural educational principles are widely used in education today, such as ‘scaffolding’ and modeling’ (Boxall, 2013, p.25), and are therefore not exclusive to the sociocultural educational arena. However, as noted by Davydov (1999, p.130) when discussing sociocultural principles in relation to ‘basic learning actions’:

‘As observations show, some teachers, whether consciously or spontaneously, utilize these techniques in their practical work, though often not in full sequence and therefore not completely successful.’

My research aims to utilize the sociocultural principles outlined in Eun’s (2010) model, holistically, which is a point that will be expanded in the following sections.

2.4.1 The teaching of music within a sociocultural theoretical framework

In Chapter One, I suggested that music exhibits a natural affinity with the educational principles within sociocultural theory due to its inherently collaborative, active nature. Further, in utilizing Lompscher and Hedegaard’s (1999, p.12) definition of learning activity within a sociocultural context, I suggested that music as a subject domain lends itself perfectly to this teaching and learning approach because it is ‘a special kind of activity.’ (cf., section 1.6). I proposed that the educational principles contained within the sociocultural theory could offer practical advice regarding how to organize and implement the music curriculum within a school context section. Whilst a number of
studies have been conducted utilizing sociocultural educational principles within schools (Lui and Hannifin, 2010; Gold et al, 2009; Ogden, 2000; White, 2012) and several subjects that utilize curricula based on activity theory have been formulated in Russia today (Davydov, 1999, p.137), research on the curricula development of primary classroom music developed through sociocultural principles is limited.

The boundaries of this study are not to give an exhaustive account of the varying sociocultural theoretical approaches to education, but they do attempt to view these approaches in a holistic way by utilizing the perspective Eun offers in her figure entitled ‘Interrelationships among the instructional principles’ (2010, p.405). I wish to use this model because I believe it is important to consider these theoretical approaches to education holistically, since as Karpov (2009, p.12) notes that:

‘Many reviewers present Vygotsky’s theory as a set of separate ideas (such as the ideas of mediation, psychological tools, higher mental processes, zone of proximal development, scientific concepts, etc.) without showing (or even understanding) that these ideas are interrelated as basic components of Vygotsky’s holistic theory’.

For the purposes of this study and constraints on space, I have limited my discussion of each of Eun’s eight interrelated areas to the key concepts that she presents which directly relate to the affective component in my research question. Additionally I have included pertinent information from other authors deemed helpful in informing my study.

As stated in Chapter 1, I used Eun’s model to pedagogically combine the learning through the musical domain that may occur ‘in its own right’ (to promote musical skills, knowledge and understanding) and music ‘to promote wider learning and development’ (such as increased social and communication skills) Ockelford (2000, p.197). Similarly, Daniels (2010, p.174) suggests that in the study of schooling for pupils described as having emotional and behavioural difficulties, the use of Bernstein’s formulation of pedagogy, which combines instructional and regulative components to offer one way in which to handle the ‘cognitive/affective dualism’. However, my focus in the next section will be limited to the sociocultural educational concepts pertaining to the ‘affective’ development of the students.

### 2.4.2 Eight principles for sociocultural education

Eun (2010, p.405) offers eight interrelated principles for instruction suggesting that school based instruction should be: mediated; discursive; collaborative; responsive; contextualized; activity-orientated; developmental; and integrated. The model itself highlights the view that many of these areas are interrelated, through its use of various arrows connecting concepts within each of the eight principles. Therefore, I would like
to begin my discussion by reiterating this point, but will consider each one separately for purposes of clarity.

### 2.4.2.1 Mediated Instruction

The concept of mediation through another human being was first expressed by Vygotsky in the context of explaining the zone of proximal development (Kozulin, cited by Eun, 2010, p.406). Indeed, Daniels states that mediation lies at the heart of the traditions of sociocultural theory and its ‘near relative’ activity theory (2010, p.1). Eun (2010, p.406) bases her discussion of mediated instruction around Kozulin’s three categories of mediation, namely mediation through material tools, symbolic systems and another human being. However, the theoretical basis for the discussion of mediation within the context of my study is that of Karpov and Haywood’s concept of mediation (1998), which they suggest is derived from the writings of Vygotsky. They posit that one can distinguish two major types of mediation from these writings: metacognitive and cognitive (ibid., p.27). They state that metacognitive mediation refers to children’s acquisition of semiotic tools for self-regulation, such as self-planning, self-checking, self-monitoring and self-evaluating, and cognitive mediation refers to children’s acquisition of cognitive tools that are necessary for solving subject-domain problems (ibid., pp.27-28). During the course of my research, both types of mediation were applied since it was my ethical duty to focus on learning per se. However, most relevant in the context of this study is a discussion of metacognitive mediation, since it can help children to overcome impulsive action, to plan a solution to a problem prior to its execution and to master their own behaviour (Karpov and Haywood, 1998, p.28).

Karpov and Haywood suggest that the reasoning behind this argument is that according to Vygotsky (cited by Karpov and Haywood, 1998, p.27), the metacognitive mediation of children’s psychological processes has its roots in interpersonal communication and in the course of joint activity with children, adults or more mature peers, semiotic means are used to regulate the child’s behaviour. In turn, the child says it out loud to itself, so-called ‘egocentric speech’ (op. cit.), which later becomes the child’s internalized tool for ‘self-regulation’, which is itself a key Vygotskian postulate (Moll, 2002, p.17). However, Karpov and Haywood note that not all children have internalized the tools for self-regulation, which can be problematic, but suggest that joint activity is a facilitator of children’s acquisition of semiotic tools for self regulation as during the course of collaboration children may regulate the behaviour of others:

‘Regulation of others’ behaviour by means of the word gradually leads to the development of verbalized behaviour of the people themselves.’

(Vygotsky, cited by Karpov and Haywood, 1998, p.28)
2.4.2.2 Collaborative Instruction

Eun states that it is a well-developed Vygotskian position that students are capable of solving problems in collaboration with other students or with the teacher that they might otherwise not be able to do on their own. Regarding collaborative instruction in the affective domain, Karpov and Haywood state that the role of student collaboration in joint problem solving activities is the optimal situation for their transition from other-regulation to self-regulation (1998, p.33). Eun states that one way to realize collaborative instruction is to rely on diverse types of group work that involve all participants in actively contributing to the accomplishment of a shared goal (2010, p.408). However, student collaboration and co-operation cannot be underestimated, and could potentially be a ‘minefield’ (Daniels, 2010, p.115). Although research has noted positive outcomes from student collaboration, such as improved interpersonal skills (Johnson and Johnson, 1998), Tudge warns that collaborative group work can actually cause students to ‘regress’ in certain situations (2002, p.156), because if a child is interacting with another child who is less competent then the result of that interaction may be regression (ibid., p.158). Tudge questions Vygotsky’s implication that working with a more competent peer could lead to the development of the less competent child in the case where two children are working together, because it is an ‘open question’ whether the less competent child will accept the opinion and direction of the partner (op. cit.). These difficulties could explain why ‘most classroom instructional practices are predicated on teacher control and manipulation of tasks and activities’ (Moll, 2002, p.18).

However, the benefits from collaborative learning, witnessed in programs such as Reading Recovery (Clay and Cazden, 2002, p.206) are clear. One possible solution is to move away from collaboration involving the pairing of a more competent child with one who is less competent to encouraging students of equal levels to collaborate (Tudge, 2002, p.168).

2.4.2.3 Activity-Orientated Instruction

Applying knowledge acquired in schools into real life encounters is the crux of this instructional principle, according to Eun (2010, p.410), but she warns that activity-orientated instruction it is not simply a case of incorporating more ‘hands on’ activities in the classroom. The concept of activity permeates the work of all of Vygotsky’s followers and its history is complex and therefore difficult to clearly define (Kozulin, 1998, p.8). Kozulin (ibid.) attempts to define it through its historical context, but this is outside the scope of this study, which simply aims to briefly discuss the educational implications and applications of activity theory within the context of my research. Therefore, this section will briefly discuss the advice from Davydov (1999) regarding the organisation of learning activity and the concept of theoretical knowledge within activity-orientated instruction (Lompscher and Hedegaard, 1999; Karpov, 2009).
Davydov suggests that ‘properly organized school learning’ is the ‘core’ of children’s learning activity (1999, p.125), and this is important since learning activity is considered to be the leading activity of personality development during school years, especially in primary school, by Neo-Vygotskians (Karpov, 2009, pp.171-202). The main components of activity that Davydov lists are ‘needs, motives, goals, conditions, means, actions and operations’ (1999, p.124) and for children presenting with SEBD, these components are particularly important because in my experience interest and motivation in the school work itself will help the children to maintain a focus on the task, and playing an active role in solving the task makes the task inherently more captivating.

The central content of learning activity is theoretical knowledge (Davydov 1999, p.125), which is one of the two forms of societal knowledge Davydov has distinguished, the other being empirical knowledge (Hedegaard, 2002, p.353). It is relevant to discuss the concept of theoretical knowledge here, because as noted by Kozulin (1998, p.81) the Neo-Vygotskians argue that a properly designed and implemented curriculum aims to encourage the children to think, and to ‘reflect’ (Davydov 1999, p.131). Further, Davydov states that students ‘development of creative abilities, initiatives, self-understanding and personality depend on it’ (1999, p.132). So what is theoretical knowledge and how can this be applied to a teaching situation?

Due to space restrictions, I will offer Hedegaard’s comparison of theoretical and empirical knowledge (2002, p.353) presented in tabular form in Table 2.1 below:

**Table 2.1: Comparison of theoretical and empirical knowledge**

<table>
<thead>
<tr>
<th></th>
<th>Empirical Knowledge</th>
<th>Theoretical Knowledge</th>
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<tbody>
<tr>
<td>Deals with</td>
<td>Differences and similarities among phenomena</td>
<td>A connected system of phenomena and not the separate, individual phenomenon</td>
</tr>
<tr>
<td>Has arisen</td>
<td>Via observation and comparison of phenomena</td>
<td>Through the development of methods for the solution of the contradictions in a societally central problem area</td>
</tr>
<tr>
<td>Can be</td>
<td>Ordered hierarchically on the basis of formal characteristics</td>
<td>Used to develop understandings of the origins, relations and dynamics of the phenomena</td>
</tr>
<tr>
<td>Communicated</td>
<td>By the word or a limited term</td>
<td>Through models as the main medium</td>
</tr>
</tbody>
</table>

Pertinent points regarding theoretical learning from Table 2.1 are the connections that students draw on in order to understand the phenomena. Also, the use of models to highlight connections are the principle means of communication as opposed to the ‘limited term’. Further, Karpov states that ‘under the theoretical learning approach, students are taught scientific knowledge (that is subject-domain concepts and procedures) and then master and internalize this knowledge in the course of using it for solving subject-domain problems’ (2009, p.186). Therefore application of the phenomena to other situations is an important aspect of theoretical learning.
However, developing curricula based on theoretical knowledge, as opposed to empirical knowledge is not easy. As Kozulin has noted, the advocates of theoretical learning have focused on physics, mathematics, and language but have ‘neglected’ the social and political sciences possibly because ‘even for scholars’ these subjects are difficult to present in a theoretical coherent form (1998, p.58). Hedegaard (2002, p.354) suggests that the tool character of theoretical knowledge becomes evident when formulated in a model, which may then guide the teacher’s instructional activity. She suggests this type of model is characterized as a ‘germ-cell model’, which implies a model that grows in complexity from a set of basic relations. I implemented this approach in the music curriculum design for my research, which will be discussed in detail in Chapter 3. Nevertheless, it is pertinent to note that whilst Hedegaard’s research focuses on the impact of theoretical learning on students’ cognitive development, (ibid., p.367), my research focuses on the possible ‘affective’ development that this theoretical approach within the music domain may have.

2.4.2.4 Contextualized Instruction

Eun states that making connections between the students’ experiences outside the school and school learning is most effective when built on students’ existing background knowledge (2010, p.409). Therefore, she states that learning in school should be contextualized within what the students already know and are able to do (ibid., p.410). However, research findings from Harland et al (2000, pp.159-161) suggest that the new experiences students were exposed to through involvement in the arts curriculums were seen to broaden their horizons and perspectives, offering them the ‘opportunity to try new things and stretch their ability’. In becoming involved with activities that they had not encountered previously, the students suggested they felt they had gained a ‘wider view of life’ (ibid., p.161).

The cognitive aspects of learning a new activity are closely connected to social motivation (Lompscher and Hedegaard, 1999, p.14), a point that Davydov (1995, p.17) stresses when discussing the influence of Vygotsky on education theory, research and practice:

‘A psychological law states: before you want to involve the child in some kind of activity, interest the child in it, being concerned to make sure that the child is ready for this activity.’

(Vygotsky, cited by Davydov, 1995, p.17)

Therefore, the instructional implication for introducing a new concept which is outside the realms of the students’ current sociocultural experience may involve placing the ‘need’ to learn something in a child (Davydov, 1999, p.124). Further, I suggest that it is closely linked to ‘responsive instruction’, which will be discussed next.
2.4.2.5 Responsive Instruction

Eun states that responsive education is grounded in Vygotsky’s development theories that maintain interdependence between all aspects of development, thereby addressing the issue that cognitive and affective developments are ‘intricately tied and complexly related’ (2010, p.408). Eun states that when demands for affective development are not met, cognitive development may suffer and vice versa (op. cit.). In her argument for the importance of responsive instruction, Eun singles out language-minority students as ‘needing’ and ‘benefiting most’ from enhanced learning due to interpersonal relationships, citing Palincsar’s research as the basis for her opinion. However, Cooper (2008, p.19) suggests that understanding the importance of teacher/student relationships with children presenting with SEBD and promoting a ‘consultative approach’ to teaching, such as finding out what interests the pupil, is an effective educational strategy for children because it helps to promote engagement.

‘Pupil voice’ has become a large focus in Wales, with its own dedicated website, available from: http://www.pupilvoicewales.org.uk. [accessed January 2014], which is a Welsh Government initiative. This website is a ‘child/student friendly’ website, which highlights information that can empower children, such as a description of student rights and information on forming school councils. Ladson-Billings (1994, p.17-18) describes responsive instruction as placing student voice at the heart of education and describes it as:

‘a pedagogy that empowers students intellectually, socially, emotionally and politically by using cultural references to impart knowledge, skills and attitudes.’

In other words, it makes the curricula accessible to students and facilitates teaching and learning in a way that is engaging and understandable.

2.4.2.6 Integrated Instruction

Two main tenets are discussed in this instructional principle, that is the perception of integrated instruction as the combination of diverse school subjects (Eun, 2010, p.412) and also the combination of everyday and scientific subjects (Moll, 2002, p.10).

In her discussion of integrated instruction, Eun states that teacher collaboration is critical in order to achieve a common goal across a variety of subjects (2010, p.413), but in the context of my research, I discuss integration of subjects within the same subject, by the same teacher, for example, to incorporate subjects such as information technology, art, literature, within one music curriculum. The Ofsted evaluation report ‘ICT in schools 2008-11’ (2011b, p.10) states that the ‘integrated use of ICT enhances the learning experience’ and they cite an example to highlight the increased engagement and concentration of a Key Stage 1 pupil who had ‘very poor concentration’ becoming quickly ‘absorbed’ in the ICT lesson when ‘manipulating a music program to make
simple beats and rhythms.’ Furthermore, integrating a variety of diverse subjects creates ‘connective learning’ to the wider world (Eun, 2010, p.413).

In addition to enriching learning by making connections via subject integration, Moll states that Vygotsky emphasized the interconnection and interdependence between everyday and scientific concepts in the learning process, whereby their development is mutually influential (2002, p.10). He suggests that the everyday concepts mediate the acquisition of the scientific concepts because through the use of everyday concepts children make sense of the definitions and explanations of the scientific concepts (op. cit.). Therefore, the implication of this in relation to education is that schooling must foster the interaction and development of everyday concepts with scientific concepts (Daniels, 2010 p.54).

2.4.2.7 Developmental Instruction

Vygotsky and his colleagues viewed learning to be the driving force of development (Eun, 2010, p.411), particularly learning which occurs in the collaboration between children and adults and the sociocultural mediation of the learning process (Kozulin, 1998, pp.6, 59). The tenet that Eun focuses on in her discussion of this principle is the need for learning to lead to generalisation (2010, p.411). However, in discussing the theory of developmental education, Davydov (1999, p.18) concentrates on the ‘zone of proximal development’ (ZPD), which may be defined as follows:

‘actual development level as determined by independent problem solving and the higher level of ‘potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.’

(Vygotsky, cited by Daniels, 2010, p.57)

Therefore, what the child is initially able to do only with adults and peers, and then can do independently, lies exactly in the zone of proximal development (Davydov, 1995, p.18). The important implication of this for pedagogy is that teaching should focus on the potential of the learner, rather than on a ‘static’ intelligence test, which merely indicates what the learner may have already achieved (Daniels, 2010, pp.57, 61).

My research concentrates on the affective development of students presenting with SEBD during the course of music lessons, because I believe these principles offer excellent advice regarding how to teach. Within these lessons, I aim to develop the whole child, their personality and creativity, which is a key Vygotskian idea (Davydov 1995, p.13). Therefore, the relevance of developmental education in this study is to note whether progress has been made in the affective domain of the students, for example, whether improved interpersonal skills during task collaboration with peers have been noted through the utilization of ‘metacognitive mediation’ (Karpov and Haywood, 1998), as discussed earlier. Consequently, whilst authors such as Hedegaard, 2002, pp.349-371) have investigated student cognitive progress within the ZPD, whilst
utilizing mediatory techniques, I want to look at student ‘metacognitive’ progress within the ZPD using ‘metacognitive’ mediation. Hedegaard (2002, p.367) says she ‘worked with the zone of proximal development as a relation between the instructional steps and the steps of children’s learning/acquisition process’ and that she utilized the ZPD as a ‘tool’ for ‘class instruction’ because ‘it should not be the function of school pedagogy to offer special instruction to each child in a class’. However, Kugelmass (2007, p.275) recommends that it is essential to identify and work with the child within his/her ZPD. Further, the focus of the individual ‘learning pathway’ is also one of the key elements of working with children in an ‘inclusive’ environment highlighted by the National Assembly for Wales (Circular 17/2006, p.v).

2.4.2.8 Discursive Instruction

Daniels states that the Vygotskian heritage is evidenced in the focus on the meditational function and capacity of speech (2010, p.79). Speech as a meditational function has important implications for instructional practices in schools and Eun states that the ‘power’ of language in dialogues as a tool for cognitive development must be incorporated into instructional practices (2010, p.407). As noted in the discussion of metacognitive mediation, the role of speech is important because collaborative dialogue later gets internalized to serve individual cognitive functions, such as problem-solving, reasoning and logical thinking (op. cit.). Eun (op. cit.) suggests that language games are one example of an extended instructional conversation a teacher could have to support student learning in these areas. ‘Scaffolding’ is another technique widely associated with sociocultural principles, involving the creation of a lesson format in which an emerging skill may be promoted, allowing the child to work with the familiar, whilst introducing the unfamiliar in a measured way (Clay and Cazden, 2002, p.212).

Gallimore and Tharpe, (2002, p.177) suggest that twentieth century psychology has concentrated on six ‘means of assisted performance’ with regard to instructional conversations: modeling, contingency, managing, feeding back, instructing, questioning and cognitive structuring. They discuss each one of these in relation to teaching as assisted performance through the ZPD. Please refer to the Table 2.2 for a definition of each aspect, adapted from Gallimore and Tharpe (ibid., pp.178-183).

They cite their earlier research in order to highlight an example of how utilization of ‘means of assisted performance’ may guide the learning of a five year old child through the ZPD when attending to teacher instruction and direction by employing a ‘rich diet of praise’, which may be expected to decline with time (2002, p.184). They state that positive reinforcement is most effective, as opposed to contingency management based on loss of privileges, and it can strengthen ‘points of advance through the zone of proximal development’ (ibid., pp.188-189).
### Table 2.2: ‘6 means of assisted performance’

<table>
<thead>
<tr>
<th>Means of assisted performance</th>
<th>Definition</th>
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<tr>
<td>Modeling</td>
<td>- is the process of offering behaviour for imitation</td>
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<tr>
<td>Contingency management</td>
<td>- is the means of assisting performance by which rewards and punishments are arranged to follow behaviour (example: praise, encouragement, consumables, privileges, tokens, symbolic rewards)</td>
</tr>
<tr>
<td>Feeding back</td>
<td>- providing feedback is the most common and single most effective means of self-assistance as demonstrated for virtually all problematic behaviours in which self-regulation has been studied</td>
</tr>
<tr>
<td>Instructing</td>
<td>- compliance with instructions is not inevitable, since effective instructions must be embedded in a context of other effective means, notably contingency management, feeding back and cognitive structuring</td>
</tr>
<tr>
<td>Questioning</td>
<td>- if the teacher questions then two teaching advantages are gained: 1. there is mental and verbal activation of the pupils, which provides practice and exercise; 2. during this exercise of the pupils’ speech and thought, the teacher will be able to assist and regulate their assembling of evidence and logic.</td>
</tr>
<tr>
<td>Cognitive structuring</td>
<td>- refers to the provision of a structure for thinking and acting, which may be a structure for beliefs, for mental operations or for understanding; - it organizes, evaluates, and groups and sequences perception, memory, and action.</td>
</tr>
</tbody>
</table>

### 2.5 Summary

This chapter has discussed the pertinent aspects of the study, which are firstly the relevance of teaching music as a classroom subject, its content and design, and secondly, the need for targeted intervention strategies to help students presenting with SEBD. Finally it examined how music may be organised utilizing Eun’s (2010) ‘Interrelationships among the instructional principles’.

Davydov states that the first general Vygotskian idea in relation to education, is that:

‘education, which includes both human teaching/ learning and upbringing is intended first of all to develop personality’ (1995, p.13).

Therefore, for this reason, I want to investigate whether music teaching, which utilizes the principles of sociocultural education, may address not only cognitive learning but also metacognitive/affective learning in order to develop the whole personality. In implementing intervention strategies that encourage acquisition of semiotic tools, such as self-regulation (Karpov and Haywood, 1998, p.28) through collaborative music activities, I hope to uncover whether the development of children presenting with SEBD may be positively shaped.
Chapter 3: Research Design

3.1 Introduction

This chapter outlines the whole research design of this study. Firstly, the overall research strategy is presented, which incorporates subdivisions about the study’s methodology, why it is an ethnographic in orientation case study, and aspects of reflexivity and reactivity within the context of this investigation. Next, the research design is introduced, which includes a discussion of the rationale and design of the music curriculum implemented. Following this, more detailed background to the research context is given and vignettes are offered to describe the study’s two key participants. Methods and procedures of data collection are then presented, followed by a discussion of the methods of data analysis employed in the study. Validity and reliability are the focus of the next portion and penultimately, the study’s ethical implications are addressed. Finally, the chapter’s conclusion draws together all pertinent elements discussed.

When presenting these aforementioned sections, this chapter attempts to constitute a discussion of the particular issues surrounding the research design and documents the way in which my chosen theoretical approach shaped the way the substantive topic was investigated. Throughout, the focus of the research design has been how best to address the following research question:

‘How do intervention music lessons, which utilize sociocultural educational principles, relate to the three interconnected aspects of social, emotional and behavioural development of two children aged between seven and eight years old in a mainstream school setting in Wales?’

3.2 Research Strategy

In this section, my research methodology and rationale for conducting qualitative research are discussed. I explain the characteristics of my case study, which is ethnographic in orientation, and discuss some issues of reflexivity and reactivity in relation to my research.

3.2.1 Methodology

The methodology for the research was dependent on the study’s research question and in order to address this question, I chose to operate within an interpretive paradigm (Johnson and Onwuegbuzie, 2004, p.20). This seemed appropriate, as my design was based on induction, whereby I aimed to avoid assumptions about what the research findings looked like before the collection and analysis of data (Kelly, 2005, p.131).
Therefore, I believed that a qualitative approach had advantages over a quantitative one as it emphasized the manners in which individuals interpret their social world, interests and broader perceptions, an aspect that certain authors suggest may ‘defy’ quantitative research (Holliday, 2005, p.4). Additionally, since my research attempted to project a view of social reality as a changing property made up by the individuals’ creation (Bryman, 2001, p.20), I thought that operating within a qualitative paradigm would be more suitable as it was an attempt to represent what is a complex reality (Holliday, 2005, p.6). Therefore, my paradigm was interpretive, since I thought that the participants may have been superficially touched by the research which aimed to make sense of the social setting as opposed to a quantitative approach, which would have been normative and may have suggested that there could be a normality in this setting which I might ‘fathom, understand and master by statistics and experiment’ (ibid., p.5).

3.2.2 Ethnographic in Orientation Case Study

This research was a case study that was ethnographic in orientation. By reviewing definitions of both ethnographic research and case study research, I offer a rationale regarding the choice of this approach for my research, the advantage of combining the approaches and the potential limitations.

Silverman (2013, p.444) defines ethnography as:

‘Put(ting) together two different words: ‘ethno’ means folk, while ‘graph’ derives from writing. Ethnography refers, then, to social scientific writing about particular folks.’

Creswell (1998, pp.68-69) states that ethnography involves ‘extended observations of the group, most often through participant observation’ and that ‘ethnographers study the meaning of the behaviour, language and interaction among members of the culture sharing group.’

My research was ethnographic in orientation because I was interested to examine the shared, collaborative experience of a group of children (Creswell, 1998, p.68) presenting with SEBD and to note how music may have shaped their development. Further, it was important that the primary research ‘method’ was participant observation because music teaching and learning was integral to the research, and the design and delivery of those music lessons in a way that was collaborative were two pertinent concepts of the study, which only I could execute. Through this shared music experience, I wanted to study the meaning of how music may have shaped the behaviour and interaction of the group of children, thereby focusing on the topic of child ‘development’ (ibid., p.70). Therefore, the ethnographic approach seemed most suitable in addressing my research question, because a strength of this approach is in describing and interpreting shared patterns of a group culture, and analysing data through the group culture by noting emergent themes.
In addition, my research was also a case study. Since Yin (2014, p.24) states that communicating a clear definition of case study is ‘difficult’, it is beneficial to provide an in depth discussion offering reasons why this research is a case study.

Yin offers a twofold definition of case studies where the first part deals with the ‘scope of a case study’ (ibid., p.16):

1. A case study is an empirical inquiry that
   - Investigates a contemporary phenomenon (the ‘case’) in depth and within its real-world context, especially when
   - The boundaries between phenomenon and context may not be clearly evident.

My research was a case study because it was an empirical inquiry into a ‘real-world’ case, music teaching in a school situation to children presenting with SEBD, and it involved important contextual conditions, which will be discussed later, that were pertinent to the case.

The second part of the definition of case studies deals with the ‘features of a case study’ (ibid., p.17):

2. A case study inquiry
   - Copes with the technically distinctive situation in which there will be many more variable of interest than data points, and as one result
   - Relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result
   - Benefits from the prior development of theoretical propositions to guide data collection and analysis.

This study’s research situation was complex and relied on multiple sources of evidence where sufficient data was explored in order to create a plausible interpretation of how intervention music classes, which implemented sociocultural educational principles, may relate to students presenting with SEBD. This involved a specific approach to the whole study, which benefitted from prior development of the music curriculum, using theoretical guidance in the form of Eun’s (2010) model. Subsequently, this directed data collection and analysis. In carrying out the case study, I attempted to provide a ‘unique example of real people in a real situation thereby enabling readers to understand more clearly than simply presenting them with abstract ideas, theories or principles’ (Cohen et al, 2001, p.181).

I suggest that the two research approaches are mutually complementary, and offer a comparison of both in Table 3.1 below, which is a table I have devised that incorporates elements of Creswell’s table (1998, pp.77-81) and Cohen et al’s Box 3.1 (2001, pp.78, 79). Creswell’s points are in italics:
Table 3.1: Comparison of case study and ethnographic approaches

<table>
<thead>
<tr>
<th></th>
<th>Ethnography</th>
<th>Case study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Describing and interpreting a culture sharing group</td>
<td>Developing an in-depth description and analysis of a case</td>
</tr>
<tr>
<td>Type of problem best suited for design</td>
<td>Describing and interpreting the shared patterns of culture of a group</td>
<td>Providing an in-depth understanding of a case</td>
</tr>
<tr>
<td>Discipline background</td>
<td>Drawing from anthropology and sociology</td>
<td>Drawing from psychology, law, political science, medicine</td>
</tr>
<tr>
<td>Unit of analysis</td>
<td>Studying a group that shares the same culture</td>
<td>Studying an event, a program, an activity, more than one individual</td>
</tr>
<tr>
<td>Data collection forms</td>
<td>Using primarily observation and interviews, but perhaps collecting other sources during extended time in the field</td>
<td>Using multiple sources such as interviews, observations, documents, artefacts</td>
</tr>
<tr>
<td>Data analysis strategy</td>
<td>Analysing data through the culture sharing group, themes about the group</td>
<td>Analysing data through description of the case and themes of the case</td>
</tr>
<tr>
<td>Written report</td>
<td>Describing how a culture sharing group works</td>
<td>Developing a detailed analysis of the case</td>
</tr>
</tbody>
</table>

This table highlights the advantage of using both approaches, whereby the intent in ethnography is to determine ‘how the culture works’ and case study research involves the ‘study of an issue explored within a bounded system, that is, a particular context’ (Creswell, 1998, p.73). Indeed, Bryman (2001, p.309) states that ethnography is a term that refers to both a method and the written product and I think it may be useful to use this perspective in picturing ethnography as providing the method for my research and the case study approach as providing the structure. Nevertheless, in using this dual approach I think that the overall research was strengthened due to a more holistic perspective. However, it is also important to understand and consider the potential weaknesses of any research approach (Yin, 2014, p.4).

Reflexivity and reactivity are two potential weaknesses of ethnography (Walsh, 2005, p.229). Due to the complex nature of both these issues, they will be discussed later in this chapter. Additionally, one possible limitation with case study research is the ability to produce generalized knowledge (Thomas, 2011). Flyvbjerg (2006, p.224) states that the view that one cannot generalize on the basis of a single case study is considered to be devastating to the case study as a scientific method but he suggests that the case study is effective for generalizing using the type of test that Popper called ‘falsification’ (ibid., p.227). Flyvberg states that falsification is one of the most rigorous tests to which a scientific proposition can be subjected, since if one observation does not fit with the proposition, it is considered not valid generally and must therefore be either revised or rejected. In explicating his point, he cites the example Popper used ‘all swans are white’
wherein Popper proposed that just one observation of a single black swan would falsify this proposition. Due to the ‘in-depth’ nature of the case study approach, Flyvbjerg suggests that it is well-suited for identifying black swans and he states the ‘force of example is underestimated’ (ibid., p.228).

3.3 Research Design

As previously discussed, this research employed an interpretive qualitative approach, which aimed to investigate the participants’ points of view, affinities, relationships, interactions and behaviour during the course of the music lessons in order to answer my research question. I understood that the design of some of the instruments would not commence until after beginning the research (Spradley, cited by Holliday, 1994, p.181; Punch, 2005, p.153) although I had some ideas what I wanted to look for. The research began with contacting the school in March 2012 and then officially entering the school to begin the study in September 2012. Appendix 1 outlines the time frame and overall research design.

The whole design incorporated ‘formal’ and ‘informal’ interviews (Spradley, 1980, p.123), and participant observations. Additionally, the participants used iPads to create their own diary entries, rather like the use of the Diary room in Channel Five’s reality television show, ‘Big Brother’. As stated in the introduction, this latter strategy was effective in grounding my research in the participant’s perspective without ‘filtering the views through the researcher’s pre-established constructs and categories’ (Spicer, 2005, p.299). I felt that this was an important aspect of my study, to unravel how music may shape the students’ social, emotional and behavioural development from the ‘emic’ (Harvard Education Web site, 2014) ‘inside out’, perspective.

However, since I was a participant observer, the specifications of the music curriculum itself were central to the overall research design. I wanted to seek the opinion of the students regarding their interests and what they wanted to learn, therefore, I initially only planned one unit of study – ‘Stomp!’ This was primarily designed around the concept of rhythm, taking the stimulus and inspiration for the unit from the London stage show entitled ‘Stomp!’ and using the musical teachings of Orff-Schulwerk. ‘Stomp!’ is a contemporary London show featuring brilliant young rhythmic musicians, creating rhythmic pieces in unusual ways with unorthodox instruments, such as in a kitchen using pots and pan, spoons, knives and forks. I felt this might hold appeal and interest for the children whilst simultaneously solving a resources issue since the school had extremely limited musical instruments. Eun’s (2010) model, which provided an overall framework for looking at the reality of sociocultural educational theory within my study, was essential in the consideration of which musical aspects to incorporate that might best highlight sociocultural educational principles. Additionally, it informed the design of subsequent units, which also included student preferences. Please refer to
Figure 3.1 for more detail regarding my adaptation of the model in relation to my research.

Furthermore, in order to incorporate an emphasis on theoretical knowledge, an aspect of ‘Developmental Instruction’ (cf. Figure 3.1), into the research design of the music curriculum, I decided to utilize a model based on a germ-cell model, which is a simple model that highlights ‘theoretical knowledge’ and may ‘become a tool to guide the teacher’s instruction activity’ (Hedegaard, 2002, p.354). Hedegaard implemented the germ-cell model in her research on the zone of proximal development (pp.354-358) and I also used this strategy to design each musical unit. This was an excellent tool to facilitate construction of a practical music curriculum built on Eun’s model (2010). Please refer to Figures 3.2a and 3.2b.

Figures 3.2a and 3.2b highlight the unit’s theoretical connections. Certain sociocultural educational principles are visible, for example, the contextualized use of scientific language and everyday language (Moll, 2002, p.100) by associating the musical notation with everyday language – jam and jelly – rather than their technical names – crotchet and quaver. Further, the group tasks allowed for collaboration (Eun, 2010), chances for students to express their opinions, share dialogue, problem solve together in order to complete the tasks and additionally, an opportunity to consider the students’ zone of proximal development when working with others (Hedegaard, 2002, pp.349-371). Integration across subject domains is seen with the story of the ‘Magic Drum’, which was to be enacted with student volunteers. It was intended that both mediated instruction (Kozulin, 1998) and metacognitive mediation (Karpov and Haywood, 1998) occur at every level in the music lessons, in this unit and in subsequent units, student to student, and also from teacher to student, with group collaboration and the use of resources such as rhythm cards, teacher led power point presentations and the discursive use of ‘modeling’ (Gallimore and Tharpe, 2002, pp.178-179) and ‘scaffolding’ (Clay and Cazden, 2002, pp.212, 219) in order to understand the objectives contained in the group tasks. Further, the whole unit was heavily orientated towards practical, active learning.

Eight music units were designed in total using the same method as outlined above. I attempted to incorporate the interests of the children with all subsequent music projects. Due to space restrictions, this study has only explicated one of the units devised, however, Appendix 2, Unit Overview, briefly outlines the other units. This table links to the ‘Music in the National Curriculum for Wales’ (National Assembly for Wales, 2008) document discussed in Chapter 2.

It was hoped that this overall qualitative research design, informed by Eun’s (2010) ‘Interrelationships among the instructional principles’ model, would uncover pertinent information to address the research question.
**Figure 3.1:** My adaptation of Eun’s (2010) interrelationships among the instructional principles applied to the music domain.

<table>
<thead>
<tr>
<th>Contextualized Instruction</th>
<th>Responsive Instruction</th>
<th>Mediated Instruction</th>
<th>Activity Orientated Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOME SCHOOL CONNECTION: situated learning</td>
<td>COLLABORATIVE INTERPERSONAL RELATIONSHIPS: Increase pupil engagement by seeking out their interests regarding what they would like to learn</td>
<td>COGNITIVE MEDICATION: symbols, tools, humans (Kozulin, 1990, 1998, 2003)</td>
<td>PRACTICAL ACTIVITIES: Focus on active music participation using instruments, iPads, paints etc.</td>
</tr>
<tr>
<td>HOME SCHOOL CONNECTION: use of pop music</td>
<td>AFFECTIVE and COGNITIVE: programme needs to target all areas</td>
<td>METACOGNITIVE MEDIATION: semiotic tools (Karpov and Haywood, 1998)</td>
<td>SYMBOLIC ACTIVITIES</td>
</tr>
</tbody>
</table>

**Integrated Instruction | Collaborative Instruction | Discursive Instruction | Developmental Instruction**

**INTEGRATED CURRICULUM:** Utilize ICT in particular the iPad, combine art and music, incorporate literacy

**CO-OPERATION:** Provide opportunities for co-operation

**INSTRUCTIONAL CONVERSATIONS:** Use scaffolding, modeling instructional conversations, questioning and 'contingency management' all requiring extensive thought and planning (Gallimore and Tharp, 2002)

**LEARNING LEADING DEVELOPMENT:** Focus on development of theoretical thinking (Davydov, 1999)

**INTEGRATED CURRICULUM:** combine scientific concepts and everyday concepts (Moll 2002, p.100) to teach rhythmic notation

**COLLABORATIVE DIALOGUE:** Provide opportunities for collaborative learning and encourage listening and sharing ideas

**ZPD:** Consider the ZPD when formulating activities (Hedegaard, 2002) and consider student development during collaborative process (Davydov, 1999, p.18)
**Figure 3.2a:** Stage I of the germ-cell model ‘STOMP!’

**Figure 3.2b:** Stage II of the germ-cell model ‘STOMP!’
3.4 Participants and Selection of Participants

My study focused on how music intervention classes, utilizing a socioculturally informed educational approach, may shape the social, emotional and behavioural development of two children aged between seven and eight years old in a school in Wales. This school has a diverse body of students, and is designated by the local authority to be one of the most ‘deprived’ schools in the region with ‘ninety three per cent of the students living in the most deprived areas of Wales and with fifty four per cent of the students having English as their additional language’ (School’s Estyn Report, 2009).

The music lessons were organised within small groups, between five to twelve children, which took place one to two afternoons a week (cf: Appendix 1). The school had wanted to put what they referred to as ‘intervention’ afternoons in place from the half term of Term 1, 2012/2013 due to the extreme behavioural difficulties they encountered with this class of children. After several discussions, the Head of the school believed that using my suggestions regarding the sociocultural teaching approach to music, which included guided experientially-based learning, where students learn content as well as discipline specific reasoning skills and practices by collaborating in group investigations (Hmelo-Silver et al, 2007, p.100), would benefit the children. Researchers have suggested that students who learn in groups develop improved interpersonal skills (Johnson and Johnson, 1998) and it was hoped that these music lessons might impact positively on the learning dispositions, attitudes and self-esteem of these children, by possibly uncovering strategies to help the students control some of the social, emotional and behavioural difficulties presented.

The school’s organization of the weekly intervention afternoon included the division of the class of thirty children into smaller groups and involvement in activities designed to engage them, help them socially, and support them emotionally. I was very interested to join the team as I felt that the musical influence would really bring something special into their weekly curriculum. I was then faced with developing a music curriculum for these children, knowing that I essentially had a blank canvas as the Head had told me they did not really do classroom music in the school. I knew that this would be complex since in addition to providing a learning experience for the children, this was also a research study (cf: Section 3.3).

This intervention afternoon’s staffing included myself, a teacher on staff and the Schools and Family Liaison Officer who was contracted to the school for two days a week. It was decided to divide the children into three groups, which were to be rotated between the three members of staff each Tuesday afternoon. The agreement was that I would teach music, one teacher would teach philosophy and the Family Liaison Officer would conduct lessons focusing on encouraging emotional development.

Towards the end of Term 1, I then selected five children to be the main participants in my research. I selected the children based on the teaching observations I had made from
my Tuesday afternoon teaching and from my discussions with the Head and the Year 3 classroom teachers. We all felt that the five children selected would benefit enormously from the extra attention and musical activities I would involve them in. It was agreed that I would continue to teach all the children Music every Tuesday afternoon, and that the five participants would additionally work with me on a Wednesday afternoon for one hour, on separate music projects. At all times, the strict ethical guidelines (British Educational Research Association, 2011) were followed at every stage of student selection and group teaching, more of which will be discussed later in the thesis.

I had selected the five children on the basis of the SEBD they had presented during the music lessons but due to word restriction, only two children are the focus of this study.

Of the two participants, one displayed highly demanding, antisocial behaviour, whereas the other child displayed timid, withdrawn behaviour. Below are two brief vignettes of the children, whose names have been changed for ethical reasons outlined in Section 3.9:

- **Rhodri**

  Rhodri runs into the hall, shouting, falls on the mat, lies flat on his back, sits up, pokes the boys next to him, falls over again.

  “Miss, ‘e ‘it me!” shouts Rhodri.

  “You ‘it me first!” the boy shouts back.

  Rhodri touches the carpet, pulls it, lies down, interrupts me with some irrelevant comment, pokes the child next to him.

- **Sioned**

  Sioned works quietly and co-operatively with her partner. She tries hard to apply herself to the task at hand, even though it’s really noisy with the inevitable instrumental chaos resounding around the hall. Figuring it out with her partner and trying hard to persevere. The recent actions of her impulse control disorder are highly visible. Although she tries hard to practically complete the task, she zones out when listening to others present their work, staring blankly at the hall floor, sucking her left thumb, and entwining her right hand fingers around her hair.

In total, I spent 42 afternoons teaching this group of children as a participant observer. In addition to this, I observed the children in different classroom situations with other teachers, conducted interviews with the children’s parents, the Head of the school, the educational psychologist and a variety of classroom teachers.
3.5 Methods of Data Collection

I wanted to see what questions may emerge, thereby guiding my data collection (Spradley, 1980, p.32). My primary methods of data collection were participant observation, ‘formal’ and ‘informal’ interviews (ibid., p.123) and student iPad Diaries. The combination of these methods helped to triangulate the study in offering ‘cross validation’ thereby additionally increasing the overall validity (DeWalt and DeWalt, 2011, p.128). Furthermore, I tried to develop a connection between various types of data, and in doing so, and in rationalizing the connection between such types of data, I built a system of interconnected data, which enabled me to triangulate between different aspects of the same thing (Holliday, 2005, p.75).

During the course of the research I also collected other types of data, such as samples of student work, which largely served as evidential data to support my primary methods.

3.5.1 Participant Observation

The advantage of using participant observation as a method was the ‘tacit understanding’ it provided in ‘informing the form’ of the research, together with its ‘specific technique of data collection’, via the music teaching units developed and delivered, and then the subsequent interpretation of materials collected (DeWalt and DeWalt, 2011, p.10). Therefore, the fact that I was a participant observer enabled me to collect types of data that I would otherwise not have been able to collect, since I decided on the inclusion of musical activities that were specifically linked to the sociocultural educational principles, which in turn informed the data collected.

To support my participant observations and field diary, I used the iPad to video classroom activities and took many photographs because as a participant observer, I could not rely on recollections or notes alone. Further, it soon became apparent that I was collecting an enormous amount of data, therefore adopted Silverman’s stance to ‘combine insight with rigour’ (2006, p.94) and focus on emerging themes, after initially focusing on broad descriptive observations (Spradley, 1980, p.33). In constantly evaluating my field notes and video data in order to highlight any emerging themes and discover any new questions, I was then selective with my observations (ibid., pp.34-35).

For example, one of the participants went home after the first lesson in the unit entitled ‘Valkyries’ (cf: Figures 3.2a, 3.2b and Appendix 2), which was an integrated unit based on Wagner’s ‘Ride of the Valkyries’, and she expressed her astonishment to her mother, later revealed to me when I interviewed her mother, that she had never before realized that listening to music could change your mood, and change the way you feel. Therefore, this made me question other ways in which listening to music, and being involved in music, may have impacted on the children’s emotions during the music lessons.
The primary focus of my observations was to note and ‘pursue’ what the children did as opposed to impressions of what they might have felt or thought (Silverman, 2006, p. 69). Wolcott’s (1990, p. 32) set of suggested questions was practical advice regarding the implementation of this concept:

- What is going on here?
- What do people in this setting have to know (individually and collectively) in order to do what they are doing?
- How are skills and attitudes transmitted and acquired?

However, I did also use ethnographic approaches to look for patterns, commonalities on the basis of such points as ‘What is the tone? What is the body language?’

Furthermore, I engaged in ‘active listening’ (DeWalt and DeWalt, 2011, p. 87) when monitoring student collaboration and co-operation of activities set, making mental notes, sometimes jotting notes down, and occasionally prompting students when aspects of the conversation seemed to have relevance to the research.

Possible methodological issues associated with using participant observation as a method are due to the fact that data is gained while experiencing and participating in events, some relevant events may occur outside the limits of that period of fieldwork (ibid., p. 125). However, I tried to combat this through the triangulation of methods, including parental interviews and iPad Diaries in order to gain a wider perspective of other possible events.

### 3.5.2 Formal and Informal interviews

I wanted to use ‘formal’ and ‘informal’ interviews (Spradley, 1980, p. 123) together with the participant observation since it afforded the opportunity to further ‘explore voices and experiences’ (Silverman, 2006, p. 114). It also provided the opportunity to triangulate some of the observations that I had noted, via asking the children themselves some questions but also through interviewing other adults, such as the two mothers, I gleaned interesting information that I would never otherwise have had access to.

I held ‘informal’ interviews with the children, which were essentially discussions during the course of the participant observation, and I held ‘formal’ interviews with the children’s parents, Head of School and the school’s Educational Psychologist, which occurred at an appointed time (Spradley, 1980, p. 123). It is relevant to note here that I would have liked to have periodically interviewed the children’s regular classroom teacher to search for any noticeable contrasts in their behaviour before and after music lessons, however, during the 42 afternoons that I worked with the children they had eight different supply teachers, each working in the school for periods ranging from days to half a term. Therefore, by the time some of the teachers had established a relationship with the children and myself, they left the school.
During the interviews I did conduct, I used some of the questions that had arisen during periodic review of my data, and I also asked some ‘contrast questions’ (Spradley, 1980, p.125) which focused on any differences the adults had noted in the children over the last few months. However, essentially my role was that of a ‘moderator’ or ‘facilitator’ (Punch, 2005, p.169). I allowed the interviewees space to roam freely around topics as I was interested to see what may emerge. I tried to build a rapport with the interviewees so that they felt comfortable and able to chat openly. Although the interviews were unstructured, I was aware that it was important to somehow link the discussion to the research question (Wragg, 2004, p.144), rather than focusing on a particular technique, although I did implement techniques such as ‘active listening’, ‘Uh-Huh prompt’, ‘repetition feedback’ and ‘tell me more’ (DeWalt and DeWalt, 2011, pp.142-151). I felt that the format of these unstructured interviews allowed respondents to express themselves at length but I tried to maintain a focus on the objective of the interview in such a way as to prevent rambling (Wragg, 2004, p.149).

Some of the interviews with the children were recorded but I did not record the interviews with the parents as I felt that might be intimidating. Instead, I asked them if it was acceptable to take a few notes, which I made very simply, and wrote out in full once the interview had ended and the interviewee had left the room.

I was aware that the limitations of using the unstructured interview included potential hazards such as interview bias, where leading questions may distort the interviewee’s true opinions. Further, I considered the possibility that the children may have wanted to say things they thought might be pleasing to me. However, interesting perspectives were noted.

3.5.3 Student iPad Diaries

The rationale behind the use of student iPad Diaries was because informal interviews among the children were difficult in yielding comprehensive data due to the livelier children dominating the discussions. The iPad diaries provided interesting insights into the thoughts of Sioned in particular, since she was a quieter student, as she was able to chat freely and express herself whereas in the informal group interviews, she rarely spoke.

The way this method was implemented, was during the Wednesday afternoon lessons, if the children felt that they had something to say, they could ask to go somewhere private and quiet, within visibility of the main teaching area, and they could talk into the iPad. They knew that these diary entries were highly confidential, and no one except myself, heard what they said. All of the children had seen the use of this method in Channel Five’s ‘Big Brother’ reality television show, so all were instantly familiar with the process. Further, they really liked using the iPad itself and having a chance to be with and cuddle Monkey (my soft toy).
As noted in section 3.9.1, I noticed some issues regarding this method, specifically in the students using it as less as a forum to discuss music per se than I had anticipated:

‘Music is brilliant because……(long pause)….she’s the best music teacher ever. Hooooraaaayyyyy!!......(pause)…..She’s the best teacher.’

Rhodri, iPad Diary, January 2013

However, I tried to address this by developing some other methods to be used in conjunction with the iPad Diary, such as the ‘Music and Me’ clouds and rainbows (cf., section 3.9.1) which were meant to help the children focus on music in their discussions.

### 3.6 Procedures of data collection

As a participant observer, I took field notes and kept a fieldwork journal throughout. Further, I recorded events using audio-visual means and photographs, in order to support and expand observations made, all of which are the types of activities I would normally do as a teacher in order to record progress. However, for ethical reasons I chose not to include any of the photographs in this written account of the research as I did not want the children to be identifiable (Kelly, 2005, p.137). The formal and informal interviews were held throughout the research process, at times when I felt questions had arisen from review of the data, and further opinion and clarification via interviews would triangulate perspective and meaning of those questions.

Clearly, I could not write down everything that went on or that was said (Spradley, 1980, p.69), but I made every effort to try and record information faithfully and accurately. I made a ‘verbatim’ record of what the students said in their iPad diaries, in order to record exactly what they said, and how they said it ‘word-for-word in order not to lose any clues to the meaning behind the spoken word’ (ibid., p.67). I focused on ensuring that in writing up field notes I used as much specific detail as possible by expanding and enlarging the descriptions (ibid., p.68). My field notes began with condensed versions of what had actually occurred, such as recording some words or phrases, and immediately after the lessons I wrote an expanded account (ibid., pp.69-70). Additionally, my fieldwork journal included expressions of frustration, evaluatory thoughts and future ideas to be included in following lessons.

Furthermore, I gathered some evidence of student written work, musical notation compositions, self-assessment forms and paintings. These mainly served as evidence to highlight or substantiate an observation.
3.7 Methods of data analysis

Data analysis took place throughout the study and as it progressed, I further re-organised and reduced the data (Watling, 2006, p.263). During data collection I had followed Silverman’s advice to try and focus on a limited body of data with which to work, in order to make my analysis effective (2006, p.8) and the on-going questioning and review of my data in order to find emergent themes on which to focus my observation had greatly facilitated the task of overall data analysis. However, it must be noted that while some themes emerged in this way during the data collecting process, other themes emerged at the final analysis, after consideration of the raw data, which I selected and arranged under thematic headings, thereby creating the study’s ‘corpus of data’ (Holliday, 2005, p.100)

In order to begin this final analysis, I took a ‘cultural inventory’ (Spradley, 1980, p.155), which was essentially an examination and review of all my data (notes, journal, condensed accounts, expanded accounts, analysis to data, video data, photographs) and made an inventory on one large sheet of paper. This was effective in viewing the research as a whole (ibid., p.156).

Then I made a list of codes that I had discovered, whereby each code was a word that captured the essence of the various data (Saldana, 2011, p.3). As previously stated, my data was a variety of participant observation field notes, which I referred to as my ‘Research Diary’, the children’s iPad diaries, interview notes and the students’ ‘Self Assessment Sheets.’ I was involved in several cycles of coding my data, using ‘one-word capitalized codes’ called a ‘descriptive code’ (op. cit.). However, in order to ensure a robust method of allocating various data to a specific code, I incorporated an ‘inclusion rule’ which was initially in the form of a ‘propositional statement’, coupled with sample data (ibid., p.9). My ‘propositional statements’ transpired into ‘propositional questions’ for my codes as I felt it was easier to categorize data in a more robust way. I then organized these codes into overall categories, which I then used to progress towards an overall thematic, conceptual framework (ibid., p.11). The three main themes that emerged from this process were: personal competence; task competence; social competence. Further, within each theme, there were various subthemes, which will be discussed in more detail in chapter four, the ‘Presentation and Analysis of Findings,’ which is based on my conceptual framework developed from this process. However, it is worth noting here that the findings in the emergent themes were a combination of ‘emic’ and ‘etic’ perspectives (Harvard Education Site, 2014).

In writing the research account, I wanted to convey as much meaning as possible and to ‘show the reader the cultural knowledge’ so I tried to include various levels of ethnographic writing such as making relevant context statements about the environment in which the children studied, together with some facts about their school routine, and I also included ‘specific incident statements’ (Spradley, 1980, pp.162-168). The ‘specific incident statements’ included descriptions of particular moments in the research together with student dialogue to convey a real sense of the context and culture. Therefore, the
written accounts were an important part of the overall method of data analysis due to the sense of meaning conveyed.

3.8 Validity and Reliability

In the discussion of validity and reliability in his book entitled ‘Interpreting Qualitative Data’, Silverman (2006, pp.271-314) names the chapter ‘Credible Qualitative Research’. He begins by citing Riessman who questions whether the ‘investigator’s interpretation of data...is persuasive and plausible, reasonable and convincing?’

These have been leading considerations in addressing the concept of validity and reliability in my study, and Silverman’s table outlining criteria for the evaluation of research (2006, p.276) anchored my thoughts regarding its credibility. In relation to the aforementioned table, I have presented an argument for the research topic as a key educational matter and I have clarified its connection to the existing bodies of knowledge and theory. Furthermore, the research topic was based in the school’s natural setting (Walsh 2005, p.228), which in itself addresses the study’s validity and reliability. The data collection and analysis have been made explicit and reference has been made to the accepted procedures for analysis. Furthermore, I tried to develop a connection between various types of data, and in doing so, and in rationalizing the connection between such types of data, I built a system of interconnected data, which enabled me to triangulate between different aspects of the same thing (Holliday, 2005, p.75). Future chapters deal with a discussion regarding how the emergence of themes, concepts and categories were derived from the data and future chapters also delineate clearly between the data and its interpretation. Therefore, by addressing these factors I have attempted to strengthen its credibility.

An additional point that might enhance the validity of my research, is due to the ‘careful documentation and reporting of the methodological choices’, including details regarding the content within the music lessons themselves, which could make it possible for interested persons to reproduce (DeWalt and DeWalt, 2011, p.112).

3.9 Reflexivity and Reactivity

As noted earlier, reflexivity and reactivity are two potential weaknesses of ethnography (Walsh, 2005, p.229). This section discusses these issues in depth.

3.9.1 Reflexivity

I recognized that my presence and influence as a researcher, specifically a participant observer, within a qualitative paradigm was unavoidable, but that it was also possibly a resource that could be capitalized on (Holliday, 2005, p.145). I perceived my role as
music teacher to be a resource, but this role subsequently implicated me in the construction of knowledge within the social setting, therefore formulated implications and significance of my choices as observer and writer (Bryman, 2001, p.470). Consequently, due consideration regarding the matter of reflexivity was awarded when executing the research and within the written study (Spicer, 2005, p.297) because, on one level reflexivity denied the possibility of me as a researcher to achieve an objective position since I was part of the social, political and educational world of the research (Morrison, 2006, p.22). Therefore, it was important for me to monitor closely and continually scrutinize my interactions with participants, their own reaction, roles, biases, and any other matters that might bias the research (Cohen et al, 2001, p.141; Byrne, 2005, p.184) but, in acknowledging this unavoidability of interacting with, and possibly changing, the culture within my research, I suggest that I was also ‘capitalizing’ on what was revealed about the culture during this process (Holliday, 2005, p.146).

Peshkin (1988, p.17) states that acknowledgements and assertions of subjectivity are insufficient and that the researcher ‘must attend to subjectivity in a meaningful way’ since it is ‘like a garment that cannot be removed’. He offers the concept of ‘Multiple-I’s’ as access to founding prejudices or dispositions that could be addressed by the researcher during the research process itself. Peshkin suggests that this concept enables the researcher to learn about one’s personal qualities that contact with the specific context of a piece of research, which have the ‘capacity to filter, skew, shape, block, transform, construct and misconstruct’ (op. cit.). Following Peshkin’s advice to note internal feelings of ‘warm and cool spots’, and ‘compulsion to act beyond the necessary research needs’, I identified several ‘Multiple-I’s’ through the duration of my research (re: Table 3.2):

Table 3.2: ‘Multiple-I’s’ in the context of my research

<table>
<thead>
<tr>
<th>‘Multiple-I-identity’</th>
<th>Reason for Emergence</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Mummy-I’</td>
<td>I felt great compassion towards the children, a sense of affection and concern, given some of the issues they displayed</td>
</tr>
<tr>
<td>‘Authoritarian-I’</td>
<td>My role was that of a participant observer, and I wanted to encourage attention but it was necessary to be very firm but fair on many occasions</td>
</tr>
<tr>
<td>‘Justice-Seeking-I’</td>
<td>I experienced discomfort whilst witnessing certain interactions between some teaching staff and children</td>
</tr>
<tr>
<td>‘Pedagogical-child-Centred-I’</td>
<td>I was surprised to see so much teacher led, rote learning emphasis in the morning school activities</td>
</tr>
<tr>
<td>‘Research I’</td>
<td>I had to constantly remind myself to stay in this mode and maintain the role of the stranger (Walsh, 2005, p.230)</td>
</tr>
</tbody>
</table>

One of the issues that arose during the course of my research, was that my ‘Mummy-I’ was obstructing my focus as ‘Research-I’ on occasions. One example was the realization that too many comments from the student iPad diaries expressed how much they liked me or ‘Monkey’ (my soft toy assistant) rather than the music per se. Clearly, my research objective was to uncover how music may have shaped the students social,
emotional and behavioural development. This led me to develop a new method in order to find out what the children thought of the music lessons themselves, where during one lesson I gave each student a huge piece of coloured paper and asked them to draw themselves in the middle, caption at the top ‘Music and Me’ and lots of ‘clouds’ on the rest of the paper. They were then to draw in each cloud what they thought a connection between them and music might be. They could draw as many or as few clouds as they liked. One of the children wished to change the ‘clouds’ to ‘rainbows’, which of course we did! We also used in-depth Self-Assessment Sheets, a system I would not normally have used with such young children, but it proved fruitful.

However, the reflexive approach involves not only acknowledging and addressing the possibility of reflexivity during the research process, but also in attention to writing strategies employed to construct the research account (Tonkiss, 2005, p.380). Foley (2002, p.487) discusses a variety of possible writing styles such as ‘trying to use common sense, autobiographical experiences, ordinary language, irony, satire, metaphor and parody to understand everyday life’ as he believes that one must aim for a realist narrative role which will make the research a more interesting and engaging narrative (ibid., p.469). With this in mind, I endeavoured to find my own ‘realist’ writing style when recounting the research, in order to represent the setting in a unique way.

### 3.9.2 Reactivity

I understood that my role as participant observer would carry a danger of reactivity with the participants (Walsh, 2005, p.230), or to be more specific, that it might cause the students to alter their behaviour as a result of their awareness that they had been selected to participate in my research (Spicer, 2005, p.295). Further, I was aware that reactivity might interfere with the study’s validity (Cohen et al, 2001, p.127) and Bryman (2001, p.37) states that one identifiable threat to validity is interaction, selection and treatment of students. Regarding the selection of the two participants in my research, it is relevant to discuss how they became involved in the study, in order to address possible reactive affects.

The reasons I selected the two students were due to the social, emotional and behavioural difficulties they presented with (cf., Section 3.4). However, I did not want to make these reasons explicit to the children when asking them to participate more fully in my research as I believed it would have been negative and potentially damaging to the students’ self-esteem and sense of self. Therefore, the rationale I offered them and their families when seeking consent for participation was that I had noticed that their children had enjoyed the varied musical activities and therefore would like to work with them more closely until the end of the school year. It was true that the students had enjoyed musical participation. All the children involved had enjoyed it and many of them asked me regularly when might they be able to come and have extra music with me. Therefore, I was aware that the children felt quite ‘special’ to have been selected and I cannot rule out the positive impact this may have had on the findings. However,
one of the ways I managed the reactivity was by combating it through the ‘Research-I’
reflective lens (cf., Table 3.2), which encouraged me to continually monitor my roles,
interactions and biases with the research (Cohen et al, 2001, p.141).

Finally, ethical considerations before and during the start of my research increased the
reliability and validity of my research, which will be discussed below.

3.10 Ethics

All research undertaken in situations involving people and children interacting with one
another will have ethical dimensions, which are often complex (Stutchbury and Fox,
2009, p.489).

Gaining ‘informed consent’ (Kelly and Ali, 2005, p.116; BERA, 2011, p.6) from
research participants is widely regarded as central to ethical social science research
practice (Wiles, 2013, p.25) and it was important that I was mindful of such rules, laws
and codes of conduct which determined how to behave whilst conducting the research
(Stutchbury and Fox, 2009, p.489). I sought permission from the Head of School, and
subsequently, regarding the selected children, from their parents in writing and from the
students themselves, after I had informed them about my intended research on how
music might shape the students social, emotional and behavioural development.

I spoke to the children at length about my study and we engaged in a question and
answer session about the research and what was expected of them. I gave them the
opportunity to ask me lots of questions and they were interested to know about the types
of activities we would be doing in Term 2, on a Wednesday afternoon. I clarified the
meaning of confidentiality and assured them that anything they told me during the music
lessons, or anything they said in their iPad Diaries were confidential. I also wrote to
their families explaining about my background, what the research was about, what the
children’s participation would involve (Wiles, 2013, p.25), in which I included some
examples of the types of activities their children would be doing with me and the
guarantee of confidentiality and student anonymity. This is why I did not include any
photographs of the study or specifics details of the school’s Estyn report in the written
account. I explained to all parties that if they decided they no longer wanted to be a part
of the research that they could opt out at any time (Kelly and Ali, 2005, p.121; BERA,
2011, p.6). Additionally, I offered to meet the parents at any time to discuss my
research and the activities the children were doing.

The information accompanying the request for written parental permission outlined the
premise that the information collected would be confidential and that the students could
withdraw from the study at any time (Kelly and Ali, 2005, p.121; BERA, 2011, p.6).
Furthermore, regarding the issue of confidentiality, I ensured that the individual students
are not identifiable in the presentation of my findings (Kelly, 2005, p.137). Furthermore,
I agreed to debrief the staff about my findings (BERA, 2011, p.8).
However, in addition to addressing these aforementioned rules and codes, I was aware that the reasoning behind the study’s ethical decisions needed to be explicit and recoverable by the reader (Stutchbury and Fox, 2009, p.489). Therefore it is important to specify the ethical reasoning I employed during the course of my study, because there were a number of perspectives that contributed to the overall ethical decisions that I made. I found Stutchbury and Fox’s ethical framework (ibid., pp.495-496), which is based on a collation of the work by Seedhouse and Flinders, to be an excellent guide regarding the various ethical angles requiring consideration. Although this framework did not provide solutions, it did provide a structure to guide my thinking. It contained a set of 24 questions, which focused on ethical analysis from four perspectives, which were:

- An ‘external/ecological’ perspective whereby questions concerning codes of practice and cultural sensitivity were raised;
- A ‘consequential/utilitarian’ perspective whereby questions such as potential ‘benefits’ to the participants as well as ‘avoidance of harm’ were asked;
- A ‘deontological’ perspective in which questions such as ‘fairness’ and ‘telling the truth’ were considered;
- A ‘relational/individual’ perspective, whereby questions such as ‘how could I demonstrate my respects for all participants’.

I found the questions contained in each of the four aspects to be helpful in addressing issues such as how to behave ethically alongside methodological considerations, thus ensuring the integrity of the research. Although I was aware that unforeseen ethical issues may have arisen whilst conducting the research (Christensen and Prout, 2002, p.485), the framework was invaluable for thinking about the research in a ‘logical and structured manner’ (Stutchbury and Fox, 2009, p.494), for example, regarding the fourth aspect, ‘relational/individual’, it was important to question whether ‘unreasonable demands were being placed on any individuals and whether they appreciated that participation is voluntary’, because the focus of my research is children.

This brings me to another ethical point that needs to be raised, which is that my research focused on children. In recent years there has been a growing body of work that has emphasized children’s competency and agency and from this point of view, children and young people should, at the very least be treated as having the same rights to choose whether or not to participate on the research, as adults do (BERA, 2011). Indeed, as noted by Lewis and Porter (2007, p.223) with regard to research and pupil voice, since Article 12 of the United Nations Convention on the Rights of the Child (UNCRC), which calls for the child to express their views freely in all matters pertaining to them, there has been a ‘torrent of initiatives worldwide involving hearing children’s views in matters concerning them’. The implications of UNCRC regarding educational research are that a situation may not be fully understood without ‘representation of the views of all stakeholders’ and the validity of the research must be ‘immeasurably strengthened’ where not only the views of the children have been gathered but the ‘topics that have been addressed and the questions asked are meaningful’ (op. cit.). An important aspect
of my research was not only to hear what the children themselves thought about the music lessons but also to consider what they wanted to learn. Therefore, they played a significant role in the study itself, and I envisaged them as being ‘social actors’ (Christensen and Prout, 2002, p.480) because I saw them as subjects who may change or become changed by the social and cultural world in which they live (ibid., p.481). Subsequently, the key difference in the ethics involved in my research was that I did not take any distinction between adults and children for granted, and the methods I used had to suit the persons involved. Additionally, all practices employed in the research were in line with the children’s experiences, interests, values and everyday routines (ibid., p.482).

The Head of School had asked me early on in my research if I could organize an end of year celebratory music assembly, to which the school would invite the families of the children involved. She felt that this would be a great way to finish the year’s musical learning for the children as well as a wonderful way to share the musical learning and experiences with a wider audience. Ethically this was a benefit for the children, their families and the school.

Collectively, these procedures addressed the ethical considerations involved in the research itself and also the research methods, which included recording, filming and photographing the students.

### 3.11 Summary

This chapter has constituted a presentation of the methodology, methods of data collection and analysis, a discussion of the study’s reliability and validity, reflexivity and reactivity and lastly, consideration of ethics. In so doing it has included descriptive details of how the study was developed and conducted, and how the study’s overall theoretical framework informed the methodological process. The aim of this chapter was not to give a complete account of the various methodological issues relating to the topics under discussion, but to highlight some of the central issues and to show how the practice of method within the context of this study was inherently connected to its theoretical assumptions.

The next chapter will present the findings from this study through the emergent themes: personal competence; task competence; social competence. In doing so it analyses the data in relation to the themes and related subthemes of both the children, thereby noting the main findings and any emerging patterns.
Chapter 4: Presentation and Analysis of the Findings

4.1 Introduction

In this chapter I present and interpret the findings of my study. As a starting point for this discussion, I will expand on the method used to collate and analyse the data, as discussed in section 3.7 of the previous chapter.

My final analysis initially involved a ‘cultural inventory’ (Spradley, 1980, p.155), which was essentially an examination and review of all my data (a variety of participant observation field notes, which I referred to as my ‘Research Diary’, the children’s iPad diaries, interview notes and the students’ ‘Self Assessment Sheets,’ video data and photographs) and made an inventory on one large sheet of paper. This was effective in viewing the research as a whole (ibid., p.156). Then using this inventory as the analytical foundation, I collated various pieces of data that seemed especially pertinent, photocopied and cut it up, considered it for several weeks, and moved it around several times in order to start to try and group the data together and establish some patterns.

Then I made a list of codes that I had discovered, whereby each code was a word that captured the essence of the various data (Saldana, 2011, p.3), such as ‘disruptive’ or ‘happy’. This was followed by a re-organisation of my data in line with the emergent codes. This latter process occurred several times, and involved several cycles of coding the data and moving it around. I used ‘one-word capitalized codes’ called a ‘descriptive code’ (op. cit.) that I thought best described that various data samples. In the later cycles of organising the data into codes, in order to ensure a robust method of allocating various data to a specific code, and later to subthemes, I decided to incorporate an ‘inclusion rule’ which was initially in the form of a ‘propositional statement’, coupled with sample data (ibid., p.9). Then my ‘propositional statements’ transpired into ‘propositional questions’ for my codes as I felt it was clearer to categorize the data in a more rigorous way. For example, one of the codes was ‘confident’ and the ‘propositional question’ was: ‘Is self-assurance exhibited?’ I then organized these codes into overall categories, which became my subthemes. Then, I used the subthemes to progress towards an overall thematic, conceptual framework (ibid., p.11).

The three main themes that emerged from this process were: (1) Personal Competence; (2) Task Competence; (3) Social Competence. Further, within each theme, there were various subthemes, which can be seen from the conceptual framework presented in Table 4.1 below.

This chapter takes Table 4.1 as its conceptual framework in order to present and analyse the findings in a concise and coherent manner. It is divided into three sections, whereby the first section discusses the findings of each of the three main emergent themes. The second section is based around the introduction and review of a fourth theme deemed pertinent, which is time. Here, the research with the children is divided into three time phases: early research (0 to 3 months); mid research (3 to 6 months); late research (6 to
9 months). Finally, a discussion, which synthesizes the findings of both children in relation to key findings is held.

Table 4.1: Emergent themes from data

<table>
<thead>
<tr>
<th>Personal Competence</th>
<th>Task Competence</th>
<th>Social Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subthemes</strong></td>
<td><strong>Subthemes</strong></td>
<td><strong>Subthemes</strong></td>
</tr>
<tr>
<td><strong>Self-regulation</strong></td>
<td><strong>Enjoyment</strong></td>
<td><strong>Collaboration</strong></td>
</tr>
<tr>
<td>• Is there a lack of control/increased control with behaviour?</td>
<td>• Are signs of happiness and pleasure expressed?</td>
<td>• How is working with others construed?</td>
</tr>
<tr>
<td>• Does music help control/regulate mood and emotions?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Self-confidence</strong></td>
<td></td>
<td><strong>Social connectedness</strong></td>
</tr>
<tr>
<td>• Is self-assurance exhibited?</td>
<td>• Does the activity captivate and engross?</td>
<td>• Are signs of feeling connected/disconnected to the environment visible?</td>
</tr>
<tr>
<td><strong>Self-esteem</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Is there a feeling of pride, which induces positive sense of self?</td>
<td>• Are increased resilience and persistence to practice being shown?</td>
<td></td>
</tr>
</tbody>
</table>

4.2 Overview of the emergent themes

4.2.1 Personal Competence

The general aspects of this theme related to the children’s understanding of how they thought and felt, and how they managed their feelings in terms of how they ‘expressed emotions, coped with difficult and uncomfortable feelings' (Humphrey et al, 2008, p.9). It is divided into three subthemes: self-regulation; self-confidence; self-esteem.

4.2.1.1 Self-regulation

This subtheme used the following questions as inclusion codes to help organize and select the findings:

(i) Is there a lack of control/increased control with behaviour?
(ii) Does music help control/regulate mood and emotions?

There were 10 key findings in response to this theme, the largest number of key findings from all of the subthemes, and they were distributed among the children as follows:
**Self-regulation**

<table>
<thead>
<tr>
<th>Finding number:</th>
<th>Finding related to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Findings 1 - 3</td>
<td>Sioned</td>
</tr>
<tr>
<td>Findings 4 - 9</td>
<td>Rhodri</td>
</tr>
<tr>
<td>Finding 10</td>
<td>Both children</td>
</tr>
</tbody>
</table>

1st finding:

The first key finding was Sioned’s revelation that listening to classical music could change her mood. She had written some accompanying notes to her pastel drawing, and expressed in her own way how the music made her feel:

**W6/2/2013 – Research Diary – ‘Valkyries’ and iPads – small room**

‘Sioned listened attentively to the music and joined in the activity. She didn’t say very much, it was hard for her to get a word in above the attention seeking behaviour of two of the other children. She meticulously drew an intricate picture with the pastels, and thoughtfully wrote her ‘feelings’, or ‘what came to mind’, on a piece of paper:

- Makes me happy
- Calm (she told me ‘when you’re stressed it can calm you’)

I did not fully realise the impact of this until speaking to her mother a few weeks later:

**W1/5/2013 interview with Sioned’s mother**

‘Sioned came home from school and she was raving about how music can change how you feel, your mood. She hadn’t realized that before. She’s loved the art and music, and talked a lot about how music can make you feel a different way. Just raving about it to us all.’

This data suggests that Sioned experienced a genuine emotional response to the music, which made her feel calm.

2nd finding:

The second key finding was that Sioned herself realised that she could use music as a self-regulatory mechanism for preferred mood. The following extract, taken from the same lesson as the above extract, highlights additional feelings when she listened to the music:
'Bedtime music if you’re stressed

She didn’t expand on the ‘bed time’ music; perhaps it sounded like the type of thing she listens to before bedtime?’

At the time, I had assumed that Sioned listened to music at bedtime, but I was not sure so clarified this point with her mother during an interview:

W1/5/2013 interview with Sioned’s mother

'I asked her if Sioned listened to music before she went to bed and her mum said no. We chatted about Sioned’s comments ‘bedtime music if you’re stressed’ and I offered to put some classical music on a memory stick for Sioned to listen to on the computer before she went to bed.’

This data suggests that Sioned thought that if she listened to this type of music at bedtime it might help her to be calm and remove stress before trying to sleep, in other words as a self-regulation mechanism for preferred mood.

3rd Finding:

The calming impact of music on the other children’s behaviour was also noted by Sioned in relation to listening to the ukulele, the third key finding for this subtheme. Sioned astutely commented on the impact of listening to this instrument on her group:


'Sioned loved the sound of the ukulele. She listened attentively to the sound and said:

"It’s peaceful."

I said, "Do you mean the sound of the uke is peaceful?"

Big pause.

Sioned doesn’t like to contradict…

Then I could feel the calm atmosphere, and noted her eyes look over the group, so I asked:

"Or do you mean the atmosphere is peaceful?"

"Yes," she confirmed, "everyone’s peaceful."
It is revealing that Sioned herself noted the calming effect that the sound of the ukulele had on the behaviour and emotions of her group, describing the atmosphere as ‘peaceful’. The ukulele did visibly calm the children’s emotions and behaviour.

4th Finding:

Rhodri’s behaviour in the early research, that is the first three months of research, exhibited a lack of self-regulation and was a disruptive influence on the class:

T4/12/2012 – Research Diary Extract – ‘Parachute Game’ – school hall

‘Rhodri was a handful all lesson and needed constant reminding. All the other kids loved the parachute game, happy, listening to instructions, moving under the parachute, rhythmically etc. Singing the song, Rhodri was pulling the parachute too fast too slow, going under when it wasn’t his turn:

“Look at me I’m doing it wrong!”’

The attention seeking behaviour as interpreted from this extract highlights his general conduct at that time, and was a barrier to lesson participation, which was a loss for Rhodri since the other children loved the fun use of the colourful parachute to understand the elements of music, moving it either fast, slow, high or low in response to the song.

5th finding:

This finding demonstrated the relaxing, regulatory impact of listening to music in relation to calming Rhodri’s physical behaviour, when he was appraising music during lessons:


‘I have never seen Rhodri so focused and engaged. So calm. When he was drawing, he selected the pastels carefully, working on a beautiful, intricate and colourful design. Took his time. Meticulous. When we talked about how the music made us feel, he tried hard to express himself….’

This suggests that music had a quietening and calming influence on Rhodri’s behaviour, and it helped him to regulate his emotions, which consequently enabled him to participate in the lesson.
6th Finding:

Playing the ukulele also had a calming effect on Rhodri, as noted below:


'Rhodri was amazing – very on task!!!! Very calm and still!!!! No annoying the other children or major disruptive attention seeking!!!! For the whole lesson!!!! Awesome footage of him and I playing together with me on the xylophone and him on the uke playing ‘Twinkle twinkle’. Brilliant rhythm. Hand fell on the uke perfectly for C. Astonishing. Grasped immediately

(i) which fret to use
(ii) how to hold uke
(iii) where to put his hand to strum
(iv) where to put his finger to make C chord

Unbelievable!!!!!'

This datum highlights that active participation in playing the ukulele had a regulatory impact on Rhodri’s behaviour, possibly because of the soothing sound itself but also I would suggest that it might also have been related to his ‘enjoyment’ of playing the instrument.

7th finding:

Rhodri’s self-regulation regarding his behaviour improved as the research progressed. An example that highlights this improvement may be seen from the extracts below, which describe his behaviour during a musical game called ‘The Name Game’ (a musical game based on the concept of circle time):

T6/11/2012– Research Diary - ‘Name Game’ – school hall

'All the children were seated in a circle, which was an incredibly difficult task, with a few children running into the hall, sliding all over the floor, going wild in the large open space. Calm resumed and the children sat for the ‘Name Game’, after lots of nudging, poking, lying on the floor from some of the livelier children, all the children were kind of sitting up. We just couldn’t get round the circle of only 12 children, with one round of 12 rhythmic ‘taps’ and ‘claps’ to:

“My name is * * *”.

Rhodri was fidgeting, moving, poking and prodding, saying it fast, saying it slow, laughing when the game broke down and we all tried again. It was amazing! The four year olds in my last school did this brilliantly. It was a challenge for some of this group. Shame. Some kids really enjoying.'
His behaviour here was extremely disruptive, however, a few months later, considerable improvement was seen in Rhodri’s involvement with this game:

**T11/12/2012 Research Diary – ‘Name Game’ – smaller room**

'Today we were in a smaller room for music, and we had chairs. Although disruption as we had to move desks etc. and organize chairs in a circle, Rhodri was much improved. He was really focused in the ‘name game’, joined in, said everyone’s name, and kept pace. Astonishing!'

These extracts suggest that Rhodri’s behavioural self-regulation was improving, which I suggest may have been related to the practice and participation in this type of activity since we played it every week as an introductory game.

**8th Finding:**

Music lessons in the larger hall with noisier instrumental tasks, utilizing a variety of tuned and untuned percussion instruments, may have been overwhelming for Rhodri:

**T5/2/2013 – Research Diary Extract – school hall ‘Graphic Notation’**

'Rhodri – so disruptive today. Hiding round the corner, he seemed to know his behaviour was unacceptable, he was so challenging??!!

**RESEARCH DIARY ‘AFTER THOUGHTS’: did Rhodri experience sensation overload today? Is the hall genuinely too big and noisy? Was he going behind the curtain to be silly or find peace?**

A possible reason for Rhodri’s lack of self-regulation that emerged from this datum, and other similar data, was that the instrumental noise during the group activities in the large school hall space seemed to overwhelm Rhodri and impact on his behaviour negatively.

**9th finding:**

This extract describes Rhodri telling Ffion (another child in the group) off for her constant interrupting and general attention seeking behaviour, which was highly disruptive:

**W22/5/2013 – Research Diary Extract - Garage Band – small room**

‘…. Today, Rhodri said, actually quite nicely, but firm not in anger:

"Ffion, move away… You’re not letting anyone see anything… other people want to have a turn…. Stop it Ffion. Stop being in the way…. Stop interrupting all the time.”'
It was highly notable because previously he would have either joined in with her disruptive behaviour or encouraged her. This incident occurred in the late research phase (up to the last 9 months of the study) and may suggest that Rhodri had started to think more about the regulation of his own behaviour, since he was correcting the behaviour of others.

**10th finding:**

This finding relates to both children, and was an opinion from the perspective of both their mothers who felt that active involvement in music, specifically learning to play the piano, had an impact on the children in terms of helping to relieve their anxiety:

**8/5/2013 - Interview with Rhodri’s mum – Research Diary Extract**

"Rhodri’s mum said he’s a perfectionist and worries a great deal about everything. She said he spent a lot of time at home doing music on his tablet and she felt music:

"takes him out of his worries. Maybe he can be himself with music.

All he does is fingers in the air."

(this is something we do in class when learning a new piano piece)

**W1/5/2013 interview with Sioned’s mum**

"She loves the piano! I don’t know why we didn’t think of it sooner. Because of her (anxiety disorder) it would have been something to keep her occupied, to keep her hands busy."

These extracts illuminate the children’s behaviour outside school and suggest that active participation in music, specifically in learning to play the piano, was a helpful emotional regulator for both children.

**Synthesis of findings for self-regulation**

It is striking that the music activities shaped both children in ostensibly different ways, except that learning to play the piano, as noted by both mothers, relieved the anxiety of both children. It is possible that their feelings of anxiety were usually managed in different ways, habitually exhibited by Rhodri in ‘acting out’ behaviour and by Sioned in ‘acting in/withdrawn’ behaviour. However, both parents believed that their anxiety was reduced through learning the piano.
4.2.1.2. Self-confidence

This subtheme related to the children’s sense of ‘trust in (their) abilities, qualities and judgement.’ (Definition available from: http://www.oxforddictionaries.com/definition/English/self-confidence [Accessed January 2014]).

It was ascertained through the levels of self-assurance, belief in themselves and assertiveness they displayed. The inclusion code used to determine this subtheme was:

(i) Is self-assurance exhibited?

There were 3 key findings in response to this theme, and were distributed among the children as follows:

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<thead>
<tr>
<th>Self-confidence</th>
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<tr>
<td>Finding number:</td>
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<tr>
<td>1st Finding</td>
<td>Rhodri</td>
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<tr>
<td>2nd Finding</td>
<td>Sioned</td>
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<tr>
<td>3rd Finding</td>
<td>Sioned</td>
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</table>

1st Finding:

Rhodri’s confidence grew substantially throughout the duration of the research. The educational psychologist, who saw Rhodri regularly in school, she described his confidence as follows:

12/3/2013: Interview with the Educational Psychologist

‘The educational psychologist said that Rhodri has very little confidence’

Also substantiating this view was his mother, who said she was not sure whether he would perform in the assembly at the end of term because of the following reasons:

8/5/2013 - Interview with Rhodri’s mum

‘He did Judo five nights a week but they’d stopped him competing in Judo because he was getting very stressed about competitions, makes him anxious, and he even passed out a couple of times……..

She said Rhodri’d told her about the assembly in a few weeks, and that I’d asked him to play the piano, but although he said he would do it, she said he probably wouldn’t because of his anxiety.’

This extract suggests that even though Rhodri trained regularly and was ostensibly competent at judo, his levels of stress and anxiety prevented him from competing in a situation where he had to ‘perform’ in front of others. However, in contrast to this,
Rhodri showed self-assurance and belief in himself to play the piano in assembly during an extra rehearsal just before the assembly:

**M7/7/2013 – Research Diary Extract – assembly practice**

‘Rhodri was very excited and positive. He had quite a few pieces he could play, right hand only. We played a duet together - me doing the left hand introductions and chord fill ins, Rhodri doing the melody. His rhythm was great and he seemed surprisingly confident. Assured.’

Further, he performed well, without an obvious trace of anxiety:

**W9/7/2013 – Research Diary Extract - Music Assembly in the hall**

'But Rhodri was calm and determined. I think he wanted everyone to see what he’d accomplished. He concentrated very hard whilst he was playing his piano solo, stood up and bowed when he finished.'

These extracts possibly highlight Rhodri’s developing self-confidence and also suggest that Rhodri felt confident in his ability to play the piano in the assembly in front of his classmates, the teachers, the rest of the school and his family. It is possible that the achievement and accomplishment he felt in playing the piano was linked to the increased feelings of self-confidence implicit here.

**2nd Finding:**

Sioned displayed confidence throughout the duration of the research:

**T29/1/2013 –iPad footage – Graphic Notation**

'Sioned is sat on a bench, right by the chart, head higher than other kids, to work out the task, assuming visible position of authority. Other four children in her group sat on the floor. Michael takes the role of what they could do, how they could work it out. Sioned not shy to give her input.

Very on task.

Anxiety issues are partially covered, but still visible.'

This extract suggests that Sioned, via her body language and assumed position, felt confident with the task and confident amongst her peers. She was assured in voicing her opinions.
3rd Finding:

Sioned started bringing her piano book into school every Tuesday and Wednesday. She was very proud to be learning the piano and she displayed confidence in talking about this in front of her friends and also she was assured in performing the piano solo in front of her peers and happy to show what she had achieved:

**M9/7/2013 – Research Diary Extract - music assembly practice in the hall**

‘Sioned very confident. Her piano book under her arm. She’s very proud of this! Wasn’t sure which piece to play, but delighted to show Rhodri the variety of pieces she’d accomplished.’

This extract highlights how proud Sioned was of learning the piano, bringing her own piano book to school, which she did regularly, and it also indicates how confident she was to perform a variety of piano pieces for her friend. It is possible that this sense of pride in her accomplishment boosted her self-confidence.

**Synthesis of findings for self-confidence**

These findings suggest that both children’s self-confidence increased as the research progressed, possibly due to their active participation in music, particularly in learning the piano. However, findings indicated that Rhodri’s confidence grew more substantially than Sioned’s, since reports from his mother and the educational psychologist indicated that he had a distinct lack of confidence. However, in late research he demonstrated a sense of self-assurance and composure. Collectively these findings suggest that an increase in the self-confidence of both children may have been linked to achievement in learning the piano.

**4.2.1.3 Self-esteem**

Self-esteem in the context of this research was conceptualised as the ‘feelings and attitudes that children... ha(d) about themselves.’ (Swinson, 2008, pp.165-166). Further, it was useful to consider Lawrence’s work (1973), cited by Swinson (ibid., p.165), who concentrated his studies on children, when organising data:

‘Self-esteem is a result of a series of value judgements made by children as they grow up, in which they attempt to sort out ideas that they develop about their abilities, attributes and appearance. These they acquire by their perceptions of how they are accepted and valued by adults.’

In relation to Table 4.2, feelings of obvious ‘self-esteem’ were not noted with regard to either child in the early research phase, but developed as the music intervention classes proceeded.
The inclusion code used was:

(i) Is there a feeling of pride, which induces a positive sense of self?

There were 6 key findings in response to this subtheme and were distributed among the children as follows:

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<th>Finding number</th>
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<td>1st Finding</td>
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<td>5th Finding</td>
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1st Finding:

Rhodri’s self-esteem seemed to increase as the research progressed. The following extract is a Research Diary excerpt written when Rhodri was completing his Self Assessment sheet at the end of Term 2 and highlights that he was very proud of his accomplishments in music:

**W27/3/2013: End of term 2 Self-Assessment Sheet – small room**

‘He was really on task discussing his achievements with me and in completing this self-assessment form. He really wanted to take it seriously. He felt very proud of his accomplishments. The engagement he’d felt during all the different tasks, and the success he’d achieved, seem to have led to feelings of increased self-esteem.’

There is a distinct sense of ‘achievement’ noted here, together with the pride he seemed to display in relation to his accomplishments. This sense of personal achievement was seen again when he completed the ‘Self Assessment Sheet’, in the late research period, by which time he had learned to play several pieces on the piano, the recorder, could read simple staff notation for both instruments and had collaborated in a variety of musical tasks and activities. Most pertinent is his response to the following question:

**W3/7/2013 – Self-Assessment Sheet – small room**

‘Do you think you have tried your best this term?

Yes I’ve improved because I’m learning’

On the back of this Self Appraisal sheet, Rhodri had wanted to demonstrate this ‘learning’, and he therefore took it upon himself to painstakingly and perfectly write out the rhythm for a recorder piece he’d learned along with the lyrics:
Gon-na catch-a big one yes I am

Got some bait a line and hook

‘He showed me it when he’d finished. I was astonished. It was perfect. He’d also tried to write it on staves, and represent the ‘G’ and the ‘A’ in the first line, but then just focused on the rhythm.

He showed amazing perseverance doing all of this today and his appraisal sheet shows a positive sense of self.’

This was an incredible accomplishment and the fact that he wanted to show he could do this, to visibly display his cognitive progress highlighted that he felt real pride and a sense of achievement in his learning and progress. Implicit in this data is that Rhodri’s increased sense of self-esteem was related to his feelings of musical accomplishments.

2nd Finding:

Rhodri in particular responded well to praise. I used a variety of contingency management schemes in the class, but the one he seemed to like was the acquisition of a beautiful, colourful sticker. This is noted in the extract below:

T11/12/2012 – Research Diary Extract– ‘Name Game’ – smaller room

‘He asked quietly, at the end of the lesson if he can have a sticker, by sidling right up to me. He took ages choosing the pattern and wording of the sticker and wore it with pride.’

This extract highlights the importance of the sticker for Rhodri. This type of interaction became a consistent pattern in the music lessons, whereby Rhodri would either ask for a sticker, if he thought he’d done something to deserve it, or really enjoyed wearing it if I awarded it to him. Therefore I suggest that teacher praise was also a possible factor in Rhodri's enhanced self-esteem because he thrived on teacher recognition of his efforts.
3rd Finding:

Praise from other members of staff also seemed to enhance Rhodri’s positive feelings toward himself:


‘The class TA (teaching assistant) walked through the classroom (in order to get into the classroom next door) and was shocked to hear Rhodri playing ‘Ode to Joy’. He was really trying hard – showing good attention and perseverance.

After I'd said “OK, finished, let’s tidy up”, he was still enjoying playing and practicing, trying to get it right.

He was beaming with pride.

I asked the TA (teaching assistant) if she had time to listen properly to Rhodri, and she did. She was genuinely interested and Rhodri could see her surprise and admiration.

She then had a chat with him about how to do it, understand how to play, etc., because her young son at home had a keyboard for Xmas but didn’t know how to play because the note reading was too complex.

Rhodri was delighted and proud to explain to her what to do. He experienced success and admiration today! It was great his TA could see what he’s accomplished!’

This extract portrays that Rhodri was very proud to not only be able to show the teaching assistant that he could play the piano piece, but to explain to her how it ‘worked’. He understood from her comments that both she and her son at home were unable to do this. It would seem that this praise gave Rhodri a great sense of pride and helped him realise the genuine progress he was making, and thereby increased the positive feelings of self.

4th Finding

After the assembly in which Rhodri played the piano solo, his mother came over to him and hugged him excitedly, then said to me:

9/7/2013 - Research Diary Extract - music assembly

"I feel very emotional! I didn't think he would do it! I'm so amazed!"
Rhodri could see and hear how proud his mother was that he had performed in front of the whole school and I suggest this maternal pride in his accomplishment may have enhanced his self-esteem.

5th Finding:

Sioned’s self-esteem seemed to increase as the research progressed, and was noted only in the late research (up to 9 months) phase:

**W9/7/2013 – Research Diary Extract - Music Assembly in the hall**

‘We had another quick practice today before the assembly. I was wondering if they would actually do it in front of the audience. Sioned and Rhodri quite a little team – very supportive of each other.

Sioned really shone on stage. She was front row, sang her heart out. Bopped and did all the actions. Played the recorder well. Beaming. Happy!

She was the first soloist and she did brilliantly, remembering to bow at the end!’

Sioned showed pride in her accomplishment here and it seemed she enjoying having the opportunity to show her friends and family what she could do, and what she had achieved, which I suggest increased her sense of self-esteem. Therefore, it is possible that Sioned’s increase in self-esteem was related to her sense of achievement from active participation in music.

6th Finding:

Sioned was very excited that both her parents would be in the assembly to watch her perform her piano solo:

**M7/7/2013 – Research Diary Extract - music assembly practice in the hall**

‘She’s excited to do this in front of her parents.

“My dad works nights so he can come. That’s good, isn’t it?”’

This extract suggests that Sioned felt special and valued that her father would be able to come and see her perform in front of the whole school, and after the actual assembly:

**W9/7/2013 – Research Diary Extract - Music Assembly in the hall**

‘Her parents were both there and they were really proud. Big smiles. Sioned gave them big hug! Had quick chat with them. Mum said that the keyboard was great for Sioned and she was still enjoying the lessons outside school.’
It is possible that Sioned felt increased self-esteem and self-worth because her father was making a special effort to come and see her make her piano solo debut. Further, their pride in her was clear from the smiles and hugs. I suggest this level of family support and pride in her musical accomplishment increased her sense of self-esteem.

**Synthesis of findings for self-esteem**

Both children seemed to develop an increased sense of ‘self-esteem’ through active participation in music, particularly in learning the piano. The findings indicate that ‘achievement’ in music for both children impacted strongly on their feelings of increased self-esteem (findings 1&4). Also, findings indicate that received ‘praise’ from teachers, other significant school adults and parents may have impacted on both children's increased feelings of self-worth (findings 2,3,4 & 5).

### 4.2.2 Task Competence

This theme related to how well the children participated in the task, by noting how engaged and focused they were, and whether they were able to concentrate sufficiently for completion of tasks deemed appropriate. It is divided into three subthemes: enjoyment; engagement; motivation.

#### 4.2.2.1 Enjoyment

This subtheme related to their ‘enjoyment’ and pleasure of musical activities, as detected in their self-report, by other adults in their lives or as observed by me from their general expression and physiology. The inclusion code for this subtheme was:

(i) Are signs of happiness and pleasure expressed?

There were 5 key findings in response to this theme and were distributed among the children as follows:

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<thead>
<tr>
<th>Finding number:</th>
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<tbody>
<tr>
<td>1st Finding</td>
<td>Rhodri</td>
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<td>2nd Finding</td>
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<td>4th Finding</td>
<td>Sioned</td>
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<tr>
<td>5th Finding</td>
<td>Sioned</td>
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</tbody>
</table>
1st Finding:

Enjoyment was a developing theme for Rhodri from mid research onwards.


‘Later in the lesson, it was his turn to play the piano. He came and sat nicely, ready to learn. Waited for some instruction. After, I asked him what he thought of learning the piano:

“I love it!”’

This extract highlights Rhodri’s enjoyment in this task. Furthermore, considering that enjoyment was not noted at all in the early research phase, I would suggest that it is possible that his lack of behavioural regulation was a barrier to enjoyment of music lessons in the early research phase.

2nd Finding:

Enjoyment was a recurring theme for Sioned, and occurred throughout all research phases, for example in large group composition classes as noted from my observations:

T27/11/2012 – Research Diary Extract – ‘Group Leader STOMP’

‘Today I selected Sioned as a group leader for one of the group tasks. She’s a really quiet little girl, very polite, very shy. She was delighted to be selected and wore the group leader badge with great pride. She was quite vocal and lively with her group, helping others to select instruments, and playing rhythms together. Laughing.’

And as noted in self-report:

W3/7/2013 – Research Diary Extract - Self-Appraisal Lesson

‘How do you feel when you are in music lessons?

Hapus (happy)

For one of her two stars and a wish, she wrote:

hapus (happy)’

This ‘happiness’ and enjoyment was also conveyed verbally to the educational Psychologist:
27/3/2013: Interview with the Educational Psychologist

‘Sioned has told her that Wednesdays are her ‘lucky day’ because she does music on a Wednesday.’

Collectively these extracts highlight Sioned’s general passionate enjoyment of the musical activities

3\textsuperscript{rd} Finding:

Sioned really enjoyed cuddling Monkey, the inanimate soft toy that was a predominant feature in the music lessons:

22/5/2013 - iPad Diary Extract

‘So we really enjoy it…..so we….like…playing with the instruments, we like cuddling Miss Thomas’s monkey and we like um…..using the ukulele and playing ’Twinkle twinkle little star.’’

This datum was representative of many similar extracts concerning Sioned and her affinity with ‘Monkey’. I had many photographs of Sioned with Monkey’s long limbs dangling around her shoulders, and his velcroed hands joined together, rather like wearing a backpack, whilst she was playing the xylophone or engaged in some other musical activity. In fact, the majority of the children enjoyed taking it in turns to hold Monkey, and they sat with him whilst they went about their task. This extract highlights the effectiveness of using inanimate toys to enhance enjoyment in learning.

4\textsuperscript{th} Finding:

The fourth key finding was that it seemed highly likely that learning to play the piano was the most enjoyable musical activity both children. The extract below was a note Sioned wrote to the Head after her first ever attempt at playing the piano:

W13/3/2013 - hand written note from Sioned to the Head

‘To Mrs Jones, I am just writing to let you know that I have had a lovely day. My best bit playing the piano with Miss Thomas. Thankyou for letting Miss Thomas teach us about music.

Love from (full name)

xxxxxx’
This extract clearly indicates how much Sioned’s first experience of playing the piano meant to her and the fact that she wrote down how deeply this had touched her suggests that it moved her deeply.

Regarding Rhodri, unbeknown to me at the time, his family had contacted the school to request that his speech and language sessions were moved in term three because they started clashing with the music lessons. They did not want him to miss any lessons because they knew how much he enjoyed them:

8/5/2013 - Interview with Rhodri’s mum –

‘His mum informed me that Rhodri’d been upset when he had to leave music last week because of speech and language therapy and so mum had contacted the school and they’d all arranged to move his therapy to a different day and time as they all recognized that this was important to Rhodri because he loved the piano so much.’

Collectively these extracts highlight the intense enjoyment that both children felt in learning the piano.

5th Finding:

The final key finding with this subtheme was that both children enjoyed the variety contained within the music lessons, as highlighted in Sioned’s iPad Diary entry below:

26/6/2013 – iPad Diary

‘Hello, I’m Sioned and I like music because we get to play piano…..um….and we have fun…. And….we get...(starts to hug Monkey)...and we have music and we get to play the ukulele and get to play the xylophone and get to play the recorder, we get to learn the piano……and we just love it with Miss Thomas. So…. I really like it with Miss Thomas and Rhodri and me have been, …..I have been practicing in the house about the piano. Thank you very much. Take a bow. (she bows and switches it off).’

In this extract Sioned talked about the enjoyment of ‘playing with the instruments’ and she named the ukulele, xylophone and piano. Additionally, her mother told me the following about Sioned’s enjoyment:

W1/5/2013 interview with Sioned’s mother

‘She’s loved showing us her paintings and the photo of the painting and the words on the iPad.’

This extract highlights Sioned's enjoyment gained from the integrated music activities, which incorporated literacy, art and ICT through the use of the iPad.
Rhodri also noted in his iPad Diary that enjoyed the variety contained in the lessons:

**W22/5/2013 – iPad Diary**

'I like playing instruments with Mrs Thomas and playing the ukulele (he starts improvising a tune, and then moves into trying to play ‘Twinkle twinkle little star’, then he sings the whole song whilst playing the rhythm correctly and improvising the tune on the xylophone). How’s that? Funky chicken!'

This data suggests that variety in their music lessons enhanced enjoyment of learning.

**Synthesis of findings for enjoyment**

The piano was an intensely enjoyable aspect of the music lessons for both children. Also, both children really enjoyed the wide variety of musical activities, which incorporated integration of other subjects such as literacy and ICT.

**4.2.2.2 Engagement**

This subtheme related to the engagement shown by the children during task activities. This could be seen by the children’s levels of discussion, effort and focus during the task. The inclusion code for this subtheme was:

(i) Does the activity captivate and engross?

There were 4 key findings in response to this subtheme and were distributed among the children as follows:

<table>
<thead>
<tr>
<th>Engagement</th>
<th>Finding relates to:</th>
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<td>Finding number:</td>
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<td>1st Finding</td>
<td>Sioned</td>
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<td>Rhodri</td>
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<td>3rd Finding</td>
<td>Both children</td>
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<td>4th Finding</td>
<td>Both children</td>
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**1st Finding:**

Engagement in the tasks and activities was a recurring finding throughout the whole research phase for Sioned, as noted from the following extract taken in the early research phase:
T13/11/2012 – Research Diary Extract – ‘Stomp!’ - School Hall – large group

‘Sioned was really engaged and tried hard with her partner, chatting, working it out, tapping the (drum) sticks on the chair, doing the rhythm together… coming up with ideas how to organise the cards and create a ‘Stomp-like’ performance piece.’

This extract highlights Sioned’s focus on the task, in trying to create a performance piece with her partner. She was engrossed at all levels, from collaborating with her partner and coming up with joint and individual ideas, and re-arranging the rhythm cards and generally trying to create a performance piece.

2nd Finding:

Engagement in tasks and activities was a developing state for Rhodri from mid research onwards. This pattern is visible in Table 4.2. It is possible that the disruptive behaviour displayed in the early research impeded his engagement in activities but as his self-regulation improved, so did his engagement with the various tasks and activities.

T4/12/2012 – Research Diary Extract – ‘Parachute Game’ – school hall

“Look at me I’m doing it wrong!”

This is a previously mentioned extract, which was used to highlight Rhodri’s lack of self-regulation and it is indicative of his general behaviour in the early research phase. It is pertinent to note this particular comment because it succinctly demonstrates that Rhodri’s focus and intent was to seek attention from his peers rather than to join in with this activity, the parachute game, which all the other children found engaging.

3rd Finding:

It is possible that the use of the iPads assisted with engagement of tasks for both children, the third key finding for this subtheme, noted in the following extracts:


‘Rhodri worked really well on the task. He has a tablet at home, not an iPad, but confident and adept at working it although never been on actual iPad before.’

W15/5/2013 – Research Diary Extract - ‘Garage Band’

‘Sioned worked quietly and was focused on the task…head down…She displayed concentration and engagement.’
They were both enthralled in the iPad programme ‘Word Photo Art’, used in the Valkyries project, and the looping composition programme, ‘Garage Band’. The use of technology added another dimension to their music learning and made it interesting, especially since both of them had never been on an iPad before these music lessons, which was exciting in itself!

4th Finding:

Both children found learning the piano highly engaging.


‘After I’d said “OK, finished, let’s tidy up”, he was still enjoying playing and practicing, trying to get it right.’

This extract highlights Rhodri’s engagement in the task, because he still kept going even after I’d announced ”Tidy up time!” Sioned also found the piano a captivating activity:

T12/3/2013 – Research Diary Extract – Sioned tries the piano for the first time - Hall

‘Some of the children asked if they could try and play the piano for part of their group piece. So a few of us went over to the piano and I showed them where to place their hands, and we talked about middle ‘C’ and right hand finger numbers. Sioned’s fingers fell naturally on the piano. Her long fingers moved dexterously. She picked up a ‘finger jogging’ exercise instantly: 111,222,333,444,5432,111. She surprised me, such a quiet little girl but way more determined than the others to get it right, focusing hard on the instructions’

She displayed intense engagement with the piano from the time she first tried it, as exhibited in this extract.

Both children were deeply engaged in the piano tasks, and they tried hard to work out the various pieces and ‘finger jogging exercises’ they were given, which suggests that learning the piano was a main finding in their musical engagement.

Synthesis of subtheme findings on engagement

The use of the iPads, learning the piano and working in pairs may have enhanced task engagement for both the children. It is also possible that the latter finding, Finding 5, whereby working in pairs increased the levels of task engagement for both children is also related to the subtheme ‘collaboration’.
4.2.2.3 Motivation

This theme related to increased motivation of the children to do more in order to ‘work towards goals, and be more persistent, resilient and optimistic.’ (Humphrey et al, 2008, p.9). This theme did not refer to initial motivation for a task, which was noted as either ‘enjoyment’ or ‘engagement’ but it referred to the extra persistence and resilience shown by the children for the task or activity. The inclusion code for this subtheme was:

(i) Are increased resilience and persistence to practice being shown?

There were 5 key findings in response to this subtheme and were distributed among the children as follows:

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<td>Rhodri</td>
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<td>5th Finding</td>
<td>Both children</td>
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1st Finding:

Sioned seemed to become more motivated after she had ‘discovered’ the piano:

**T26/3/2013 – Research Diary Extract - hall**

‘Sioned was delighted to tell me in front of the group, that she had a piano book! She said it was her friends and she’d been trying to work the piano pieces out.’

This extract suggests that Sioned was displaying an inner need to learn more about the piano, borrowing her friend’s book and ‘trying to work the pieces out.’ The piano would appear to be the main reason for Sioned’s increased levels of motivation.

2nd Finding:

Sioned began to show more and more interest and motivation to learn the piano by getting her own piano book:

**W24/4/2013: Research Diary Extract – after a lesson**

‘I walked the children back to their classroom and Sioned ran to get her piano book from her bag.'
Brand new!

She showed me the book and said she loves piano.’

And her own keyboard for her birthday:

**W24/4/2013: Research Diary Extract**

‘On the way out of school I saw Sioned’s mum who said that Sioned’s started having lessons on the piano outside school with a neighbour, 16, who’s just done her grade 8. They’ve bought her a second hand keyboard for her birthday.’

Practising so hard that she could:

**W1/5/2013 – piano – small room**

‘Sioned was awesome on the piano, demo’d a couple of songs she’s learned with her neighbour, all around ‘C’. She’s starting to read the music notes on the stave now, moving on from finger numbers, and she is using her left hand!

Then she practiced ‘Ode to Joy’ on her own.’

This data highlights Sioned’s intense persistence to learn the piano/keyboard. Further, it shows her progress from wanting to learn the piano, through to getting her own keyboard, and finally, playing with both hands and reading the staff notation. The resilience and persistence shown here is quite incredible.

3rd Finding:

Sioned’s motivation for the piano became a regular conversational feature for her with the other significant school adults around her, particularly Tim, one of the teaching assistants in her class:

**T30/4/2013 – Research Diary Extract - after recorder lesson**

‘Sioned brought in her piano book to show me again this week. She’s so proud. Talked about some of the pieces she’s learning. She also showed the other TA, Tim.

Later I spoke to Tim and asked him if he’d noticed any changes, conversations, anything…… re: Sioned.

He said she comes and talks to him about music often, especially the piano.

I asked him if he’d noticed any impact on her in particular, and he simply said:

“Well, Sioned’s learning the piano now because of it.”’
And her educational psychologist:

**W24/4/2013: Research Diary Extract**

‘The Ed Psych. walked passed and said, “I’ve heard all about the piano today!”’

This data highlights Sioned’s enthusiasm for the piano, wanting to talk about it to the significant adults in her school life, and share this new part of her life with them, possibly even providing a conversation topic for Sioned, who was a very quiet, withdrawn little girl. This suggests possible links with the subtheme ‘social connectedness’, because her motivation and enthusiasm for the piano became a conversation anchor for her with some of the other significant school adults in her life. Further, Tim’s comments indicate the positive impact of the school music classes on shaping Sioned’s development.

**4th Finding:**

The subtheme ‘motivation’ was noted for Rhodri from the late research phase only. It was first noted from an interview with his mother, which was very surprising for me:

**8/5/2013 - Interview with Rhodri’s mum**

‘Rhodri’s mum told me he hadn’t told her the specifics of the music lesson, but that he’d downloaded a piano app onto his tablet and was playing at home and also making up tunes. She thought he’d done this on his own initiative and was delighted that he’d been learning the piano in school and was so interested in it. Her father, Rhodri’s grandfather, had offered to pay for piano lessons for Rhodri because they could see that he was enjoying it so much, but his mother didn’t want him to take on too much expectation and become stressed. At home, he regularly made up songs, drew notes.’

At the time of this extract, Rhodri had not verbally expressed the extent of his feelings about learning the piano to me but I had noted increased ‘engagement’ and ‘enjoyment’, which implied an overall increase in Rhodri’s general learning disposition in the mid and late research phases as compared to the early research phase. This extract suggests that he had been highly motivated to learn the piano because he had downloaded an application onto his tablet himself and was regularly and actively practising what he had learned in school regarding the piano and also other aspects of music, such as ‘drawing notes’, ‘singing’ and composing his own songs. This suggests a high level of motivation regarding several aspects of the music lessons.
5th Finding:

The last key finding for this subtheme was that both children’s motivation increased as the research developed and this is visible from Table 4.2. Motivation was not noted in the early research phase for either child.

Synthesis of findings for motivation

The motivation of both children increased during the whole research phase, but possibly for different reasons. For Sioned the findings suggest that the piano was a major source of her motivation. However, whilst it is clear that Rhodri was highly motivated in many aspects of music as noted in Finding 4:

8/5/2013 - Interview with Rhodri’s mum

‘At home, he regularly made up songs, drew notes, and she said:

“All he does is fingers in the air”’

It would appear that a barrier to Rhodri’s motivation earlier in the research might have been due to his lack of self-regulation.

4.2.3 Social Competence

This theme relates to the students’ ability to feel connected to the school environment, both in feeling a sense of belonging socially and also in connecting with peers in collaboratively based class and group tasks. In the ‘Social and Emotional Aspects of Learning’ Programme (Humphrey et al 2008:9), gaining ‘social competence’ is defined as students actively trying to ‘reduce negative feelings and distraction while in learning situations’. This theme has two subthemes, which highlight aspects of ‘social competence’ as discussed here: collaboration and social connectedness.

4.2.3.1 Collaboration

This theme noted whether the children could work together collaboratively on an activity, or to solve a problem, whereby an emphasis on group music making that focused the children on the empathetic feelings and opinions of others (Rabinowitch et al, 2012). It must be noted here that the overall classroom atmosphere encouraged an ethos to ‘simply try’, where ‘no idea is a bad idea’ in order to give children the reassurance to become involved and express their ideas and opinions. The inclusion codes for this subtheme were:

(i) How is working with others construed?
There were three key findings in response to this subtheme and were distributed among the children as follows:

<table>
<thead>
<tr>
<th>Collaboration</th>
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<tbody>
<tr>
<td><strong>Finding number:</strong></td>
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<tr>
<td>1st Finding</td>
</tr>
<tr>
<td>2nd Finding</td>
</tr>
<tr>
<td>3rd Finding</td>
</tr>
</tbody>
</table>

1st Finding

Rhodri’s ability to collaborate with others developed positively as the research progressed, from finding it difficult to work with others:

4/12/2012 – iPad Footage – school hall – ‘Stomp!’

‘As soon as the children were put into their groups, taking with them one of the boxes of tuned and untuned percussion instruments that I’d pre-organised, Rhodri started grabbing and pulling at the instruments he wanted, arguing with the other children, pushing, shoving, refusing to share or take it in turn… later, whilst the rest of the group were trying to work on their task, he sat a little bit away from them just banging the instruments, loudly, so it was hard for them to focus above the noise of Rhodri’s banging.’

This extract suggests that Rhodri was not focusing on trying to work with the other children, by utilizing empathetic skills such as sharing or turn taking. Further, he did not involve himself in presenting ideas or in listening to the ideas of his peers. However, it would seem that he was negatively trying to get their attention by banging loudly on instruments. However, towards the late research phase, a shift in Rhodri’s general attitude in the music lessons could be seen. He started working well in a paired activity, showing vastly improved skills of empathy and turn taking:

W8/5/2013 – Research Diary Extract - piano

‘Rhodri and Sioned worked brilliantly at the piano today. Each concentrating for ages, helping each other, pointing things out, playing together in the same rhythm, then individually and helping each other whilst working out a new tune, Dvorak’s ‘Largo’. Sat for ages, Rhodri wasn’t ready to leave when their turn over, but obedient and gave others their turn.’

In this latter piece of datum, Rhodri was being helpful with his partner, taking it in turns, and even when his time had finished at the piano and he was not ready to leave, he did leave, recognising that it was somebody else’s turn.
Collectively this data highlights Rhodri’s progress in working collaboratively. Although it is a possibility that the noisier instrumental activities may have overwhelmed him, due to sensory overload, thus impeding his ability to work collaboratively, the second extract clearly shows improved ability in turn taking and working empathetically by listening to others.

2nd Finding:

Throughout the research, Sioned’s ability to work collaboratively in a group, offering some ideas, listening to others, was noted.

**T13/11/2012 – Research Diary Extract – group task**

‘Sioned collaborated well in group work. She gets on well with the other kids. Chats. Easy.’

This extract shows that Sioned was able to work with other children and was able to offer her opinion, even though she was generally quite a shy child.

3rd Finding:

The key finding for this subtheme was that collaboration for both children was more productive when they worked in a paired activity rather than in a group activity. Rhodri found working on a group activity difficult and this was possibly reflected in his lack of self-regulation with his behaviour:

**T5/2/2013 – Research Diary Extract – school hall ‘Graphic Notation’**

‘Rhodri – so disruptive today. Hiding round the corner, he seemed to know his behaviour was unacceptable, he was so challenging??!!’

However, he was more engaged when involved in collaborative tasks organised as partner activities rather than group activities, even when in the larger, noisier school hall with the bigger group, Rhodri was able to cope:

**T5/3/2013 – Research Diary Extract – Co-operative task – school hall**

‘Rhodri worked fantastically with Caitlin. Very focused. Very on task. Very exacting. Listening to each other, he was working with empathy for her ideas.

Much more polite and generally trying very hard to complete the task.

Works better in a pair than a group?’
Group tasks were also sometimes difficult for Sioned, who would ‘withdraw’ on occasions such as noted below:

**T14/5/2013 – Research diary Extract – recorder lesson**

‘…. at times Sioned’s attention was wandering, by just not involving herself in the group tasks, sitting back in her chair. Sucking her thumb and retreating. Leaving the organization of the task to the others. Not interested? Or overwhelmed by enthusiasm, noise and ideas of her table? A recorder lesson is noisy and group tasks are a bit ‘chaotic’ and loud. But when doing group or class performances, she was very involved. Even came out the front with a few others to demonstrate what they could play.’

Possible reasons for this were that Sioned found too much ‘discussion’ or difference of idea emanating from the group overwhelming, a suggestion, which was substantiated by the educational psychologist’s comment about Sioned below:

**27/3/2013: Interview with the Educational Psychologist**

‘She confirmed that Sioned finds assertiveness very difficult. ‘

However, findings suggested that she worked consistently well in paired tasks:

**T5/3/2013 – iPad Footage – Graphic Notation**

‘Sioned got stuck into new task straight away. She partnered with Seren and they worked out how they could play the picture but also what notes to play! Sioned very co-operative, engaged, collaborating well.’

Collectively this data suggests that paired tasks were more productive for both children.

**Synthesis of findings for collaboration**

Both children reacted differently when working on collaborative tasks in bigger groups but it is possible that both children found the negotiation of ideas from too many people difficult. Rhodri’s reaction to this was a tendency towards disruptive, uncooperative behaviour, whereas Sioned’s reaction was a tendency to withdraw quietly from the situation. However, both children seemed to work more productively in a paired task.

**4.2.3.2 Social Connectedness**

In the context of this research, it refers to the feelings of attachment and connection that the children had towards their peers generally and during group during music tasks and activities. The inclusion code for this subtheme was:
(i) Are signs of feeling connected/disconnected to the environment visible?

There were two key findings in response to this subtheme and they were distributed among the children as follows:

<table>
<thead>
<tr>
<th>Social Connectedness</th>
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<tr>
<td>Finding number:</td>
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<tr>
<td>Finding 1</td>
</tr>
<tr>
<td>Finding 2</td>
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</tbody>
</table>

1st Finding

The first finding was that Rhodri’s feelings of social connectedness increased as the research progressed. In the early research phase, Rhodri noted in his iPad diary:

**W30/1/2013 – Research Diary Extract – Rhodri’s iPad Diary – small room**

'I like…..doing stuff with Mrs Thomas…….and playing football with my friends……..if I had any friends……..(moves his head from side to side)…….shocking…….(moves head from side to side)…….I haven’t got any friends.'

Here Rhodri expressed his feeling that he did not have any friends. This was also noted by his educational psychologist during an interview held in the mid research phase:

**22/1/2013: Interview with the Educational Psychologist**

‘She also said that he has feelings of persecution, and feels that people don’t like him’.

But by the late research phase, Rhodri stated the following in his iPad diary:

**W26/6/2013 – Research Diary Extract – Rhodri’s iPad Diary – small room**

‘I like music…….cos…….well…….I like to play with my friends’.

Collectively this data suggests an increase in Rhodri's feeling of social connectedness. Possible reasons for the increase may have been due to the targeted small group setting in which the music lessons took place, thereby creating a social learning experience, and joint learning focus for the children around music activities. Participation in this setting may have helped Rhodri to feel more socially connected, as noted by calling the other members of the group his ‘friends’. It is pertinent that this increased sense of social connectedness occurred in the late research phase, indicating that time may have been a crucial factor in the development of this increase.
2nd Finding

Sioned sometimes withdrew from the environment, as noted in the extract below:

T20/11/2012 – Research Diary Extract – '24 Robbers'

'All kids enjoying learning the rhythmic poem ‘24 Robbers’, moving round in circle, chanting, playing game etc. Sioned was hopping on one foot, not walking properly, and when I asked her if everything ok, she said she had hurt her knee. Yes – she’d been to the doctor. No – she didn’t need an x-ray. Yes – she’d like to sit down.

AFTER THOUGHTS: her teacher said later that there hadn't been any limping or bad knee earlier in the day....so....Sioned withdrew herself from the activity today? If there was no knee issue, then was it an excuse to withdraw? She gets on well with others, but I’ve noticed she ‘zones out’ at times, not in large chunks of a lesson, but in parts. Daydreaming? Anxiety? Since half term, her anxiety issues are much more visible. Maybe she didn’t enjoy the lesson?'

This behaviour exhibits that Sioned would withdraw from a situation and it baffled me at the time. However, as I got to know Sioned better, I started realising that she was perhaps choosing to withdraw due to sensory overload, as the following extract implies:

W27/2/2013 – Research Diary Extract – small room

'Watched the iPad footage after the lesson. At times, end of lesson, or when I put the iPad on and ask a group question, Sioned seems to find the noise and attention seeking behaviour of the others stressful. I noticed her withdraw on these occasions, curl up her legs, suck her thumb and curl her hair, but today she moved and sat on a low ledge at the side of the other three, who stood and hogged all the limelight….interrupting each other, vying for air time. She seems happy to volunteer ideas and contribute, but not to contend with the extreme attention seeking behaviour of children like Ffion, who constantly talks over everyone.

Watched last week’s footage again also, and when I asked the group, at the end, what they had thought about the lesson..........Ffion hogging limelight and shoving her face in the camera. Sioned sat quietly in background sucking her thumb. At times like this, rather than try and get her voice heard, she seems to just withdraw. Doesn’t like conflict? She always gets on with kids, have never seen conflict. She would rather say nothing than argue.'

This extract suggests that the noise of the activity and the group discussions may have collectively been too much for Sioned. As previously discussed, the educational psychologist had told me that Sioned lacked 'assertiveness' (27/3/2013) but I think these
extracts highlight that Sioned sometimes felt overwhelmed by a situation, which she coped with by withdrawing.

**Synthesis of findings on social connectedness**

These findings indicate that both children sometimes felt socially disconnected from a situation. In Rhodri's case, he felt a lack of social connectedness at times because he felt socially isolated from his environment, but for Sioned, she sometimes chose to withdraw from a situation, possibly due to feeling socially over saturated by the environment.

**4.3 Time**

Time was an integral part of this study, and is therefore the fourth emergent theme. Specifically pertinent to this theme was the progress that the children made over time, which will be discussed in a holistic manner in this section.

I would like to begin the discussion of this theme by reviewing Table 4.2, which is an evaluation of the data in relation to time:

- **Early Research** – where progress is seen up to three months;
- **Mid Research** – where progress is seen after participation in the music lessons for up to six months;
- **Late Research** – where progress is seen after participation in the music lessons for up to nine months.

This was helpful in looking for any emergent patterns, issues and key findings in relation to both children.

Pertinent highlights regarding the time factor in relation to Rhodri’s development suggest that in the early research:

- Notable data regarding ‘Personal Competence’ insinuates that his lack of ‘self-regulation’, as noted by his disruptive behaviour, was a common feature of the music lessons. The subthemes of ‘self-confidence’ and ‘self-esteem’ were not noted at all.
- Regarding “Task Competence” the subthemes task ‘engagement’, ‘enjoyment’ and ‘motivation’ were not noted at all.
- Finally, in relation to ‘Social competence’ his lack of ‘social connectedness’ is highlighted but the subtheme ‘collaboration’ was only noted in relation to the lack of collaboration shown.
Table 4.2: Collation of key subtheme findings together with time theme

<table>
<thead>
<tr>
<th>Date</th>
<th>Rhodri</th>
<th>Date</th>
<th>Sioned</th>
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<tbody>
<tr>
<td></td>
<td>LACK OF SELF-REGULATION</td>
<td>6/11/2012</td>
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<td></td>
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<td>13/11/2012</td>
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<td>20/11/2012</td>
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<td></td>
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<td>27/11/2012</td>
<td>H</td>
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<tr>
<td>Early Research</td>
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<tr>
<td></td>
<td>LACK OF SELF-REGULATION</td>
<td>4/12/2012</td>
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<td></td>
<td>LACK OF COLLABORATION</td>
<td>11/12/2012</td>
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<td></td>
<td>INCREASED SELF-REGULATION</td>
<td>22/1/2013</td>
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<td></td>
<td>LACK OF SOCIAL CONNECTEDNESS</td>
<td>23/1/2013</td>
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<td></td>
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<td>Mid Research (6 months)</td>
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<td></td>
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<td></td>
<td>COLLABORATION</td>
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<tr>
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<td>13/3/2013</td>
<td>note</td>
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<td>SELF-ESTEEM</td>
<td>26/3/2013</td>
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<td></td>
<td>ENGAGEMENT</td>
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<td></td>
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<td>22/5/2013</td>
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<td>Enjoyment</td>
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<tr>
<td>Self-esteem</td>
<td>9/7/2013</td>
<td>H Assembly</td>
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</tbody>
</table>

* SR = small room  H = Hall  CR = class room  
* SG = small group  BG = big group  WC = whole class

By the late research phase substantial increases in all thematic areas were noted regarding Rhodri’s development:

- In relation to ‘Personal Competence’ several entries highlighted increased ‘self-esteem’ and ‘self-confidence’.
- Regarding ‘Task Competence’, several entries mentioned increased ‘motivation’, ‘engagement’ and ‘enjoyment’.
- Finally, significant increases were also noted in response to ‘Social Competence’, with self-reported increased feelings of ‘social connectedness’.

Pertinent highlights regarding the time factor in relation to Sioned’s development suggest that in the early research:

- In relation to ‘Personal Competence’, only the subtheme ‘self-confidence’ is noted but all three subthemes ‘self-confidence’, ‘self-esteem’, and ‘self-regulation’ are noted in the late research.
- Regarding ‘Task Competence’, the subthemes ‘enjoyment’, and ‘engagement’ are mentioned throughout the research but no entry for ‘motivation’.
- Finally, there is no significant pattern in ‘Social Competence’, with the subthemes ‘collaboration’ and ‘social connectedness’ noted throughout all time phases.

By the late research phase substantial increases in all thematic areas were noted regarding Sioned’s development:
• In relation to ‘Personal Competence’, all three ‘self-confidence’, ‘self-esteem’, and ‘self-regulation’ are noted.
• Regarding ‘Task Competence’, entries for ‘motivation’ substantially increase as well as ‘enjoyment’ and ‘engagement’.

In total, the patterns discussed here suggest that time was a crucial factor in the implementation of the music intervention programme, with notable improvement occurring in late research.

### 4.4 Individual responses to the music intervention programme

The children responded in strikingly different ways to the music activities, however, there were two pertinent commonalities between them, which were that they both had greatly enhanced feelings of self-esteem by the late research phase and that time played a crucial role in their development.

Sioned’s development was not as seemingly linear as Rhodri’s, and although substantial increases were noted in seven out of the eight subthemes, with her lack of social-connectedness represented in all time phases due to her tendency to withdraw from situations, she also had extremely significant increases in her feelings of self-worth and self-esteem. Therefore, figure 4.1, which represents Sioned’s musical development, may be described as circular, with ‘self-esteem’ at the heart of the figure.

Regarding Rhodri, his development seemed to be hierarchical, as represented in Figure 4.2, beginning with his lack of behavioural self-regulation and developing from that dominant behaviour in the early research phase, through to increased behavioural self-regulation, enjoyment, engagement and collaboration, finally through to increased levels of self-confidence and self-esteem.

**Figure 4.1** Sioned’s circular development
This chapter presented and analysed the findings from this study, which were presented in Table 4.1. This table was then used as the conceptual framework for the chapter’s deliberation of the findings, which will be reviewed in chapter five alongside relevant literature in the field.
Chapter 5: Discussion of Findings

5.1 Introduction

This research aimed to contribute to the educational field of music in order to explore the impact of music on students since little is known about how music affects our emotions and behaviour (Hallam and Prince, 2000, p.9). The study’s main research question was as follows:

‘How do intervention music lessons, which utilize sociocultural educational principles, relate to the three interconnected aspects of social, emotional and behavioural development of two children aged between seven and eight years old in a mainstream school setting in Wales?’

In doing case study research, which was ethnographic in orientation, for the duration of a school year, the findings focused on the development of two students who were presenting with SEBD. One of the students exhibited disruptive ‘acting out’ behaviour (Barth et al, 2004; Altepeter and Korger, 1999) and the other student exhibited withdrawn anxious behaviour (Cooper, 1999; Schoenfeld and Janney, 2008) as noted by the visible signs of her impulse control disorder. The themes emerging from the findings indicated benefits in three major thematic areas: personal competence; task competence; social competence. Additionally, I added a fourth theme, time, because the children’s progress developed positively over the duration of the music lessons.

This chapter examines the key findings together with my review of the literature in order to provide an answer to my research question and also to discuss contributions to my substantive, theoretical and methodological aims and issues. It is therefore divided into two sections with an additional concluding section at the end of the chapter.

5.2 Links between the key findings, literature review and my research question

This section examines the key findings in relation to the literature review in order to address my research question. In doing so it will note any consistencies between my findings and other research in the field, and it will also note any unanticipated findings that are not consistent with other literature. Overall, the findings revealed strikingly different responses in the children and they uncovered some unexpected outcomes.

5.2.1 Personal competence

Collectively, this theme had the largest number of findings, particularly regarding the subtheme self-regulation. The three subthemes of self-regulation, self-confidence and self-esteem contained in this theme will be discussed holistically.
First, regarding the subtheme self-regulation, Sioned experienced a genuine emotional response when listening to classical music, which made her feel calm (finding one). This provides support for Lundqvist et al’s findings that music can instigate an authentic emotional response to music, which is consistent with the ‘emotivist position’ (2008, p.75). However, it raises interesting questions regarding the finding from North et al (2000, p.265) that the only perceived benefit of classical music by the majority of respondents was to please teachers and parents. Since classical music in this study instigated a genuine response from Sioned, the question is how would a sample of the teenagers in North et al’s study (2000) have responded to actually listening to selected pieces of classical music? Further, would their self-reported thoughts prior to listening to classical music, have changed?

The second and third findings regarding self-regulation uncovered the calming aspect of listening to music, which is consistent with other authors (Thayer et al, 1994; North et al, 2000; Saarikallio, 2007, 2011). Significantly, it was Sioned herself who realised that she could use music to calm her and remove stress (finding two), in other words as a self-regulation mechanism for preferred mood. I suggest that this finding is consistent with Saarikallio’s research (2007, p.102) that one of the important uses of music for adolescents is to regulate elements of mood state, to help control feeling good, and to help the ‘ability to voluntarily experience preferred moods and aim to achieve them’. It was also Sioned who astutely commented on the ‘peaceful’ impact that listening to the ukulele had on the rest of her group, thereby regulating everyone’s mood and behaviour (finding three). Collectively these findings resonate with the research outcome by Graham et al (2009, p.491) that the presence of music demonstrates potential as therapeutic intervention for individuals experiencing acute anxiety states. However, the type of music being played is crucial and significant factors are that classical music and the soothing sound of the ukulele instigated this ‘peaceful’ atmosphere.

The music intervention classes uncovered insightful findings regarding Rhodri’s behavioural self-regulation. Firstly, he demonstrated a lack of self-regulation in the early research phase (finding four), which may have been preventing him from participating in the music activities. This finding highlights that behaviour may be a barrier to learning, which is consistent with the statements of the Ofsted inspectors (2004, p.12). However, later findings uncovered possible reasons contributing to his lack of behavioural self-regulation, namely that the large hall and noisy instrumental activities seemed to have a detrimental effect (finding eight). This was an unanticipated finding because my initial observations had not accounted for Rhodri’s behavioural difficulties due to ‘sensory overload’, such as that caused by noisy instrumental activities in a large space. This conduct exhibited by Rhodri was usual in the early research phase, and it is consistent with Boxall’s (2013, pp.51-52) descriptions of some of the ‘nurture group’ children who may be initially overwhelmed by a situation, therefore, ‘limited’ choice in the earlier stages might be more appropriate. In hindsight, these early music lessons involving collaborative group work with a selection of percussion instruments to choose from, may have been ‘sensory overload’ for Rhodri.
thereby exacerbating his tendency to be ‘disruptive’ and ‘act out’ (Barth et al, 2004; Altepeter and Korger, 1999).

However, other music activities such as appraising classical music, had a relaxing, regulatory, calming impact on Rhodri’s physical behaviour (finding five). This quietening influence of music resonates with other research whereby the presence of ‘calming’ background music for students presenting with SEBD when doing mathematics (Hallam and Price, 1998) and science (Savan, 1999) induced positive physiological, behavioural and concentration changes. Although this finding refers to a music appraisal lesson, the combination of art and music in the activity is significant, and I suggest that the multi-sensory aspect of ‘doing’ and ‘listening’ combined to achieve a comforting influence.

Playing the ukulele also had a calming impact on Rhodri as noted in his general demeanour and behaviour (finding 6). This outcome was very unexpected and I was taken aback by Rhodri’s response to this instrument. This finding, whilst unique, may draw parallels to the research findings of Clift and Hancox’s choir singing (2001, p.253), wherein active participation in singing induced feelings of well-being and relaxation, which one could argue Rhodri displayed in this extract. However, not all participation in music regulated Rhodri’s behaviour in this way, as noted previously. Therefore, I suggest that the ukulele itself was the key factor in regulating Rhodri’s behaviour and attention.

However, improvements in some of the activities that Rhodri had found difficult in the early research phase were witnessed over time (finding seven). I suggest this was related to participation in musical games such as ‘The Name Game’, which is a game built on the concept of ‘circle time’ (DfES, 2005, Appendix 5). This supports Cooper’s assertion (2008) that games such as ‘circle time’ are an effective tool to incorporate into intervention strategies for children presenting with SEBD. Further, I suggest that this finding supports the view that a specific teaching focus on developing children’s metacognitive acquisition of semiotic tools, such as self-regulation, is essential because not all children have ‘acquired’ these tools (Karpov and Haywood, 1998, pp.27-28). I suggest that finding nine, where Rhodri started regulating the behaviour of Ffion, also highlights the possible effectiveness of certain collaborative music activities in positively shaping Rhodri’s development of behavioural self-regulation. This was an insightful finding, because he would have previously either joined in with her or encouraged her. This occurred in the late research period and may suggest that Rhodri had started to think more about the regulation of his own behaviour, which is consistent with the neo-Vygotskian theories of metacognitive mediation:

‘Regulation of others’ behaviour by means of the word gradually leads to the development of verbalized behaviour of the people themselves.’ (Vygotsky, cited by Karpov and Haywood, 1998, p.28)

The last finding relevant to the self-regulation subtheme was that both mothers believed active involvement in music, specifically in playing the piano, had an impact on
reducing the levels of anxiety for both the children (finding ten). One may draw parallels between this finding and the music intervention research of Hillier et al (2012, p.210) whose outcomes, from pre and post measures showed a significant increase in reduced self-reported anxiety. However, I suggest that it was specifically the piano that was the conduit to decreasing levels of anxiety. I speculate that it could be the multisensory aspect of learning the piano that is possibly so all consuming, and as Rhodri’s mother noted, this multisensory focus ‘…takes him out of his worries.’ Further, I believe that the children enjoyed the group aspect of learning the piano in combination with the painting activity, which enabled them feel a sense of group belonging (Cooper and Whitebread, 2007; Boxall, 2013).

Findings relating to the second subtheme, self-confidence, indicate that both children’s self-confidence increased over the duration of the music lessons. This is consistent with Harland et al (2000, p.157) who specifically noted increased self-confidence in music students due to performing. Whilst the children did ‘perform’ regularly in class, and both were confident to perform in the music assembly in front of the whole school, I suggest that the main reason for enhanced self-confidence may have been linked to achievement in music, specifically the piano. This will be explored in detail together with the literature review next.

The first finding for this subtheme was that Rhodri’s confidence increased substantially as the research progressed, from the perception of both his mother and the educational psychologist that he lacked self-confidence to witnessing Rhodri’s self-assurance in himself when playing a piano solo in the music assembly. I suggest that this improvement in his self-confidence was possibly related to his accomplishments in music, which draws parallels with Boxall’s (2013, p.146) observations that when the children in nurture groups build up an integrated skill, they ‘gain a sense of organization, orderliness and sequence, and the pleasure of achievement’. Learning the piano was exactly this experience of organization and sequence, and began for Rhodri with earlier activities that developed his rhythmic understanding.

The second finding was that Sioned displayed self-confidence throughout the duration of the research but this confidence grew due to the pride in her accomplishments on the piano (finding three). It is possible that her confidence was boosted through her achievements with this instrument and I speculate that her affinity with the piano gave her a sense of musical identity, which in turn boosted her sense of self. Sioned was often seen with her ‘piano book under her arm’ and talked extensively about the piano to significant school adults in her life, therefore, I suggest that as music became ‘embedded in the emotional landscapes, routines and structures of (Beatrice’s) (main participant) life’ of Barrett’s research (2011), so it did with Sioned. In utilizing Hargreaves et al (cited by Barrett, 2011, p.406) work on identities in music, I suggest that music may have functioned as a ‘resource’ for Sioned, helping to shape her identity. Whereas in Barrett’s (2011, p.419) study her main participant:
‘fashioned different versions’ of her musical self (IIM), such as singer or dancer, and of herself in music (MII), such as exploring different musical styles’

I suggest that Sioned had one predominant version of her musical self (her identity in music (IIM)), which was that of a ‘pianist’ and I speculate that this enhanced her self-worth and self-confidence.

In a collective examination the findings for the third subtheme, self-esteem, it is highly possible that both children developed an increased sense of ‘self-esteem’ through a sense of achievement gained from active participation in music, which is consistent with the research of Harland et al (2000, p.148). In relation to Table 4.2, feelings of obvious ‘self-esteem’ were not noted with regard to either child in the early research phase, but developed as the music intervention classes proceeded.

As the research progressed, Rhodri’s self esteem increased (finding one), and I suggest this was directly related to his overall accomplishments in music, such as his ability to play basic tunes on the recorder, piano and ukulele and to read simple staff notation for the recorder and the piano. I posit that Rhodri’s practical achievements and developing understanding of music notation was substantially aided through the teaching focus, which combined scientific concepts and everyday concepts (Moll, 2002, p.10). The use of ‘jelly’, ‘jam’ and ‘coca cola’ in place of ‘quavers’, ‘crotchet’ and ‘semi-quavers’ (cf., Figure 5.1) helped him make sense of the concept of rhythm, thereby providing access to learning to read staff notation for the recorder and the piano. He was very proud of his grasp of this concept, and he recognised it as a huge achievement himself, which I believe boosted his self-esteem.

**Figure 5.1**

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jel-ly   jam   co-ca-co-la
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I suggest that this focus in combining scientific and everyday concepts (ibid.) also enhanced Sioned’s musical understanding, which ultimately led to feelings of achievement and increased feelings of self-esteem as the research progressed (finding five). I also incorporated scientific and everyday concepts (ibid.) to teach the piano, whereby finger numbers were used initially in place of traditional staff notation. This related playing the piano to a number system with which they were already familiar and from this ‘scaffold’ (Clay and Cazden, 2002, p.212) the children learned how to read staff notation. Utilizing the connection between the everyday and scientific concepts facilitated the learning process making a complex learning situation accessible.

Several findings from this subtheme highlight the importance of verbal and non-verbal praise from adults as an effective positive intervention instrument for both children (Bani, 2011, p.47; Swinson and Cording, 2002, p.72). First, Rhodri responded well to
praise from teachers and other significant adults in his school and home life and it was possible that this praise made him feel good about himself, thereby enhancing his self-esteem (findings two and three). This provides support for the work of Gallimore and Tharpe’s ‘means of assisted performance’ (2002, pp.178-183), within which ‘contingency management’, such as praise, stickers or rewards, is advocated as a formidable discursive means to encourage development. Further, it is consistent with the pupil perspective from the research of Harland et al (2000, p.151) where it was highlighted that younger students noted that ‘receiving compliments about their work from others made them feel good about themselves’. Second, the self-esteem of both children may have been enhanced from the feelings of family pride shown after the assembly performance (findings four and six). These findings are insightful and complex, suggesting that the positive interest shown within the children’s families towards their musical achievements may have significantly boosted their feelings of self-esteem. This resonates with the view of Lawrence (cited by Swinson, 2008, pp.165-166), who states that children can acquire self-esteem ‘by their perceptions of how they are accepted and valued by adults.’ Also, these findings draw parallels with Boxall’s view (2013, p.133) that children in nurture groups have a poor self-image and that for some, ‘the response of the adults to their achievements means as much or even more than the achievement itself, so great is their need to be valued’.

5.2.2 Task Competence

The three subthemes enjoyment, engagement and motivation will be discussed collectively in this section.

Overall, enjoyment was a recurring key finding for both children, which is consistent with other research in the field (Hallam and Prince, 2000, p.68; DCMS, 2011, p.8; Harland et al, 2000, p.26) and occurred throughout all research phases for Sioned (finding two), and for Rhodri from mid research onwards (finding one). It is possible that Rhodri’s lack of behavioural self-regulation may have been a barrier to his enjoyment in the early research phase because it impeded his ability to participate in the musical activities. However, as noted by Boxall (2013, p.63) it is important that teachers of vulnerable students understand that behaviour is ‘communication’ and in organization of the learning experience for nurture group children, ‘manageable routines and security’ are key factors. Therefore this finding highlights the importance of teachers questioning and evaluating their teaching, and carefully planning the next steps for learning, taking into consideration the responses of the individual child. This is where the use of sociocultural educational tools, such as the zone of proximal development in combination with a metacognitive focus, can assist in assessing and planning these next steps.

Active participation in learning the piano was an intensely enjoyable experience for both children (finding four), which is consistent with the research on active participation in music in increasing feelings of happiness and inducing positive mood (Clift and
Hancox, 2001) and increasing the overall sense of ‘well-being’ (Ashley, 2002). However, I think that learning the piano was a specifically enjoyable experience for both the children, and I suggest that their enjoyment of learning the piano is consistent with Harland et al’s research that learning something that the students have not encountered before, can be an exciting, stimulating experience through which the students may develop the whole personality in gaining a ‘wider view of life’ (2000, pp.159-161).

Two unanticipated findings were that the use of an inanimate soft toy enhanced enjoyment for Sioned (finding three) and that implementation of variety in their music lessons, including integration across a range of subjects, enhanced enjoyment for both children (finding five). Regarding the use of the inanimate toy, Monkey, in the music lessons, Sioned enjoyed hugging, cuddling and talking to him. This affection shown to Monkey by Sioned is consistent with Boxall’s (2013, p.111) observations of the interactions of nurture group children with soft toys, which she says are ‘comfortable and comforting’, and ‘are the object and vehicle of raw feelings of love and hate…are hugged and cuddled.’ Further, she states that the toy can become an important group member (op. cit.), which is consistent with the way that Sioned perceived Monkey.

Finally, I suggest that learning was enhanced for both children due to their enjoyment of the diversity contained within the music lessons, due to the variety of the musical activities themselves and also due to the use of integrating subjects from other domains into the lessons (finding five). This is consistent with the views of the Ofsted (2011b, p.10) inspectors who state that the use of ICT in lessons enhances the learning experience. Further, I specifically incorporated variety into the music lessons in order to address the children’s limited attention span because I noted that diversity and integration of subjects increased their attention span, thereby providing an opportunity for the children to achieve success (Cooper, 2008, p.17).

The children’s responses were quite different regarding the second subtheme, engagement, with engagement in the tasks and activities being a recurring finding throughout the whole research phase for Sioned (finding one) and a developing state for Rhodri from mid research onwards (finding two). As suggested previously this barrier to engagement could be due to Rhodri’s lack of behavioural self-regulation (Ofsted, 2004, p.12), exacerbated by ‘sensory overload’ caused by noisy instrumental activities in a large space (self-regulation: finding eight).

The piano itself was a major factor in both children’s musical engagement (finding four) and I suggest that this highlights responsiveness in education as critical in ‘empowering’ children to access the curriculum (Ladson-Billings, 1994, pp.17-18). The reason for this suggestion is because I had not intended to include learning the piano into the music activities because the school had limited resources. But after Sioned’s note to the Head, which expressed her intense enjoyment when she tried the piano for the first time (subtheme enjoyment, finding 4), and the other children’s obvious enthusiasm for the piano, I devised a programme for them based around one piano, painting and appraising
music. The children had to take it in turns and rotate around the activities, which they did very well. Therefore, utilizing this ‘consultative approach’ (Cooper, 2008, p.19) and finding out what interested the pupils, was crucial in their overall engagement of music.

Two unexpected findings occurred in relation to this subtheme which were firstly finding three, where the use of iPads may have assisted the engagement of both children in musical activities, and secondly finding five, where working in a pair increased the levels of task engagement for both children, which may also be related to ‘collaboration’. Regarding finding three, both children utilized the iPad programmes ‘Word Photo Art’, an integrated programme combining art, photography and literacy, and also ‘Garage Band’, a looping programme that can assist in composition. The use of technology added another dimension to their music learning and made it interesting, especially since both of them had never been on an iPad before these music lessons, which was exciting in itself! These findings are consistent with the Ofsted (2011b, p.10) evaluation report ‘ICT in schools 2008-11’ which states that the integrated use of ICT enhances the learning experience. The example cited to highlight increased engagement and concentration, which was a Key Stage 1 pupil who had ‘very poor concentration’ becoming quickly ‘absorbed’ in the ICT lesson when ‘manipulating a music program to make simple beats and rhythms’, was a startlingly similar experience to my research.

There were some insightful and unanticipated findings regarding the third subtheme, motivation. Firstly, regarding Sioned, findings one, two and three almost plot her musical journey from initially ‘discovering’ the piano (finding one) which was when her levels of motivation began to increase, through to the intense resilience and persistence regarding learning and practising the piano, which led to her having her own keyboard, lessons outside school, and being able to play with both hands and read the staff notation (finding two). Finding three suggests that Sioned’s motivation and enthusiasm for the piano provided her with a central conversation point with the significant adults in her school, possibly thereby linking to the subtheme ‘social connectedness’. I posit that these findings, whilst unique, do resonate on some level with Boxall’s (2013, p.133) comments that teacher encouragement can instil into children the ‘sense that someone has faith in them, which motivate(s) them to achieve’. Sioned received a great deal of encouragement from the significant adults in her school and at home as well as from me (re: finding 3), providing her with emotional support and enthusiasm for her efforts, which I suggest was highly motivational for her.

The motivation of both children increased during the whole research phase (finding 5) but Rhodri’s motivation for music, was only really noted in the late research phase (finding 4), where his resilience and persistence in practising the piano at home and also other musical activities such as ‘drawing notes’, ‘singing’ and composing his own songs, as reported by his mother, came to the forefront. This was an astonishing outcome from the research. In noting the hierarchical nature of Rhodri’s development, seen clearly in Figure 4.2, I would speculate and suggest that Rhodri’s learning seemed to progress through various affective stages, from the lack of self-regulation, to
increased self-regulation and enjoyment, followed by engagement and collaboration, which then collectively led to motivation. These forerunners to his increased motivation are an insight into Rhodri’s learning once the barrier of his disruptive behaviour had been addressed in the music lessons. It is pertinent to note that the processes involved in the stages highlighted in Figure 4.2 derived from the holistic application of Eun’s eight sociocultural principles (2010) to the music lessons, in particular ‘responsive instruction’, in combination with the targeted small group approach (NIHCE, 2008; Cooper, 2008).

5.2.3 Social Competence

This last theme contained two subthemes, collaboration and social connectedness, and they will be discussed below.

Regarding collaboration, finding one revealed that Rhodri made substantial progress in his ability to collaborate with other children as the research progressed. There are a variety of possible suggestions that may have contributed to Rhodri’s progress in this area, but one of the possibilities is that he benefitted from being in a smaller, targeted group, which was advantageous in helping self-regulate Rhodri’s behaviour. This is consistent with Cooper’s evaluation (2008, pp.14, 19) that children who have an ‘undeveloped sense of self’ and ‘weak communication and social skills’ may benefit from an ‘environment that is more intimate, thereby being able to focus on addressing their emotional needs and security’. I suggest that through involvement in the smaller targeted group, Rhodri was able to learn some behaviours associated with collaboration and empathy, such as listening, taking it in turns, in a more intensive way.

Finding two highlighted that Sioned was able to work collaboratively, demonstrating collaborative traits such as listening to others, offering ideas and taking it in turns, but finding three highlighted that she and Rhodri both worked more productively in a pair rather than a group. Overall, both children reacted differently when working on collaborative tasks in bigger groups, and it seemed that both children found the negotiation of ideas from too many people difficult. Rhodri’s reaction to this was a tendency towards disruptive, uncooperative behaviour, whereas Sioned’s reaction was a tendency to withdraw quietly from the situation. However, both children seemed to work more reliably well in a paired task. These findings are consistent with Daniels (2010, p.115) and Tudge (2002, p.156) who state that organisation of collaborative activities in the classroom is no easy feat. Tudge points out the recommendation of several authors who suggest that collaboration between students of equal levels, as opposed to involving the pairing of a more competent child with one who is less competent, may be more productive. However, I would suggest that organisation of collaborative tasks involving children presenting with SEBD focus on two further aspects: the temperament of the children and the type of activity itself.
There were two findings regarding the subtheme, social connectedness, but both findings indicated that the children sometimes felt socially disconnected from a situation. In Rhodri's case, he felt a lack of social connectedness at times because he felt socially isolated from his environment, but for Sioned, she sometimes chose to withdraw from a situation, possibly due to feeling socially over saturated by the environment. Sioned’s withdrawal from some activities was noted in all research phases, although finding one suggests that Rhodri's feelings of social connectedness increased as the research progressed, notably going from feeling that he didn’t have any friends to stating:

‘I like music…….cos……well……I like to play with my friends’.

The increased feeling of social connectedness that Rhodri displayed is possibly due to increased feelings of belongingness due to involvement in a close knit musical group, which is consistent with other researchers (Cooper and Whitebread, 2007; Boxall, 2013), particularly with Dingle et al’s choral research (2013, pp.412-414), whereby participants experienced an increased sense of belonging due to participation in a joint musical activity with other group members. I would also suggest that group participation in music activities led to increased feelings of ‘attachment to school’, because Rhodri’s overall ‘degree and commitment to and engagement with schooling’ had also increased (Cooper, 2008, p.14) along with his feelings of social connectedness.

5.2.4 Time

Collectively the findings with regard to this theme indicated positive development for both children in areas of the three major themes and subthemes, noted in Table 4.2, which increased as the research progressed.

These findings suggest that time played a significant role in assisting and contributing to positive developments in each of the three main themes: personal competence; task competence; social competence. As time progressed from early research (the first three months), through to mid research (six months) and finally to late research (nine months), substantial gains regarding the children’s progress in each of these areas were noted. This time factor is consistent with Humphrey et al (2008, pp.99-100) that sufficient allocation of time and space is a crucial factor in intervention programmes and their recommendation was for the small group intervention to last at least one term, 12 – 16 weeks, and consist of two 40-minute sessions per week. Further, I suggest that sufficient time is required for the children presenting with SEBD in targeted group interventions in order to feel totally ‘secure’ and ‘safe’, two components noted by Cooper (2001) who states ‘Students learn better when they feel safe and secure and the risk of failure is not experienced as a threat.’

The second pertinent point is that the progress visible over time as highlighted in Figure 4.2 emphasizes the series of small steps in affective development that were required in
order for the children to move forward positively. Therefore I suggest that alongside the thematic time factor in the improvement highlighted here was the crucial role that sociocultural educational principles played in these ‘small steps’ of progress. In order to highlight an example of these ‘small steps’, I base the following summary of the utilisation of Eun’s (2010) eight sociocultural educational principles around the concept of ‘The Name Game’, which was a game we played based on the principles of ‘circle time’ (DfES, 2005, Appendix 5):

1. The game was collaborative, involving other children who understood they had to take turns, maintain a steady pace, participate in saying each other’s names
2. The game was active and drew parallels to the other rhythmic learning they had been working on;
3. Metacognitive mediation was used by me as the facilitator to remind the children of their behaviour, to encourage the children to get involved
4. The game itself was contextualized as the tapping, clapping and saying names are the types of games many children play outside the classroom;
5. The game’s inclusion was a responsive decision on my behalf as I felt the children needed to develop skills of collaboration and empathy, such as taking it in turns.
6. The game was integrated, utilizing physical movements in combination with chanting and rhythm;
7. Much discursive instruction took place, with modelling, instructing, contingency management.

The metacognitive focus is seen in points 1 to 7 above and they are indicative of the role of implementation of the sociocultural principles in the music programme. Further, the fact the children each say everyone’s names contributes to the concept of the ‘group’ (Boxall, 2013, p.44), and therefore the feeling of social connectedness and attachment within the group.

One could view the time theme, as displayed in Table 4.2, as a representation of the zone of proximal development, which involved a focus on planning the activities required for the small steps of progress. For example, when the children had grasped ‘The Name Game’ we played a different game, which focused on acquisition of different skills. In this sense, I utilized the zone of proximal development in a similar way to Hedegaard (2002, p.367) who:

‘Worked with the zone of proximal development as a relation between the instructional steps and the steps of children’s learning/acquisition process’.

Hedegaard utilized the ZPD as a ‘tool’ for ‘class instruction’ (ibid., p.369) since she states that ‘it should not be the function of school pedagogy to offer special instruction to each child in a class. Instead it must be based on development of common knowledge and skills’. However, I utilized the concept of ZPD as both an informative class tool but also as an essential tool to identify and work with individual children, an imperative
focus when utilizing the ZPD to work in the context of special educational needs (Kugelmass, 2007, p.275; National Assembly for Wales, circular 17/2006, p.v).

5.3 Addressing the aims of the research: substantive, theoretical and methodological

This section discusses my contribution to my substantive, theoretical and methodological aims and issues.

I felt that a substantive problem could have been the lack of information and research on music intervention classes for children presenting with SEBD, therefore I had to draw on the research in the wider field of literature pertaining to music and also intervention procedures. This research in the wider field was helpful in gaining eclectic and varied perspectives about the general impact of music on emotions and behaviour and did draw some parallels to my findings. However, my study uncovered some unexpected outcomes that did not draw direct comparisons to other literature in the field and I would therefore suggest my research has contributed to the field by possibly highlighting further research requirement in these areas. In particular, I suggest that research regarding the possible link between group instrumental teaching for students with SEBD and the lowering of anxiety, with a special focus on the multisensory aspects of learning the ukulele and piano.

The associated issue with my theoretical aim was that I felt that guidance on the development of affective development was lacking as an explicit focus in Eun’s (2010) model. Therefore in order to address this I adjusted the model to incorporate the work of Karpov and Haywood (1998, p.27) who distinguish two major types of mediation from the writings of Vygotsky: metacognitive and cognitive. They state that metacognitive mediation refers to children’s acquisition of semiotic tools for self-regulation, such as self-planning, self-checking, self-monitoring and self-evaluating, and cognitive mediation refers to children’s acquisition of cognitive tools that are necessary for solving subject-domain problems (ibid., pp.27-28). Further, they state that acquisition of these semiotic tools can help children to overcome impulsive action, to plan a solution to a problem prior to its execution and to master their own behaviour (op. cit.). This helped me to gain an additional perspective on the affective development of the children.

An example that highlights this standpoint was a finding from the late research phase, when Rhodri started regulating Ffion’s behaviour (finding 9, self-regulation). Prior to appreciating the work of Karpov and Haywood I would not have fully understood the implications of this type of interaction between Rhodri and other children, which highlights Rhodri’s developing acquisition of the aforementioned semiotic tools because:
‘Regulation of others’ behaviour by means of the word gradually leads to the development of verbalized behaviour of the people themselves.’ (Vygotsky, cited by Karpov and Haywood, 1998, p.28)

Therefore, in summary, I suggest that my theoretical issue was addressed by incorporating the metacognitive theory of Karpov and Haywood (1998) into Eun’s (2010) sociocultural model because it added an affective dimension, which aided my perception of the research context. Further, I suggest that this addition of the metacognitive theory was a refinement of Eun’s (2010) model and would be transferrable to other research situations where a study focus was on the affective and/or affective/cognitive domains.

The methodological problems that I was concerned with were whether I could access the children’s thinking and understanding of how music lessons might relate to their affective development. Therefore I realised that I needed to develop some specific research tools within the context of ethnography in order to address this issue. The use of the iPad diaries, Self-Assessment Sheets, ‘Music and Me clouds and rainbows’ were some of the strategies I implemented in order to gain an ‘emic’ perspective, that is the ‘insider’ perspective of the children’s words thoughts and ideas (Harvard Education Site 2014). I suggest that these methods were highly effective in addressing this issue and I posit that they would be transferable to another research context. Additionally, I devised a music programme based around the principles of sociocultural education, which I believe would also be possible to replicate. I posit that certain aspects of the programme could be facilitated by non-specialist music teachers, such as the ‘Valkyries’ project, but training may be required to deliver other aspects of the programme, such as teaching of the basics in rhythm, the recorder and ukulele. Collectively these actions addressed the methodological problems and I suggest that they made a substantial contribution to the overall research methodology.

If I were to repeat this study, I may use a similar research design to Koutsoupidou and Hargreaves (2009) who conducted a quasi-experimental study of the effects of improvisation on the development of children’s creative thinking over six months. This involved one experimental group and one control group, where the creativity of both groups was measured prior to the research and then post research in order to compare the findings and assess whether any increase in creativity had occurred. I suggest that this design could be used to explore my topic, but since my research was an investigation into the children’s affective development, a different test would have to be utilized. I posit that the ‘Boxall Profile’, which ‘indicates their underlying needs for attachment and early learning experiences’ (Boxall, 2013, pp.35-36), would be a potentially effective assessment tool, and would have to be administered pre and post research to note any impact in their affective development.
5.4 Summary

Through discussion and analysis of the four themes identified in chapter 4, together with my review of the literature, this chapter has discussed how answers to my research question have been provided and also how they contribute to understanding of my substantive, theoretical and methodological issues. I posit that my research may have made a substantial contribution to the field of music education, and also to understanding the impact of music on students regarding how music affects emotions and behaviour.

The findings will be further discussed in Chapter 6 with a review of how they addressed my substantive, theoretical, and methodological aims. Additionally, I will offer recommendations for policy and practice.
Chapter 6: Conclusion

6.1 Addressing the main research question

This ethnographic in orientation case study addressed the following central question:

‘How do intervention music lessons, which utilize sociocultural educational principles, relate to the three interconnected aspects of social, emotional and behavioural development of two children aged between seven and eight years old in a mainstream school setting in Wales?’

It positioned around two children who were presenting with SEBD and these children participated in intervention music lessons twice a week, along with several other students in their class, over the duration of one school year. This ‘in-depth’ investigation (Flyvberg, 2006, p.228) uncovered a significant amount of material and data regarding how music shaped their development, thereby providing many rich insights into this topic. Multiple viewpoints were sought and expressed during the course of this research, enabling me to triangulate between different aspects of the same thing (Holliday, 2005, p.75) and this was recorded with ‘rigour’ (Silverman, 2006, p.94).

By ‘going to where the action is’ (Grills, 1998, p.3), I was able to develop a familiarity with the children and their families, and in doing so, understand their ‘wishes’, ‘frustrations’ and perceptions of the intervention music lessons. One of the ‘wishes’ that emerged was the desire to learn the piano, and this activity had a profound impact on both the children in the study. One of the ‘frustrations’ was the sensory overload that Rhodri experienced in some of the noisier, collaborative instrumental activities, in the large school hall. In the latter instance, the utilization of ethnographic methods was advantageous in uncovering knowledge that ‘challenged my assumption’ (Myers, 1999, p.6) regarding Rhodri’s behaviour, because initially I assumed that the ‘barrier’ to his learning and participation in the music lessons was his lack of behavioural self-regulation. The in-depth nature of the ethnographic in orientation approach facilitated close observation of this behaviour and encouraged me to question my assumptions, thereby uncovering the possibility that the barrier to his learning was the suitability of the music activity.

I posit that this research with the children revealed many such insightful findings, thereby making a significant contribution to the limited field of literature regarding the affect that music may have on children’s emotion and behaviour within which there is currently a limited body of information available (Hallam and Prince, 2000, p.9). These contributions will be discussed next.

The themes emerging from the findings indicated that music lessons positively shaped the development of the children in three major thematic areas: personal competence; task competence; social competence. Furthermore, I added an additional theme, time, due to the beneficial developments witnessed as the research progressed. Table 6.1
below outlines the themes and subthemes and indicates the total number of findings for each.

Table 6.1: Emergent themes from data and total number of findings

<table>
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<tr>
<th>Personal Competence</th>
<th>Task Competence</th>
<th>Social Competence</th>
<th>Time</th>
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<td>Subthemes</td>
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<tr>
<td>Self-regulation</td>
<td>Enjoyment</td>
<td>Collaboration</td>
<td>Progress (Holistic discussion)</td>
</tr>
<tr>
<td>(10 key findings)</td>
<td>(5 key findings)</td>
<td>(3 key findings)</td>
<td></td>
</tr>
<tr>
<td>Self-confidence</td>
<td>Engagement</td>
<td>Social connectedness</td>
<td></td>
</tr>
<tr>
<td>(3 key findings)</td>
<td>(5 key findings)</td>
<td>(2 key findings)</td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td>Motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6 key findings)</td>
<td>(5 key findings)</td>
<td></td>
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</table>

Many unexpected and unanticipated outcomes emerged from the study, with the two children relating to the various music activities with extraordinarily different responses. Significant amounts of data provided many rich insights into the impact of music on the emotions and behaviour of the children. However, two leading themes did emerge from the research, which had impacted on both children, namely the theme ‘time’ and increased ‘self-esteem’, from the major theme, Personal Competence (cf., Table 4.2 and Figures 4.1 and 4.2).

The time theme revealed that the children made more progress as the research continued, which lends support to Humphrey et al (2008, pp.99-100) that sufficient allocation of time and space is a crucial factor in an intervention programme. The results from my study clearly indicate that the longer the research continued, the more progress both children made.

The second pertinent point regarding this theme is that in combination with the duration of time, the holistic integration of Eun’s (2010) model was fundamental in assisting the planning focus on the ‘small steps’ of development required in the affective domain. This identifies a key theoretical implication of this study, which is that sociocultural educational principles do need to be implemented holistically (Karpov, 2009) and that the additional focus of ‘metacognitive’ learning (Karpov and Haywood, 1998) is crucial, especially when teaching children who present with SEBD. One example offered to explicate how the eight sociocultural instructional principles (Eun, 2010) were integrated holistically was ‘The Name Game’, which was a musical game based on the ‘effective’ concept of ‘circle time’ (DfES, 2005, Appendix 5; Cooper, 2001) and I posit that games such as this are effective in assisting children in their ‘metacognitive development’ (Karpov and Haywood, 1998). Although this model was used
holistically, I suggest that one of the most effective aspects of the model in the context of this research was the ‘responsive instruction’ (Eun, 2010) since this enabled the curriculum and lessons to support the needs and interests of the children and was critical in ‘empowering’ children to access the curriculum (Ladson-Billings, 1994). This was most clearly seen in the introduction of the piano into the music lessons, which contributed to an intense source of enjoyment (finding 4), engagement (finding 4) and motivation (findings 1, 2, 3) for the children, and contributed to their feelings of self-confidence (finding 3), self-esteem (findings 1, 5, 6) and self-regulation (finding 10).

Further the ‘small steps’ of progress that shaped the children’s development in relation to each of the thematic areas, was facilitated by the use of the zone of proximal development (Vygotsky, cited by Daniels, 2010, p. 57) in the planning and assisting of those small steps. This was similar with the way that Hedegaard (2002, p. 367) utilized the ZPD as a ‘tool’ for class instruction (ibid., p. 369) but in this research it was an essential device to identify learning requirements and to work with individual children, which is an imperative point when working with children who have special educational needs (Kugelmass, 2007, p. 275). Consideration for the development of the individual child is another key implication from this study.

The second leading theme to emerge from the findings was the impact that the music intervention classes had on the children’s self-esteem. This overall finding is consistent with the research of Harland et al (2000, p. 148). Although the children had extraordinarily different responses to the music lessons, both children had a substantial increase in their self-esteem towards the end of the late research phase (re: Table 4.2). Two of the possible reasons for this increase was the sense of accomplishment in music that both children felt (findings 1, 5) and also the praise and support from adults in relation to their accomplishments (findings 2, 3, 4, 6). I suggest that one of the reasons that the children accomplished so much in their music lessons was due to the incorporation of scientific and everyday concepts (Moll, 2002, p. 10) into the learning activities, thereby facilitating the learning process by making potentially complex learning situations accessible. The finding that praise was a major cause for growth in their self-esteem is consistent with other research (Bani, 2011, p. 47; Swinson and Cording, 2002, p. 72; Harland et al, 2000, p. 151; Gallimore and Tharpe, 2002, pp. 178-183) and it draws parallels to Boxall’s view (2013, p. 133) that children in nurture groups have a ‘poor self-image’ and that for some, ‘the response of the adults to their achievements means as much or even more than the achievement itself, so great is their need to be valued’.

6.2 Questions, messages and considerations for researchers, teachers and policy makers

The findings from this study raised many more pertinent questions than I was able to address during my research ‘cycle’ in the field (Spradley, 1980, p. 29). There were a few
insightful findings in particular that I thought raised some valid questions concerning how music may relate to children presenting with SEBD and I would like to share these thoughts with the wider audience of researchers, teachers and policy makers to contemplate.

**Questions for researchers:**

1. Could music also be a ‘leading activity’ of childhood, as indicated by the findings in this study, in the same way that socio-dramatic play is regarded as the leading activity of childhood from ages three to six by Neo-Vygotskians (Karpov, 2009, p.139)?
2. Could active group participation in playing the piano and painting relieve the anxiety levels of other children presenting with SEBD?
3. Could the use of music to self-regulate preferred mood be a possible practical strategy to assist children presenting with SEBD?

**A message for music teachers:**

An important finding in this study, which directly related to organisation of musical activities, was that certain musical activities overwhelmed Rhodri possibly due to the sensory overload of noise and too much choice (finding 8 from the subtheme self-regulation). This was consistent with Boxall’s (2013, p.51) descriptions of some of the ‘nurture group’ children who can be overawed by certain situations and want to either ‘grab’ everything and not know what to do with it, ‘bang’ and then ‘discard items out of frustration’, or ‘roam around, momentarily glancing and briefly touching’. Her advice to ‘limit’ choice in the earlier stages because some children have to ‘learn to choose’ (ibid., p.52) was one of the biggest lessons that I learned as an educator through the participation in this study with regard to teaching music to children presenting with SEBD.

**Consideration for policy makers:**

The findings from this study clearly indicate that time is a crucial factor in the developmental progress of children involved in an intervention programme. Therefore if any intervention programme is to be effective, adequate allocation of time is vital and I recommend that at least one school year, with two sessions a week lasting for 40 minutes, should be the minimum allocation if it is to achieve any real impact.

**6.3 Limitations of the study**

One of the major limitations of using the ethnographic in orientation case study approach was the time consuming factor (Myers, 1999, p.6). The research in the field was extremely lengthy and the additional planning and preparation for the lessons themselves was extensive. Furthermore, a vast amount of data was generated, and this was time consuming to organise into the various emergent codes and also to write up.
Additionally, because it was also a case study, the literature surveyed was extensive, such as the inclusion of Welsh legislation concerning music and special educational needs in addition to current thinking in the field of sociocultural educational principles and other literature surveyed. Moreover, I was not able to include all of the study’s rich findings because of word restriction, therefore I had to omit the data from three of the other children in the ‘targeted’ group intervention (NIHCE, 2008). However, I posit that the findings from this ‘in-depth’ study (Flyvberg, 2006, p.228) make a substantial contribution to our understanding of some of the ways in which music can impact on the emotions and behaviour of children, precisely because of its in-depth, time consuming nature. This brings me to the second perceived limitation of this study, which is the ability to generalize from these findings since my data refers to ‘a specific sample and set of circumstances’ (Anderson, 1990, p.126).

As noted in Chapter 3, Flyvberg (2006, p.224), states that one cannot generalize on the basis of a single case study is considered to be devastating to the case study as a scientific method. However, due to the ‘in-depth’ nature of the case study approach, Flyvbjerg suggests that it is well-suited for purposes of ‘falsification’, and he states the ‘force of example is underestimated’ (ibid., p.228). However, I suggest that in ‘seeking generalizable knowledge’ with regard to my research would be to ‘miss the point’ about what might be offered by this inquiry (Thomas, 2011, p.33). I posit that this study offers ‘exemplary knowledge’ or ‘phronesis’, which is knowledge that has meanings that are ‘malleable and interpretable in the context of varieties of experience’ (Thomas, 2010, p.578). I believe that this case study offers an example from which one’s experience enables one to gather insight or understand some of the situations and scenarios described (op.cit.).

I do believe that many of the findings from this study possess a certain resonance that I think other schools and researchers would identify with, and this type of ‘relatability’ is valid in itself, a view supported by Bassey (1998, p.1) who states the following in relation to the value of studies as single events:

‘The relatability of a research study (is) a more useful concept than generalizability.’

6.4 Final remarks

I believe that this study underlines the importance of approaching education in a holistic manner with a dual focus on the cognitive and affective aspects of learning (Daniels, 2010, p.174; Ofsted, 2004; Boxall 2013, p.133). This view is supported by the findings in this research, which highlighted the importance of achievement, and praise related to achievement, in both children’s affective development. I posit that music can be utilised as a vehicle for accomplishment for children presenting with SEBD, and that it is an influential, ‘powerful’ resource (Ofsted, 2009). Three important implications regarding the implementation of a music intervention programme were uncovered in this study. First, the teaching focus needs to be on the individual child, and on his/her individual
‘learning pathway’ (National Assembly for Wales, Circular 17/2006, p.v; Ofsted, 2004, p.15). Indeed the Ofsted inspectors noted in their 2004 report that in order to effectively implement inclusive policies that the curriculum may need to be adapted in order to meet the individual needs of the child. The findings in this study strongly suggest that focusing on individual needs greatly assists the development of children who present with SEBD, which is in contrast with Hedegaard’s stance that ‘it should not be the function of school pedagogy to offer special instruction to each child in a class’ (2002, p.367).

Second, children need to experience success. The findings in this study highlight that success and achievement led to increased levels of self-esteem. As noted by Cooper (2008, p.17), school communities that ‘ensure that all pupils have access to the experience of success’ do best with children presenting with SEBD. I posit that targeted group music interventions, utilizing sociocultural educational principles, could provide this ‘access’ to ‘success’ for many students. Furthermore, findings from this study indicated that the types of music activities that the children were involved in were crucial in the success of the intervention classes. Activities such as listening to classical music and the ukulele calmed the children and helped them to self-regulate their emotions and behaviour, which is consistent with other research (Saarikallio, 2007, 2011; North et al, 2000; Hallam and Price, 1998; Savan, 1999; Silk et al, 2003; Van den Tol and Edwards, 2014) and playing the piano and ukulele was also calming, helping to relieve anxiety issues, which resonates with other research (Dingle et al, 2013; Clift and Hancox, 2001; Hillier et al, 2012).

Third, holistic utilisation of sociocultural educational principles provides effective guidance regarding curriculum design and teacher strategies in the classroom. Particularly pertinent points are that instruction needs to be responsive (Ladson-Billings, 1994, pp.17-18; Cooper, 2008, p.19), because ‘children never learn without interest’ (Vygotsky, cited by Karpov, 2009, p.167), and must contain a focus on ‘metacognitive’ development (Karpov and Haywood, 1998).

One of the most important ways that I developed as a researcher and an educator throughout this research process, was to challenge assumptions and to take the time to understand perspectives from the children’s point of view. Particularly, to understand that children’s behaviour is often their way of communicating (Boxall, 2013, p.63), and close observation of this behaviour together with a responsive teaching focus led to curricular changes that enabled the children to access learning and thereby develop and flourish.

Collectively these findings and implications underline the importance of undertaking this research topic. New pedagogical ideas such as this must be sought (Davydov, 1999, p.137) in order to engage students presenting with SEBD in the process of learning. This is so crucial at a time when many of our vulnerable students are being excluded from schools (Daniels, 2010, p.140). ‘Targeted’ group interventions are essential for children who may have a ‘weak sense of self’ and/or ‘weak communication and social
skills’ (Cooper, 2008) and I believe that vibrant, practical, responsive intervention music programmes are one powerful way forward.
References


Cooper, P., 2011. Teacher strategies for effective intervention with students presenting social, emotional and behavioural difficulties: an international review.


# Appendix 1: Research Timetable

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>2012/2013</th>
<th>2013 / 2014</th>
</tr>
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<tbody>
<tr>
<td>Begin research, via classroom observations and discussions with key school personnel</td>
<td>T1</td>
<td>T2</td>
</tr>
<tr>
<td>Start designing research strategy and music intervention programme</td>
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<tr>
<td>Begin intervention research with whole class divided into 3 smaller groups on a Tuesday afternoon.</td>
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<tr>
<td>Start data collection</td>
<td></td>
<td></td>
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<tr>
<td>Select 5 key participants</td>
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<tr>
<td>In addition to the Tuesday afternoon sessions, begin working with 5 key participants on a Wednesday afternoon.</td>
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<tr>
<td>Start writing up aspects of the data and take these into consideration for the Research Design</td>
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<tr>
<td>Start to transcribe and analyse data in earnest</td>
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<tr>
<td>Plan a simple Music Assembly with the students, selecting items from the lessons that they would like to share with peers, teachers and families.</td>
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<tr>
<td>Continue with literature research, which may inform the study</td>
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