Generalist Student Teachers' Experiences of the Role of Music in Supporting Children's Phonological Development

---

Sarah Veronica Poulter

UCL Institute of Education,

University College London

Doctor in Education Degree Thesis

August 2018

Acknowledgements

I owe my sincere and heartfelt thanks to my supervisor, Professor Graham Welch, who has inspired, guided and supported me throughout my thesis journey.

I would also like to thank my family, my colleagues and my friends, for their patience, understanding and encouragement as I completed this undertaking.

Declaration and word count

I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

Word count (exclusive of appendices, the list of references but including footnotes etc)

46361

S.V. Poulter

Date: August 2018

Abstract

Researchers agree that phonological awareness (or the awareness of the sound structure of language), along with letter knowledge, is the strongest predictor of reading ability. There have been many studies which have shown how musical activity can impact on children's phonological awareness, and thus their early reading ability. However, it is true to say that many generalist Primary school teachers do not feel competent or confident to teach classroom music. This thesis describes an Action Research study in which the author, a teacher educator (TE) with interests in both English and music, developed a resource bank of musical activities using just the singing voice and un-tuned percussion instruments to support the Early Learning Goals related to music, phonological development and several aspects of Phonics Phase 1 Letters and Sounds (DfE, 2007). Drawing on the notion of a 'Cycle of Enactment' (Lampert, Franke, Kazemi et al., 2013), the TE then worked with a group of student teachers (STs). The TE shared the rationale for this project. The TE and the STs then rehearsed the activities together and the STs observed the enactment of those activities by the TE with children in the Early Years Foundation Stage. Subsequently, the STs collaboratively planned, taught and reflected upon music sessions with small groups of children in the same setting. This was then repeated with a different group of STs in a different school. The findings suggest that the teaching model and the use of the resource pack developed the student teachers' competence and confidence to teach music, and their understanding of the impact that musical activity can have on other areas of learning.

Impact Statement

Lucy Crehan and Mary Bousted (2017) suggest that, in order to transform teaching as a career choice, education in this country should follow patterns adopted by the world's top-performing education systems; for example, Singapore and Shanghai, both of which place great emphasis on continuing professional development (http://www.ucl.ac.uk/ioe/news-events/events-pub/dec-2017/what-if-transform-teaching-career-choice). Although Chua (2018) cautions that effective pedagogy requires a more holistic approach to teacher development, '… the current teacher PD [professional development] model in Singapore: (a) is subject-matter specific and connected to classroom practice; (b) is intensive and ongoing; (c) provides teachers with opportunities for active learning; (d) promotes collective participation amongst teachers both across and within schools; and (e) is coherent with teachers' needs and interests, and aligned with school and national priorities and goals.' (Bautista, Wong and Gopinathan, 2015 p. 323).The current study, with its various components of teacher educator mentoring, collaborative enterprise, and classroom practice related to development of subject and pedagogical knowledge, offers a model for such CPD; not only for beginning teachers, but also for teachers and teaching assistants in the early years.

This approach of modelling, rehearsal, enactment and reflection would be particularly useful in teaching other foundation subjects such as PE and Languages, which are perceived as being the province of the specialist teacher (Boyle and Bragg, 2006; Rowe, Herrera, Hughes and Crawley, 2012; Duncombe, Cale and Harris, 2018). Indeed a colleague and I adapted the approach for a recent project to teach Latin in Primary school (Poulter, 2018 in press: Appendix 22). The STs remarked on how much easier it was to teach a subject in which they were relative beginners than they had supposed, with one commenting that 'I had naively assumed that as Latin is a 'dead language', the children would not be interested in learning Latin. But…they all really threw themselves into the experience.' This is echoed by Rowe et al. (2012) who found that 'experimenting with language teaching whets the students' appetite and acts as a catalyst for further engagement; this is largely due to the positive responses from children' (p. 154).

Furthermore, my study contributes to the continuing debates about teacher education and retention. In the IOE Public Debate of 23rd January 2018, Daniel Muijs argued that teachers should be given the time and opportunity to engage with research, and that teaching itself should be research informed at every educational level (http://www.ucl.ac.uk/ioe/news-events/events-pub/jan-2018/what-if-evidence-informed-practice). My university is following the suit of others, for instance Derby, in offering a fourth year of study that would give the STs a Master's Degree in Education. One of the aims of this is to provide the STs with the opportunity to develop advanced research skills whilst on placement (Appendix 22). I would suggest that engaging in critical inquiry from the very outset of one's teaching career develops thought processes and skills that promote resourcefulness in the face of 'limiting situations' (Freire, 1993).

Finally, and in response to the reasonable comments of the STs from my study, further detailed research needs to be carried out to assess the impact of the musical activities outlined on children's phonological awareness, using this mentored approach.

List of Figures and Tables

Glossary

AR	Action Research
BAQTS	Bachelor of Arts with Qualified Teacher Status
CT	Class Teacher
DCFS	Department of Children and Family Services
DfES	Department for Education and Skills
Ofsted	Office for Standards in Education, Children's Services and Skills
PGCE	Postgraduate Certificate in Education
RD	Reflective Diary
SEND	Special Educational Needs and Disabilities
ST	Student Teacher
TE	Teacher Educator

Contents

Reflective Statement

Two challenges that the novice teacher educator faces in the traditional transition from school to university are (1) developing a pedagogy for Higher Education and Initial Teacher Education, and (2) becoming more research active (Murray and Male, 2005). In 2010, I joined the staff of a new university School of Teacher Education as a teacher educator, and almost at once, I embarked upon the research journey.

In my first year as a lecturer at North Western University (pseudonym), I completed a Postgraduate Certificate in Academic Practice. This required me to reflect on aspects of my teaching and consider ways to enhance it, to reflect critically on practice and to engage with the notion of course design. For me, a new academic, realising that I needed to make significant adaptation to my existing professional identity (Murray and Male, 2005), this was very empowering, and it convinced me of the need for constant research when teaching at university level.

Ensuring that our students are competent to teach phonics is part of the Primary English tutor's role and yet, for my colleagues, this was a dry and soulless approach to beginning reading that is not embedded meaningfully in the act of reading itself. However, it was my belief that the teaching of phonics did not have to be discrete from other learning and, indeed, was not even the sole province of the English department or the literacy lesson. In addition, my experience as a parent, teacher and amateur musician had convinced me that music had a role to play in developing children's language skills and phonological awareness. For instance, at 16 months, my own daughter was beginning to build a bank of single words, and was also regularly hearing nursery rhymes. I have an abiding memory of her sitting in the back of the car singing, 'Baa baa b[l]ack shee[p]' with a very creditable attempt at the perfect fifth interval between 'baa' and 'b[l]ack'. This was her very first word string. I felt that delight in the song had encouraged her to take greater strides in language than speech alone would have done. As for music and reading, a son of a friend of mine joined a Cathedral choir when he was eight, and had very poor reading skills at that time. She expressed her apprehension to the Cathedral Organist that the boy would not cope, and he assured her that, after some experience of singing Anglican chant (a way of singing psalms by matching natural speech rhythms to a simple melody), his reading would improve. And he was right.

My friend was astonished at how quickly her son's reading skills developed, and was convinced that it was joining the cathedral choir that effected the change.

I applied to study for the doctorate in education, therefore, with the idea of researching if classroom music had a role to play in the development of early reading and, as I wrote in the brief outline of proposed research, 'in the process of doing this, I am interested in enriching the learning experience of the students at North Western University so that they are enabled to develop their own skills further and become resourceful and reflective practitioners.'

The EdD taught courses and Institution-Focused Study

At the time of writing the first assignment – 'Foundations of Professionalism' – I was teaching more Primary curriculum mathematics than English, and I was interested in how we prepared our STs to teach to the National Numeracy Strategy (NNS) (DfEE, 1999), which placed huge emphasis on, for example, developing mental strategies. My concern was that the STs would have no personal experience of the NNS, and that too much time in our lectures and workshops would be spent transmitting knowledge about discrete elements of the new programme, perhaps leading the STs to becoming uncritical deliverers of a curriculum. I argued that STs should engage playfully in mathematical activity, whilst also learning about the theory that lay behind pedagogical principles and approaches. Askew et al. (1997, p.3) found that effective teachers of numeracy are able to make 'a rich network of connections between different mathematical ideas'. I believed that without this connectionist approach, STs were in danger of becoming de-professionalised, in that they would not develop the capacity to critique the curriculum.

I returned to my original theme of music and early reading in 'Methods of Enquiry 1'. In it, I argued that the discrete nature of the teaching of phonics in Primary schools is often replicated within the university, so that STs may not be encouraged to see phonics as being embedded in a wider context. I showed that the connection between musical activity and early reading is established by research. I reasoned that, in order for children to learn phonics, they need to have well developed phonological awareness, and that music has a vital role to play in this; furthermore, that Phase 1 of the government 'Letters and Sounds' programme (DfE, 2007) does indeed concentrate on the development of phonological awareness, and recommends some musical activities – yet at my university, the students had no experience of that in their taught sessions. At that time, I suggested

that inter-curricular collaboration between colleagues (in this case the English and Music Departments) would enhance the students' experience and develop their understanding of how children learn to read and how they can be helped to learn to read, and that this could be done through a series of workshops designed to develop specific musical skills, particularly for non-specialists.

At the time of completing the Methods of Enquiry 2 (MOE2) assignment, it was possible for our BAQTS students to opt out of university-based music education after Year 1. Therefore, I reasoned that they were likely to have more experience of music education through their school placements. The purpose of the MOE2, therefore, was to find out what that experience might consist of. I interviewed music coordinators in three partnership schools and discovered that there was huge variation in just this small sample. I also realised that the relationship that I had with my partnership schools as a university based tutor, meant that there were considerable constraints over the types of conversation I could expect to have about curriculum provision. The Institution Focused Study (IFS) yielded more reliable data. This time, I interviewed a selection of BAQTS students in their third year of study about their experiences of teaching music in schools. Some music teaching had been observed, but very few STs had taught music themselves. However, I discovered that of my very small sample, those STs who had taught a series of lessons were more able to theorise about the role of music in the wider curriculum; and, furthermore, that this ability was not confined to STs with formal musical education in their backgrounds. This effected a shift in my thinking. I believed that if STs understood the potential for music to develop phonological awareness, they would be more likely to teach music themselves. However, I no longer saw the solution as lying in university-based workshops, but in opportunities for school-based practice.

The Thesis

In preparing for the thesis, I began by exploring the possibility of giving STs the opportunity to observe Marion Long's 'Rhythm for Reading' programme (https://rhythmforreading.com), and seeking funding for this. However, this did not materialise, and I came to realise, in conversation with my supervisor, that I would need to design and provide the programme myself – I had to address this 'limiting situation' (Freire, 1993) in a creative way.

One of the themes that emerged through the taught assignments is the importance of making cross-curricular links and being 'connectionist' (Twiselton, 2007; Askew et al., 1997) – not just within a subject discipline like literacy or mathematics, but across the disciplines. Indeed, in discussing cross-curricular learning, Barnes (2011) argues that it is important for teachers to know 'something about how information on the workings of the brain is gathered and [to] seek to be fully informed about the insights neurology brings' (p. 112).

This theme continued into the thesis as I explored in greater depth the role that music can play in the language development of the very young, and as a remediation for certain types of damage to the brain. These cross-curricular links existed on at least two levels. Firstly, at curriculum level: the link between music and phonological awareness; and secondly, at personnel level: the study was carried out by a so-called Primary English specialist exploring a curriculum area she does not regularly teach. Subject areas at my university are generally taught discretely following the National Curriculum model; however, as Rose argues (DCFS, 2009a), a cross-curricular approach is vital in helping children to develop their understanding and apply their skills. My experience of carrying out this study has strengthened my conviction that more opportunities should be made to encourage STs to make these links.

Studying for this doctorate has had a huge impact on my own sense of self-efficacy. As a young and developing teacher, I felt the debilitating lack of knowledge of learning theory, which restricted my ability to teach creatively. Becoming a teacher educator has given me the opportunity to be part of designing and providing a programme which I would like to have had myself – and which attempts, at least, to marry theory with practice. It is my passion that STs should end their initial teacher education as well prepared as they can possibly be for their teaching lives; recognising meanwhile that learning is a life-long process.

In particular, I have had the opportunity for reading in depth across a wide range of disciplines – from music and the brain to play and improvisation, from early reading to teacher education. This has deepened my knowledge and understanding and helped me to make previously unknown connections. I have also had the privilege to work with children alongside STs and colleagues in school. Murray and Male (2005) warn that continuing to think of oneself as a Primary school teacher can inhibit one's growing identity as a teacher in Higher Education. However, the experience of working in the Primary classroom with my STs was extremely

empowering. Not only did it help the STs to make the connection between their learning in school and at the university, but it gave me added confidence across all my teaching because I was keeping my skills current.

I have also had the opportunities to present at three conferences as a result of my study – two national and one at a university in Rome. I have been able to share the findings of my study with colleagues at my own and other universities. Thus, my confidence and presentation skills have been greatly developed and enhanced. Not only this, but the experience of presenting at the 'Musica in Formazione' conference in Rome in December took me out of my comfort zone, and forced me to examine an aspect of music which I had not yet considered – that of improvisation. This enabled me to view my findings in a different light, and for that I am deeply grateful. Completing the action research has also meant that I have had to collect and analyse data in a critical and reflexive way, and as such, the evidence cannot be ignored. This has given me confidence in my role and a new imperative to make a difference in the working lives of our STs. In all of this, my supervisor has been a constant inspiration, fountain of knowledge and guide. He has led me into new avenues of thought and experience, and challenged me to extend my powers.

In developing standards for teacher educators (TEs) in the Netherlands, Koster and Dengerink (2001) contended that it was vital, not only that TEs themselves had continuing professional development (CPD) in their role, but that they should take charge of that CPD themselves. As Murray and Male (2005) aver, it is 'impossible to meet [the] imperatives of teacher education… without a clear sense of the importance of research for the development of knowledge and understanding of practice' (p. 138). I have been deeply fortunate in being able to combine my own continuing professional development and my research in the quest that has been my EdD.

Freire (1993) describes the notion of 'conscientização' (or conscientization) as the deepening of the attitude of awareness; an awakening of critical consciousness, or conscience. This is a concept that encapsulates my experience of the past seven years. There is also an overarching sense in this study of awakening and drawing out what is within for all participants: the children, the student teachers and myself.

Chapter 1

Introduction and Context

1.1 Introduction

This thesis gives an account of an action research study which I undertook as part of my role as a lecturer in Initial Teacher Education in a modern university in North West England.

Prior to joining the university's School of Teacher Education, I was a Primary school teacher for more than 25 years. During that time, I worked in inner city and rural schools, in London and the South, the Midlands and the North of England. I taught the full age range, from Reception to Year 6 (ages 4+ to 11 years). I have always been deeply interested in the teaching and learning of literacy (indeed, for my Masters' Degree in Victorian Studies, I wrote my dissertation on the literature of George Eliot, Charlotte Bronte and Elizabeth Gaskell). In my present role, I am the English Lead for all the Primary courses (e.g. PGCE and BAQTS). However, I also have a strong musical background. I often took the role of music coordinator in the schools where I worked, and I have also been the conductor of various young people's choirs, including the Kent Youth Singers and the Coventry Cathedral Girls' Choir (which I helped to found). Additionally, I did some work as a vocal coach for the national 'Sing Up' project in England. I was also married to a cathedral organist for many years, and saw at first hand the effect that musical training had on the lives of the children in the choirs. As I reflect on my background, therefore, and the relationship between my values and beliefs and my practice, it is clear that my experiences and prior acculturation have had an impact on this research.

One of the things that I am responsible for as Lecturer in Primary English is phonics training. Much has been written about the phonics versus real reading debate (e.g. Rosen, 2006; Dombey, 2009). I know that some of my colleagues have felt that they are called upon to express an enthusiasm for phonics that they do not feel, or at least to hide from the students their own ambivalence. Much weight is placed by the Government on the higher education National Student Survey and, if

students express a lack of confidence in teaching phonics, this triggers further scrutiny in the form of an inspection by the Offices for Standards in Education (Ofsted). Thus, there is immense pressure within the university to devote a large proportion of teaching time for beginning teachers to phonics, and we become 'part of a particular commercial 'sector' – [embroiled in] the production of marketable knowledge and the selling of marketable credentials' (Winter,1997 p. 345).

Dombey (2009) argues strongly that learning to read should never be separated from the act of reading, and I believe that she is right. I believe also that the systematic teaching of phonics has its place and should be one of the approaches to the teaching of reading. However, my initial feeling was that not only was it wrong for phonics to be taught separately from reading, but that phonics should not be isolated from the real world of sound, and that playful engagement with, for instance, rhythm and rhyme through music was crucial in developing children's awareness of speech sounds and thence their ability to decode the written word. I have since come to understand that music's impact is not restricted to the comparatively narrow sphere of synthetic phonics (Dombey, 2009), but rather, that it has an important role to play in the wider world of language development, of which phonics is a small part.

The gap in attainment between children from affluent families and those from disadvantaged backgrounds is significant, and exists in schools judged to be outstanding just as it existsin those requiring improvement (EEF, 2017). Moreover, disadvantaged pupils in Liverpool are doing relatively worse than they were in 2012 (Andrews, Robinson and Hutchinson, 2017). Indeed, 'persistently disadvantaged pupils end Primary school over a year behind their non-disadvantaged peers' (op. cit. p. 10). While the gap at the end of the early years is 4.3 months nationally, Halton (one of our school partnership local authorities) is at the bottom of the national league table with a gap of seven months, and the Liverpool city region is in the bottom 25% across all age phases.

> 'These gaps are particularly pronounced in early language and literacy. By the age of three, more disadvantaged children are – on average – already almost a full year and a half behind their more affluent peers in their early language development. And around two fifths of disadvantaged five-year-olds are not meeting the expected literacy standard for their age.' (DfE, 2017a p. 11)

As will be seen, the thesis draws on a range of evidence to argue that music has a significant role to play in the development of early language and literacy. As will also be seen, music is often not part of young children's daily experience in school, and is frequently not taught by the generalist class teacher. I will argue that music should have a far more important place in the Early Years and Primary curriculum, and that provision should be made for teachers of young children to deliver their own music lessons.

In this research, I am investigating the role that music can play in language and reading development. I also explore the extent to which it is possible for student teachers (STs) to have a mentored experience with young children that will support both their music teaching and the teaching of English. My aims, therefore, were to develop student teachers' competence and confidence to teach music, and to help them to develop their own personal theories about the value of music in the Primary curriculum, particularly in relation to supporting language development – which includes phonological awareness – a crucial factor in the development of early reading.

The research questions, therefore, are as follows:

- What musical activities does research suggest can impact on children's developing phonological awareness?
- How might we use music to support phonological development in the early years?
- How may we encourage student teachers (STs) to teach music in the early years?

The chosen methodology for this study was Action Research (AR), which is described by Winter as the creation of 'knowledge out of one's practical involvement, through the critical examination of one's own practice - the central process of experiential learning, the never-ending developmental cycle of action and reflection' (Winter, 1997 p. 345). I wanted to find out if it was possible to give STs an experience of learning and teaching music in the Foundation Stage (ages 3 to 5 years) which was modelled and guided by me as a teacher educator (TE). There were two cycles of action in two different schools with two different groups of STs (see Chapter 3).

1.2 The Context

1.2.1 Childhood in Liverpool

I am a lecturer in teacher education at North Western university (pseudonym). The university currently runs four courses in teacher education: a four-year BA (QTS course), a new three-year BA (QTS) course, a one year PGCE course and a one-year Schools Direct PGCE course. I teach all on four of these courses. In my role, I am the curriculum lead for Primary English; I also teach professional studies in the year 2 cohort (of the three-year course), and am a professional placement tutor currently for seven partnership schools.

As part of the course, STs complete placements in partnership schools in all six local authorities in the Liverpool City Region, namely Halton, Knowsley, Liverpool, Sefton, St Helens and Wirral. According to the Indices of Multiple Deprivation (IMD), two of these, Liverpool and Knowsley, are two of the most deprived areas in England (Liverpool City Council, 2015). Liverpool is ranked the fourth most deprived local authority in the country, with the severest deprivation occurring in the inner core encircling the city centre, and the greatest concentration of deprivation in the north of the city. According to the IMD document, deprivation is defined in the document as poverty combined with a lack of resources and opportunities (ibid).

The Income Deprivation Affecting Children Index (IDACI) shows that Liverpool is the eighth most deprived district in England (after Knowsley in seventh place). Statistics show that 16 (5.4%) of Liverpool's lower super output areas (LSOAs) - such as Norris Green and Speke - are amongst the most deprived 1% in England; these are home to 4,300 children between 0 and 15 years of age. Furthermore, 120 of Liverpool's LSOAs (40.3%) are amongst the most deprived 10% in England; 35,400 children aged between 0 and 15 live in these areas. The figure rises to 54% overall if the areas that fall in the most deprived 20% are taken into account (ibid).

In other words, there are high levels of deprivation for children across the city, from Everton and Kirkdale in the North to Belle Vale in the East and Speke and Garston in the south.

These statistics are significant because 'the attainment gap between disadvantaged pupils and their better off peers is closing too slowly' (Ofsted, 2013 p. 16), with these gaps being established by the time the children are five years old

and continuing to be evidenced at ages 11 and 16 (EEF, 2017). Siraj and Mayo (2014) describe these disadvantaged children as being of lower social and economic status (SES), SES typically including parental income, education and occupation. Their findings show that children with low SES are less successful than children from families with greater social and economic capital.

1.2.2 Special Educational Needs and Speech and Language Difficulties

At the last schools' census, there were 6536 children attending Primary schools in the Liverpool City region with special educational needs and disabilities (SEND) (DfE, 2015). This is 17.4% of the school population, which is higher than the National average of 14.4%. In Knowsley the figure is 20.2%, and in St Helens, 18.9% (DfE, 2015). Ofsted noted (2010a) that a disproportionate number of children with special educational needs came from disadvantaged backgrounds (with 39% of all SEN children being eligible for free school meals). Furthermore, amongst the SEND children, the commonest need is Speech and Language (20%). (For further detail relating to SEND figures, see Appendix 1.)

Various Government reports have been published in the last decade which examine the issue of speech, language and communication difficulties in the young (DCFS, 2008a; DCFS 2008b; DfE, 2010). The Bercow report found that 'approximately 50% of children and young people in some socio-economically disadvantaged populations have speech and language skills that are significantly lower than those of other children of the same age' (DCFS, 2008b. p13). That year also saw the publication of the 'Teaching Effective Vocabulary' report (DCFS, 2008a). Finding that vocabulary is a predictor of later reading success, it states that the vocabulary of children from disadvantaged backgrounds is typically smaller than that of their more advantaged peers, and the gap simply widens as the children progress through school. Similarly, the report 'Investigating the role of language in children's early educational outcomes' warns that those children who are slow to develop speech and language skills are at a high risk of struggling with literacy and other academic skills throughout their schooling (DfE, 2010). This longitudinal study of children born in the Bristol area in 1991 and 1992 found that there was a strong correlation between the level of language development at 2 years and their later academic performance. It also found that socio-economic background was a factor in determining school readiness (ibid).

Nevertheless, these last two reports both indicated that it is not inevitable that children from lower socio-economic backgrounds will achieve less than their more affluent counterparts (DCFS, 2008a; DfE 2010). They suggest, for instance, that parents and the child's communication environment may positively impact on progress.

1.2.3 The Hope Teacher

The findings (DCFS, 2008a and DfE, 2010) correlate with those of Siraj and Mayo (2014). The authors argue that it is possible for children with low SES to succeed against the odds. Whilst home environment appears to be the most important factor, average or better quality preschool education can, the authors find, 'alleviate the effects of social disadvantage' (Siraj-Blatchford, Mayo, Melhuish et al., 2011, p. iv). Further on in a child's education, 'high quality teaching (continues to be) crucial, especially for disadvantaged pupils' (Ofsted, 2013 p. 66). It was found that variations in the quality of teaching in schools which served the most deprived and least deprived communities, were large, and so the document argues, 'recruiting the best teachers to schools serving disadvantaged pupils is a priority' (op. cit.).

It was argued in the House of Commons Education Committee report (2012) that the difference between the impact of a good or outstanding teacher is 'both tangible and dramatic' compared with that of a mediocre or poor teacher (p.14). The report goes on to state that a key factor in inner city schools is a lack of teacher continuity because of poor retention rates. It was initially with this in mind that the notion of the 'Hope Challenge' was born (Moore, Pearson and Cronin, 2016) in my own university.

One of the key findings of my university's Initial Teacher Education Ofsted report 2012, echoed and developed in the 2014 report, was that the 'Hope Teacher' was one 'who takes a full part in professional school life and teaches "with moral purpose, the whole child"' (Ofsted, 2012 p. 3). On the other hand, the inspectorate had concerns about how student teachers were being prepared by their initial training to face the rigours of teaching in schools in challenging circumstances (Moore, Cronin and Pearson, 2016). Inspired by the first report, and in response to the second, Jane Moore, Sue Cronin and Michelle Pearson, in their leadership roles in the School of Teacher Education, devised an initiative called 'The Hope Challenge' in collaboration with HMI inspectors, local authority officers, school head teachers and other colleagues (ibid).

The aims of the project were to build confidence and resilience in the student teachers, so that they would be able to be successful in a range of schools, and to increase the number of talented graduates working in schools in challenging socio-economic circumstances. Typically, a partnership school in challenging circumstances would be invited to identify an area of concern for a vulnerable group of pupils; these might range from phonics to problem solving in maths, from working scientifically to supporting children with EAL. In each project, North Western student teachers would be educated in an intervention, and would work in school with those children alongside their tutors. Their emerging skills would both benefit the schools and pupils, and give the students themselves a much richer sense of a range of school contexts.

Below, I describe two cycles of an action research project. The second of these was undertaken under the 'Hope Challenge' umbrella, and I hope it will be seen from the literature review, that the moral purpose that drives the Hope Challenge to improve outcomes not only for our student teachers, but also lower SES pupils, also underpins this research.

Chapter 2

Literature Review

In the Literature Review, I discuss the acquisition of language and early reading skills, and the part that music can play in developing both of these. I go on to consider how music may be taught in the Early Years, and the importance of play and improvisation as the medium through which young children do so much of their learning. Following this, there is an examination of the challenges that the generalist Primary school teacher faces in the teaching of music, and studies that have been undertaken to confront these challenges, particularly with student teachers. The final section examines the role of the teacher educator, and the opportunities that she may take to develop reflective practice.

2.1 Language Acquisition

Siraj-Blatchford and Clarke (2000) define language as the formation and communication, through the spoken word, of information, thoughts and feelings. The highly complex process of acquiring, or learning, language begins at birth and is a collaborative undertaking that takes place between the child and his carers (Tough, 1984; Lindon, 2012; Trevarthen and Malloch, 2012). Children do not learn to speak in isolation, and although the human brain is programmed for communication, it can learn only through experience (Lindon, 2012). The earliest interactions between the mother and the child are typically intimate, one to one encounters, with mother and child gazing into each other's faces during the exchange (Trehub and Gudmundsdottir, 2015). The speech the mother uses is repetitive, higher in register, more expressive and exaggerated in intonation, and slower in speed than her normal speech for this is what engages her baby (Lindon, 2012; Wood, 1998). Moreover, 'pitch contours are thought to be the most salient aspects of maternal speech for infant listeners' (Adachi and Trehub, 2012 p. 231); this sing-song, infant-directed speech holds the child's attention for longer than adult-directed speech. The baby meanwhile, imitates the mother, and their early vocalisations will progress from cooing to vocal play and babbling (Chen-Haftek and Mang, 2012). Children are born with the capacity to learn any human language, so even though the baby is not

yet speaking any recognisable language, it is nevertheless babbling using the sounds of the language that it hears (Trehub and Gudmundsdottir, 2015). Thus, the child's innate ability to imitate others, and the 'play drive', which 'leads the child to interact with their environment and thus to learn the way in which it works' (Fontana, 1984 p. 40) can be seen in operation at those very early stages. Wood explores this interaction of speaker and listener further, and notes the ability of the listener to anticipate and thus to shadow the movements of their interlocutor. He argues that the synchronising of movement and speech plays a part in achieving a common understanding, and compares conversation with dancing and singing. All these activities, he contends, are based on shared rhythmic abilities and he suggests that this 'tuning in' that takes place between speaker and listener, has its roots in a shared biological rhythm system (Wood, 1998).

There are a number of models offered to illustrate the process of acquiring language. Tough (1984) and Siraj-Blatchford and Clarke (2000) describe the way in which babies progress from uttering so-called holophrases, or single words to express a complex idea, to telegraphic phrases, or phrases containing only the most salient words to express an idea, for instance, 'Daddy gone', 'want dolly'. These words, according to Fontana, are usually nouns and verbs to begin with, followed by pronouns, with adjectives and adverbs appearing in the child's speech somewhere in their third year (Fontana, 1995). The learning of language begins with sound (Siraj-Blatchford and Clarke, 2000) and is paced by the way in which children hear (Wood 1998). Thus, because the 'ing' in, say, 'walking' is stressed, and therefore more audible than 'ed', children master the present participle first (ibid). However, this could also be rooted in meaning; after all, it is arguably easier to express an idea while it is happening than to recall it after the event. Siraj-Blatchford and Clarke (2000) describe language as a complex puzzle that has interlocking pieces which include phonology, vocabulary, grammar (or the way in which words are put together and ordered within a sentence), discourse (how sentences are put together), and pragmatics (the rules of how to use language, e.g. turn taking). According to Whitehead's model, grammar has several levels, and these include lexis (or vocabulary), syntax (morphology and word order), semantics (cultural knowledge) and phonology (Whitehead, 2007). Whitehead applies the word phonology not only to the sound structure in words, but also to the 'organisation and patterning of the sounds of a language, including such important elements as emphasis and intonation. These give different languages their distinctive 'tunes', the rise and fall of questions and statements, as well as the stress we put on important

words, or parts of words' (Whitehead, 2007 p. 9). Thus the language of music creeps into the definition, and there are interesting links to be made between this description and the relationship between language and music, as we shall see later.

According to Tough (1984), the way in which parents speak with their children affects their learning and development right from the very beginning. In a study that she undertook in the 70s, she noted that children from advantaged backgrounds used language significantly more to report, to explain, to make predictions and so-on, than children from disadvantaged backgrounds. Siraj-Blatchford and Mayo (2014) suggest that this happens because of a difference in approach to child rearing between the social classes. So-called middle class parents are more likely to cultivate their children by ensuring that they participate, for instance, in organised activities, and that they are readier to elicit their child's opinions, thoughts and feelings; indeed, may encourage what Lareau (2011) terms 'verbal negotiation'. On the other hand, children in poorer families have more leisure time and opportunities to initiate their own play, but extended conversations beyond directives are less likely to happen between parent and child (Siraj-Blatchford and Mayo, 2014). As Lareau (2011 p. 146) puts it, 'language serves as a practical conduit of daily life, not as a tool for cultivating reasoning skills or a resource to plumb for ways to express feelings or ideas.'

In spite of the disadvantages children from poorer families may have, researchers are agreed that, with encouragement and modelling on behalf of the instructors, they may be enabled to extend their use of language (Tough, 1984; Wood, 1998). Siraj-Blatchford and Sylva (2004) suggest that in order to encourage children to extend their language and thought processes, educators need to be responsive in their teaching. In order for learning to take place, the child needs to be motivated and involved, so a large proportion of the interactions need to be child initiated with the adult taking the lead from the child, and extending the child's ideas and thought processes through sustained shared thinking (Siraj-Blatchford and Sylva, 2004). It is important to note here, too, that many of the experts recommend that play with language should be at the heart of the early years curriculum (Lindon, 2012; Whitehead, 2007; Siraj-Blatchford and Clarke, 2000). Children become aware of differences in sound patterns through learning nursery rhymes and chants, and making up words to songs (Lindon, 2012). Moreover, stories, rhymes and songs should be at the heart of the early years curriculum because their 'linguistic power… stems from the predictability of 'what comes next' in such material' (Whitehead,

2007 p. 24) and the repetition in these little texts means that the children can 'practise well-loved chunks of the language over and over again' (op. cit.).

In summary, then, the learning of language is a highly complex process which begins with sound. Furthermore, intimate and loving human interaction plays a crucial part in language acquisition.

2.2 Early Reading

Arguably, the most important aspect of the primary practitioner's role is the teaching of reading: 'The ability to read is the key to educational achievement. Without a basic foundation in literacy, children cannot gain access to a rich and diverse curriculum.' (House of Commons Education and Skills Committee, 2005 p. 5). Experts generally agree that children need a certain reading readiness in order to be able to learn to read,. Horner (1978) writes, 'it should be remembered that reading is a skill developed by societies in an advanced state of civilisation, and cannot be compared to physical skills like walking and talking' (p. 185). Horner argues that reading readiness depends on a combination of factors: psychological (which includes acuity in hearing and sight and 'the correct functioning of the speech organs' (op. cit.)), environmental (e.g. linguistic background and social experience), intellectual (which includes visual and auditory discrimination) and emotional (which includes motivation). Motivation is also cited by others as a powerful factor, and Perkins (2015) argues that it begins with the knowledge that print, and in particular environmental print, carries meaning (conveyed by language). For both Cullingford (2001) and Goswami (2014), mastery of language is a crucial factor:

> 'Learning to read is sometimes erroneously considered to be a visual skill, but it is actually a linguistic process. A brain that can read gains linguistic information from a visual code that represents speech. Hence, speech processing skills are integral to reading.' (Goswami, 2014 p. 1)

Lindon (2012) takes up this theme of the importance of spoken language, and posits five building blocks for later literacy, which include confidence in spoken language and a large vocabulary and crucially, 'alertness to sound and sound making, rhythm and rhyme and the steady beat of music making and singing' (p. 153). (For more detail on the process of learning to read, see Appendix 2.)

As the Bullock Report warned, however, 'there is no one method, medium, approach, device or philosophy that holds the key to the process of learning to

read', (DES, 1975 6.1). The process of learning to read is acknowledged to be highly complex, and these various models, which cannot on their own explain how reading is learned, should be seen complementary rather than conflicting (Perkins, 2015). Even so, Cullingford (2001) and Harrison (2004) both lament the way in which the teaching of reading has been so politicised that, when new reading schemes and approaches are introduced, it is claimed that they provide the only way to learn to read, and everything else that preceded them is thrown out, like the baby with the bathwater. 'The idea that there is one particular technique that is so important that nothing else should exist is both doctrinaire and absurd' (Cullingford, 2001 p. 33). Mixed methodologies should be accepted (Harrison, 2004).

Nevertheless, over the last twenty years, there has been increased Government involvement in the way that reading is taught in the Primary school, first of all through the introduction of the National Literacy Strategy in 1998 (DfEE, 1998), which was followed in 2006 by the Primary Framework for literacy and mathematics (DfES, 2006a). With the National Literacy Strategy came the recommendation of a 'Searchlights' model of reading. Informed perhaps by such models as Adams' (1994) four processors (see Appendix 2), this involved the children exploiting a range of strategies, which included phonic knowledge (or knowledge of the alphabetic code), whole word recognition, grammatical knowledge and knowledge of context in learning to read. Within a short period of time, it was found to be inadequate. Teachers were told that, although it acknowledged the complex process of learning to read, the Searchlights model was misleading in that it gave the impression that phonic decoding was an optional searchlight; in other words, that phonics did not need to be taught explicitly (DfES, 2006b).

A longitudinal study was carried out in Scotland (Johnston and Watson, 2004), which demonstrated the efficacy of synthetic phonics in teaching children how to read. A distinction is made between synthetic phonics, whereby single sounds are blended to decode words, (for instance b-ea-ch), and analytic phonics, which breaks the word down into larger units, (i.e. onset and rime), and encourages children to make analogies to words that are spelt similarly, e.g. b–each; p-each; r-each. Despite questions raised over the data collection (Goswami, 1999), in an Independent Review of Early Reading, Rose (2006) recommended that synthetic systematic phonics (SSP) be the prime approach to the teaching of reading, believing that it offered 'the vast majority of young children the best and most direct route to becoming skilled readers and writers' (p.4).

In order to be able to decode words using phonics, the child needs to develop phonemic awareness (Harrison, 2004). Phonemic awareness is a subset of phonological awareness, or the ability to hear the sound structure of words. Researchers agree that phonological awareness (the awareness of the sound structure of language), along with letter knowledge, are the strongest predictors of reading ability (David, Wade-Woolley, Kirby and Smithrim, 2007; Johnston & Watson 2004). However, as Goswami and Bryant (1990) argue, phonemic awareness, or the ability to segment a word into its smallest units of sound—the skill almost exclusively focused upon in the teaching of Systematic Synthetic Phonics (SSP)—is just one aspect of phonological awareness; the other two being syllabification and onset and rime. Indeed, Richardson, Thomson, Scott and Goswami (2004) claim that, of these, awareness of syllables emerges first in children, followed by onset and rime, with awareness of phonemes being the last of these to develop. Moreover, David et al (2007) and Castles and Coltheart (2004) remind us that awareness of rhythm and rhyme are crucial not only to the beginning reader, but also to the developing one as, for example, they encounter polysyllabic words to which stress must be assigned.

In a seminal study with 65 children, Bryant, Bradley, MacLean and Crossland (1990) demonstrated that there was a strong relationship between early knowledge of nursery rhymes and success in reading and spelling. In short, the children who knew nursery rhymes were better at identifying rhyming words, had superior phonemic awareness, and were more successful in learning to read by the time they were six. Indeed, rhyming words were identified as a key ingredient of the connections between the nursery rhymes and reading and spelling – so a child who knows that, for instance, ‘light’ and ‘fight’ rhyme, will be readier to make the connections between the way the words are spelt and use this analogy to read and spell other words with the same rime. I suggest also that the child who knows that ‘bite’ also rhymes with ‘fight’ may be able to build a mental store of different spellings for the same phoneme. What was also interesting was the connection between rhyme and phonemic awareness, and Goswami and Bryant (1990) suggest that being able to hear rhymes, which are intra-syllabic, helps the child break down the word further into its constituent phonemes. As Cullingford (2001) puts it, ‘children learn not only rhymes, but the individual sounds from which they are made’ (p. 47). Cullingford also suggests that in nursery rhymes there is an emphasis on speech rhythms and clear and precise sounds which makes it easy to ‘apply to the peculiarities of script’ (op. cit. p. 41). Furthermore, nursery rhymes are short,

rhythmic and repetitive and easy to memorise, and may be helpful in developing children's language ability (Horner, 1978).

The connection must be made here between music and nursery rhymes, as many of them (indeed, four out of the five that Bryant et al (1989) used) have instantly recognisable melodies, and are, I suggest, more often sung than spoken. Bryant et al. (1989) acknowledge that even when mothers are reciting nursery rhymes to their children, this is done in a sing-song way that follows the pitch and rhythm of melody and they conclude that phonological work may start with prosodic cues and rhythm in mothers' speech to babies. Cullingford (2001) is clear that music has a place in the development of phonological awareness, and recommends such activities as the use of rhythm to give a sense of spoken patterns, clapping and playing percussion instruments in time with music, and making up new words to jingles and nonsense rhymes. As he says, 'children's love of making sounds is the basis of their ability to discriminate between different sounds' (op. cit. p. 49). It is, as Harrison argues, important to develop phonological awareness with the emphasis on enjoyment (Harrison, 2004).

2.3 Music and Language Acquisition

For the last forty years of so of the twentieth century, it was believed by psychologists, linguists and neuroscientists that the parts of the brain which controlled speech and language were entirely separate from the parts of the brain that governed music (Deutsch, 2010). However, in recent years, neuroscientists have made discoveries about brain function that appear to contradict this. Patel (2012) argues that, although neuropsychology favours the theory that powers of language and music are controlled by separate domains, neuro-imaging challenges that position. He acknowledges that, although musical and linguistic knowledge are domain-specific, nevertheless, music and language share neural processing pathways (ibid). He claims, for instance, that language and music both have syntax – in other words that the elements (either words, tones or chords) are organised into hierarchically structured sequences: 'in comprehending language and music, the structural relationship of incoming elements (such as words or chords) to preceding events must be determined in order to make sense of the sequence' (Patel, 2012 p. 210). Elsewhere, Patel argues that the ability to hear and understand melodic contours is common to both speech and music; for instance, in English the pitch of the voice usually goes up at the end of a question (Patel, 2011). Goswami (2012a), on the other hand, is of the opinion that it is through prosody and rhythm that the

shared cognitive systems of language and music can best be understood, rather than through syntactic aspects. Peretz (2012a) favours the domain specific view of language and music, and is more cautious about attributing causality than Patel, stating as she does that music processing 'recruits a vast network of regions'(p. 259), and that the data that neuro-imaging gives are still not precise enough about that network. She agrees with Goswami that language and speech are most closely related through rhythm, remarking that the remediation of aphasia in stroke victims by singing (described below) could be effective because of its rhythmic quality. She goes on to point out that singing interventions have been more successfully used with English speaking patients than with French, suggesting that this is because English is a stressed language, and English texts are therefore set rhythmically. It is her view that singing is a deeply pleasurable activity, and that the sources of the enjoyment experienced in the activity of singing should be more fully explored (Peretz, 2012b).

What neuroscience is showing, in a variety of studies, is that changes do take place in the brains of both children and adults who have undertaken musical training. Hyde and her colleagues found that, after only 15 months of musical training, the brains of the children in their study had increased in plasticity (Hyde, Lerch, Norton, et al., 2009). A recent Scientific American Mind report (Forde Thompson and Schlaug, 2015) shows images of the arcuate fasciculus, a bundle of axons which, it is thought, connect two important areas for language use, Broca's area and Wernicke's area, in the brains of two healthy males, one of whom is a musician and the other is not. In the musician, the arcuate fasciculus appears much thicker, implying that musical training has strengthened this connection, and raising the question of whether this has in fact impacted on the language skills of the subject. Furthermore, studies have been made of stroke victims who have lost the power of speech and who have undergone melodic intonation therapy (MIT), which uses melodic speech intonation and rhythmic tapping to restore some of those lost skills (Schlaug, Marchina and Norton, 2008; Forde Thompson and Schlaug, 2015; Wan, Zheng, Martina et al., 2014). In theorising about findings, Wan reports increased activity in the right hemisphere of the brain during therapy, and reasons that part of its effectiveness lies in the dominant role that the right side of the brain has in processing spectral information (in other words, pitch and harmonic structure)(Wan et al., 2014). Forde Thompson and Schlaug (2015) suggests that MIT 'produces long-term gains that appear to arise from changes in neural circuitry—the creation of alternative pathways or the strengthening of rudimentary

ones in the brain' (p.35). In theorising about the success of MIT, Schlaug describes four mechanisms by which the facilitating effect may be achieved: the reduction of speed and syllable lengthening (both of which make processing of individual words easier); syllable chunking, whereby it is easier to distinguish between syllables because they are all sung on different notes; and rhythmic tapping by the left hand, which activates the right hemisphere of the brain. Three of these four mechanisms, which are used in singing, are related to rhythm as well as to pitch.

In their study of young children, Chen-Haftek and Mang (2012) also argue that music and language are closely related and that the ability to discriminate between pitch and rhythm, and between melodic contour and speech intonation is common to the processing of both language and music. Furthermore, 'developing musical abilities at an early age will enhance children's abilities in processing the musical elements in speech, which is crucial for language acquisition' (Chen-Haftek and Mang, 2012 p. 270). The authors suggest that melodic utterance is one of the first real signs of language development and that, in the child's earliest months of life, there is little difference between singing and speech sounds; in fact infants appear to prefer singing to speech (Gordon, Schön, Magne et al., 2010). Bradley et al. (1989) acknowledge that even the recitation of nursery rhymes to babies and very young children has a song-like quality in its intonation; infant-directed speech has also been referred to as musical speech 'because it contains musical characteristics, such as abundant repetition, high pitch, slow tempo, and large slow pitch contours (up/down patterns)' (Anvari, Trainor, Woodside and Levy, 2002 p. 112).

Trehub and Gudmundsdottir (2015) develop this idea in their chapter on mothers as singing mentors. When a mother sings to her baby, very often this is done face to face – a one to one interaction – with the mother smiling as she sings, giving visual interest to the child. She sings more slowly, more expressively and at a higher pitch than she would if she were not singing directly to the baby and, what is more, babies respond not only to their own mother's singing, but other singing that is done in the 'maternal style' (Adachi and Trehub, 2012). When the mother sings in this way, she emphasises phrase boundaries by lengthening the phrases or adding pauses, and when she sings at a high pitch, her singing is louder than when she sings low, thus emphasising pitch structure. In this way, unconsciously, she teaches her child about the structure not only of music but also of language (Trehub and Gudmundsdottir, 2015). Thus, 'singing to children fosters language acquisition,

perhaps because exaggerated prosody aids segmentation and the added musical information provides redundant cues for learning' (Gordon et al, 2010, p. 10).

Babies are also highly responsive to rhythm, particularly if they experience movement in the course of listening to those rhythms. Adachi and Trehub (2012) describe a study that showed that, when bounced to a duple or triple time melody, the babies were subsequently more attentive to music with those time signatures. Shared music making in the home between parents and toddlers also has a positive impact on social development and self-regulation skills (encouraging active participation and turn taking), and enhances cognitive processing and phonemic awareness (Williams, Barrett, Welch et al., 2015). In comparing musical activity with shared reading, the authors suggest that the structure of music in regular phrases might enable the child to attend in a more sustained way because it is clear where the beginning, the middle and the end of a song are, and for this reason the child is less likely to disengage partway through a song than a storybook. Also, shared music activities are often more appropriate developmentally because they are active, and the children do not have to sit still for long periods of time. In this study, it was also found that shared music activities contributed, along with shared reading, to the development of vocabulary (ibid).

Two major elements that exist in both music and speech are then, pitch, or melodic contour, and rhythm. Pitch contributes to emotional and linguistic function in both modes (Besson, Schön, Moreno et al., 2007). Thus, the simple phrase in answer to someone giving their opinion: 'Do you think so?' with the stress on 'think' may invite the interlocutor merely to confirm their position. However, if 'think' is stressed but said at a significantly higher pitch, this can also express scepticism on the part of the listener. Besson et al. (2007) show that musical intervention can improve children's ability (both those with normal development and those with dyslexia) to hear pitch violations in speech. This is particularly significant because difficulties with pitch processing account in part for difficulties in reading. On the other hand, many aspects of human behaviour are governed by rhythm, such as our breathing and heartbeart, walking and dancing, and there are metrical constraints also on the way in which we produce language (Goswami, 2012b). Goswami explains here that stressed syllables 'carry high informational content' (op. cit. p. 59), and being able to predict when the next syllable is going to occur 'guides the listener to when important information may be expected to occur in the speech signal' (op. cit.). She argues that if children are singing nursery rhymes and

rhythmical songs, they are learning to 'align the beat of the stressed syllables to the beat of the music' (op. cit. p. 60). This rhythmic ability is a crucial element of phonological awareness, and several studies have been undertaken to examine the role of music in the development of phonological awareness, not only for learning language but also to facilitate reading (Anvari et al, 2002; Gromko, 2005; Degé and Schwarzer, 2011; Hille , Gust, Bitz and Kammer, 2011; Moritz, Yampolsky, Papadelis et al., 2013; Patscheke, Degé and Schwarzer, 2016; Gomez-Dominguez, M., Fonseca-Mora, M. and Machancoses, 2018; Ozernov-Palchik, O., Wolf, M. and Patel, A., 2018).

Thus it can be seen that scientists, and neuroscientists in particular, have recently made new discoveries about the role of music in developing language skills and acquisition. Although in many cases they can only theorise about these connections, there is the feeling that there is much more progress to be made in this field. Furthermore, work undertaken with babies and very young children shows that both the pitch and rhythmic elements of musical activity can have a positive effect on children's developing language skills.

2.4 Music and Reading Development

I now turn my attention to studies where musical activities that may be found in a typical Primary school have been used to develop reading skills and phonological awareness. I focus on these in particular, because it is important to my thesis that the activities may be replicated by the generalist Primary school teacher. These activities include, for instance, *a capella* singing with and without actions, tapping out rhythms of lyrics and music in song, and playing simple percussion instruments. It is also important to note that these interventions were carried out across the development range – from children in the early years to teenagers, with both normal reading development and dyslexia. (Gromko, 2005; Biggs, Homan, Dedrick et al., 2008; Thomson, Leong, and Goswami, 2013; Long, 2008; Verney, 2013.)

In 2003, working with a group of boys aged from 7 – 11 years, Overy, Nicolson, Fawcett and Clark (2003) found that being able to tap the rhythm of a song correlated with syllable segmentation, which in turn impacted upon spelling ability. Using a range of clapping and percussion games and singing, they argued for the use of the voice because singing naturally slows down speech and highlights its transitions (Overy, 2000). This, the authors suggest, is highly beneficial for dyslexic children as they find speech processing difficult, so the technique of

slowing speech down leads to ‘faster temporal processing, and hence improved phonological awareness and reading skills’ (Overy et al., 2003 p. 226). Furthermore, training that focuses on coordination and is multi-sensory is also beneficial for dyslexic children.

After having had four months of music lessons which included singing, rhythm work and graphic representation, a group of four and five year old children showed that they could segment phonemes more fluently compared with children who had not had the same musical experiences (Gromko, 2005). A typical lesson would include learning to sing a new folk song and accompany the singing with simple body percussion and then with percussion instruments; this, it is suggested, reinforced the children’s perception of beat and word rhythms. They also followed a graphic chart as they sang. In this experiment, which also looked for impact on reading ability, the greatest gains were in the development of phonemic awareness, which as the author reminds us, is an aural skill, so the use of the graphic chart may not have had the desired impact.

In the 2013 study undertaken by Thomson et al., a group of nine year old dyslexic children had a one-to-one half-an-hour lesson per week for six weeks. The lesson would typically consist of a warm up of rhythmic activities often using words to generate those rhythms and tapping the beats on djembe drums. They then went on to use a computer programme to match short rhythms to phrases, e.g. ‘DEEdee DEEdee’ for ‘Harry Potter’, and to manipulate two different rhythms so that they became identical. Thomson and her colleagues found that, in just six weeks, there was significant impact on word reading and spelling.

In addition, the results from Verney’s studies showed that ‘an intervention based on rhythmic structure in either a rhythmic speech form or in musical form can be successful in improving children’s phonological awareness skills’ (Verney, 2013 p.iv). Verney’s study was with a group of four and five year old children. Again, they learned songs and to move and tap instruments in time with the songs, and because Verney was interested in the rhyme as well as the rhythmic aspect of phonological awareness, there was a focus on hearing the rhymes at the end of a line. Rhyming words were emphasised either by omission or by being the only part that was sung. Also, new rhyming words were supplied for familiar songs. The children had two, twenty-minute lessons a week, and after seven weeks it was

found that their rhythmic awareness had improved, which had a direct link to their ability to decode phonological information.

In work with high school children who were experiencing difficulties with reading, Biggs et al. (2008) put a singing programme in place which raised attainment levels, arguing that this is partly because a song bears repetition, whereas the spoken word will not (Standley 2008; Bresler 1993). Long (2008) describes a different intervention which involved 'stamping the feet alternately while keeping time with musical accompaniment' (p.12), adding synchronised clapping, co-ordinating the two and chanting while reading music notation. This intervention had the effect of improving not only reading accuracy but also comprehension (and, incidentally, the study of Goswami, Huss, Mead et al. (2013) showed that there was a significant correlation between musical beat perception and comprehension). Furthermore, Long supports the findings of David et al. (2007), in that 'the children were able to apply stress appropriately to tackle longer words....using newly enhanced rhythmic ability' (Long, 2008 p.21).

Standley's meta-analysis of 30 studies using a variety of music interventions to enhance reading skills, shows that benefits were found to be great, especially when 'music activities incorporate(d) specific reading skills matched to the needs of identified children...or contingent music is used to reinforce reading behaviour' (Standley, 2008, p.17).

Finally, in studies measuring prosodic awareness with dyslexic children, Goswami (2013) shows that they had difficulty not only in counting the number of syllables in certain words, but also in perceiving syllable stress. As a result, she writes 'one obvious implication is that remediation with music might be very effective for improving dyslexia. Rhythm is more overt in music than in language, and so a focus on musical rhythm along with activities that explicitly link musical beat structure to the beat structure of language many help to improve rhythmic entrainment' (op. cit. p.109), a position she reiterates in other articles (Goswami 2011; Goswami et al. 2013).

It seems that music has enormous potential for developing children's phonological awareness and language skills. Returning to the discussion of the previous chapter, Chen-Haftek and Mang (2012) list five common musical and

linguistic abilities: discrimination of pitch and rhythm, recognition of melodic contours in speech and music, organisation of sounds into musical phrases/sentences, memory of speech/ music, and vocalisation. Much of this, of course, is present in singing, which is valuable for its potential for teaching second languages, and therefore is a most important activity for children learning English as an additional language (EAL) (Schön, Boyer, Moreno et al., 2008; Saffran, Johnson, Aslin and Newport, 1999). (Please see Appendix 3 for further discussion of the effects of music intervention with children with EAL).

Thus, it can be seen that, amongst neuroscientists, academics and educators, there is an increasingly strongly held belief, supported by scientific evidence, that music in its various forms, can have a role to play in language and reading development. This has serious implications for early years and primary classroom practice. However, as Goswami (2006) warned, 'there is a gulf between current science and direct classroom applications' (p. 2). She went on to say that the continuing professional development in 'brain-based learning' offered to teachers is often based on 'neuromyth'. The question for the Primary school teacher, therefore, is what sort of musical activities will help to develop children's phonological awareness, and how might children be engaged with those activities in a meaningful way? Furthermore, what knowledge (for instance, about the way children learn) and skills do I, the practitioner, need in order to teach music effectively?

2.5 Play

It is universally recognised that play is the principal medium through which children develop and learn (Whitebread, 2012; DCFS, 2009b; Sheridan, Harding and Meldon-Smith, 2002). Indeed, as the DCFS reminds us, play is so important in a young child's 'well-being and development that the right to play is set down in the United Nations Convention on the Rights of the Child' (DCFS, 2009b p. 3), and Sheridan et al. (2002) argue that play is as crucial to a child's development as food and protection. In short, 'the influence of play on a child's development is enormous' (Vygotsky, 1978 p. 96). (For a more detailed exploration of play, see Appendix 4.)

Whitehead contends that play can be subversive, and very much about who is in charge: control must stay with the players. In other words, it is crucial that children are allowed to take the lead (Whitehead, 2010). The feeling of empowerment is fundamental to children being able to develop positive attitudes to

learning, and about themselves as learners (Whitebread, 2003). Although Vygotsky insists that it is inaccurate to define play as something that gives pleasure (Vygotsky, 1978), nevertheless, an element of fun can 'lighten the imposed nature of activities (and) introduce the possibility of subverting a tight structure' (Whitehead, 2010 p. 90). Whitehead describes ways in which children can have fun with language, such as making up new rhymes for existing songs and poems.

In many sources it is stressed that children's play should be spontaneous and self-initiated (Moyles, 2010a and 2010b; Sheridan et al., 2002; DCFS, 2009b). Adult led activities, according to the National Strategies document, are not play, but they should be playful, that is, they should have the qualities of play (DCFS, 2009b). The document goes on to state that in order to get the best outcomes for children in the early years, there needs to be a balance between child-initiated play which is supported by adults, and activities that are led by the adult who guides the learning through playful experience (DCFS, 2009b):

'Through all activities in the Early Years setting, a playful approach supports learning because:

• playful children use and apply their knowledge, skills and understanding in different ways and in different contexts

• playful practitioners use many different approaches to engaging children in activities that help them to learn and to develop positive dispositions for learning.' (p. 16).

Children learn from hands-on experiences, and the most effective projects and activities are those which draw upon and utilise the children's instincts and love of play (Moyles, 2010a; Moyles, 2010b). It will become clear whether the activities chosen for this study had that playful, engaging quality.

2.6 Improvisation

Knapik-Szweda (2015 p. 154) defines improvisation as 'the art of creating music spontaneously on the basis of non-directive activity', and Koutsoupidou and Hargreaves (2009, p. 252) say that it is 'defined as children's spontaneous music making, using their voice, movement, or musical instruments'. Both definitions are very broad and unspecific, perhaps because improvisation by its very nature is capable of infinite variation, much in the same way as play. Examples of children's improvising range from the earliest vocal exchanges involving turn-taking between

mother and baby (Gratier, Devouche, Guellai et al., 2015) to invented song (Moog, 1976; Barrett, 2006; Barrett, 2010); from exploring voice and instrumental sounds in response to imaginative stimuli (Koutsoupidou and Hargreaves, 2009) to reciprocal music-making based on taking turns (Knapik-Szweda, 2015) and using a computer software package which replies to the child playing a keyboard by mirroring and variation (Addessi, 2014; Addessi, Anelli, Benghi and Friberg 2017).

Harrison and Pound (1996, p. 237) describe improvisation as being the 'talk' of music. Moog (1976) and Barrett (2010) both suggest that when babies first learn to vocalise, their babblings are the beginnings, not only of speech, but also of invented song. This will sometimes be child-initiated, in other words, not in response to another person. This evolves into invented song whereby children use snatches of known songs to improvise in different ways – sometimes focusing on melodic contour (imaginative song), sometimes telling a story, varying lyric and melodic content (narrative), and at other times combining known songs interspersed with melodic and lyric material - what Moog dubbed 'pot-pourri' songs (Moog, 1976). Barrett remarks that in using songs to tell stories, children are making sense of their experiences and constructing a version of themselves in the world. Vygotsky argued that language is a tool, not only for self-expression, but also for thought. It is inter-personal and intra-personal, and young children need to vocalise in order to teach themselves. In one of Vygotsky's studies, the observers found that the children who were permitted to use language to talk to themselves about how they would go about a task were quicker to complete it than those who had to remain silent. So at this young age, vocalisation is incredibly important as a tool for thought (Vygotsky, 1978). Moreover, as children rework familiar songs by changing the words, they play and become more familiar with the structures and sounds of language. As Young (2003a, p. 90) remarks, 'all children enjoy changing song words enormously – it is a form of language play – particularly subverting the song words to something less reverent'.

From as young as eight weeks old, infants can be observed 'taking turns' in their vocalisations with adults (Gratier et al., 2015). Not only this, but, in responding to the infants, adults match the acoustic qualities of these vocalisations, 'producing short, repetitive bouts of infant directed speech aimed at eliciting further vocalisation on the part of the infant' (op. cit. p. 2). It is argued that this imitation of the infant by the adult plays a vital role in the infant's development; furthermore, infants prefer imitative to non-imatitive adults (Addessi, 2014). In taking turns, timing is crucial: infant and mother respond to each other more quickly than they repeat themselves

(Gratier et al, 2015) and this timing is described by Addessi (2014) as pulse and communicative musicality. Thus, repetition, mirroring and turn-taking are crucial components in the child's earliest experience of learning to speak.

Repetition, mirroring and turn taking are also explored as elements of musical improvisation. Repetition is a vital element both in music and in language: Kratus (1991) insists that repetition is essential for children in order that they should learn to audiate patterns and build their repertoire of building blocks in sound. A study was conducted which investigated children's improvisation through use of a software programme on a keyboard that was able to reply to the child's inputs using mirroring and variation (Addessi et al, 2017). In this study, it was observed that the children's engagement was far more sustained when they were responded to reflexively – in other words, what they played was repeated back to them but with some variation – than if the response was an exact replica of what they had played or something completely different. 'The co-presence of repetition along with something different seems to attract and stimulate the user to become involved in the interaction' (op. cit. p. 4). It was also found in this study that the children who had had the most exposure to the reflexive programme developed the greatest ability to improvise both by themselves and with others. In observing children's improvisations in the nursery, Young found that the children were more likely to sustain their play and to play more inventively when an adult was with them. Not only this, but the children played for longer and in more interesting and varied ways when they were interacting with familiar adults, i.e. nursery staff who had no formal musical training, than when they were with adults who were unfamiliar, yet musically trained (Young, 2003a). Young explains that 'interpersonal processes are fragile and easily upset by over-directive, poorly timed or poorly matched responses on the part of the adult partner' (Young, 2003b p. 185); the nursery staff played simple, echo and match games which led to the children playing for longer and with more attention. In other words, the nursery staff and the reflexive programme were behaving in similar ways – listening attentively to the children, picking up on their ideas and reflecting them back in turn-taking.

A study was conducted to investigate the use of improvisational music therapy with children diagnosed with autism. It was found that, through reciprocal music making based on taking turns, the children's non-verbal communication improved (e.g. eye-contact was more sustained), they were better able to listen and to obey the rules of turn-taking, and they could concentrate for longer. They also

developed their ability to memorise and reflect (Knapik-Szweda, 2015). A similar study was conducted with children with severe language delay, and it was found that the children became co-operative in their play, and made more spontaneous attempts at verbal communication as a result (Wetherick, 2014). It was felt that improvised musical interactions provide the children with opportunities for self-expression which do not depend on facility with language.

The benefits of improvisation for language as well as for musical development therefore cannot be overstated. In summary, improvisation begins at birth with interaction between mother and child. Repetition, turn-taking and mirroring are important ingredients of both music and language. Children's engagement with improvising a musical conversation is at its most sustained with a familiar adult. Finally, musical improvisation can be beneficial for children with speech and language impairments.

2.7 Music in the Early Years Classroom

In attempting to answer the question, 'Why do music?' Susan Young rightly points out that in today's educational climate, which is goal orientated, music is seen as relatively unimportant as a curriculum area: 'what often happens is that its purpose is linked with things 'use-full', so that arguing for music in terms of its ability to support children's social skills, their language and so-on, is what dominates'(Young, 2009, p. 9). I fear that if we just engage in musical activities that we think will help with language development, our teaching of music will become narrow and limited, and we will lose so much of the value of music – music, which is 'pleasurable and uplifting' (op. cit.). So children should be immersed in the full range of musical activity: listening, using their voices, playing instruments, dancing, composing and so-on. However, it is also important to understand the cross-curricular value that these activities have, and their potential for developing children's skills and understanding in other areas. Thus, reiterating Collins's findings (Collins 2014), if persuading trainee teachers of this value convinces them to include music in the curriculum, it can only be a good thing.

Trevarthen and Malloch (2012) argue that, in order for an educational experience to be rich, the moment of emotional involvement should be instantaneous for the learner. They make the point that whilst musical instruction is important, it should not stifle zest for learning: '(t)he primary acquisition of knowledge involves freshness, enthusiasm, and enjoyment of learning' (Trevarthen

and Malloch in McPherson and Welch, (eds), 2012 p. 257). Thus, 'getting the balance right is important for transmitting mastery of all the cultures of art and technique, and this is most apparent early in life when the child's unruly playfulness drives imitative learning and resists imposed tasks' (op. cit. p. 255). In other words, children need to be motivated by their own desire for involvement and participation in musical activity for meaningful learning to take place.

Young and Glover (2002) echo this when they say that '(c)hildren have a musical vitality, their own way of being musical in the world' (p.v). Therefore it is important to consider ways in which music may be taught effectively in the early years classroom so that that balance of enjoyment and purpose is achieved.

A variety of approaches to organising music making in the early years is recommended by educators. Both Edden (2003) and Klijn (2003) describe activities in which large or small groups of children typically sit in a circle with their teacher, who will have chosen an activity that both builds on the children's prior knowledge and experience and engages their interest. Both show ways in which the children can be given increasing ownership of their own learning. Young and Glover (2002) discuss a range of formats for musical activity in the classroom, which include teacher-led work, with the children participating and taking turns so that they are heard individually; small group sessions with the teacher or helper, in which differentiation and one to one musical interaction can take place; individual play in continuous provision; and individual or paired work in a music area, again with a 'listening helper'. Thus, there is a mixture of child and adult led activity. The authors also recommend that music should be integral to the life of the classroom, and not something that is taught as a discrete lesson once a week.

The Early Learning Goals for music as specified by the Early years outcomes document (DfE, 2013a pp 31 and 32) are as follows:

At 30 – 50 months children should

- Enjoy joining in with dancing and ring games.
- Sing a few familiar songs.
- Begin to move rhythmically.
- Imitate movement in response to music.
- Tap out simple repeated rhythms

At 40 – 60 months they should

- Begin to build a repertoire of songs and dances.
- Explore the different sounds of instruments.

It is worth remarking here that this document was critiqued by Linda Bance in 2012, because as she said, 'by building on young children's innate musicality, playful interactions through songs, rhymes and movement have been seen to be fundamental to language development and healthy wellbeing. It is important therefore, to see music threading through these key areas and not being confined to a single area of creative development as suggested by the current EYFS' (Bance, 2012 p. 1). In other words, the focus on music is too narrow and its potential in enhancing and enriching children's learning in all other areas is not exploited in the Early Years Outcomes document (DfE, 2013a). This view of music is reflected in Langston's handbook 'Facilitating Children's Learning in the EYFS' (Langston, 2014), which almost exclusively relegates discussion of music to half a page in the Expressive Arts chapter. Nevertheless, the Early Learning Goals do provide us with a reference point with which to examine how music may be taught in the early years.

A range of musical activity that addresses these goals is described by all four of the above authors, from listening to environmental sounds, responding to rhythms played on African drums, to vocal games, singing and composition. Both Edden (2003) and Young and Glover (2002) stress the importance of musical games. According to Edden, games are 'increasingly used as a valuable preparation for music education' (Edden in Whitebread (ed) 2003, p. 231); they aid personal, social and creative development, and give the teacher who may be lacking in musical confidence a way to explore the provision of music in the classroom. Young and Glover (2002) go further, stating that musical games help children, amongst other things, to listen, to increase their skills, to grasp concepts and to remember musical patterns. Because they are often defined by a set of rules, they offer a framework which 'sets a challenge but provides reassuring boundaries' (p. 16). This is a very important point, and reiterates Vygotsky's notion that play demands on the one hand that children act against impulse, and yet on the other that it occasions their greatest self-control (Vygotsky, 1978).

Some games, Young and Glover go on to argue, may develop a musical skill; others are intrinsically musical. Crucial to the success of the game is the teacher's role: it is the teacher who ensures that the children feel safe and relaxed

enough to join in when they feel ready to do so, when they are 'confident of enjoyment and some success in taking part' (Young and Glover, 2002 p. 16). It is then, they say, that they 'will become fully involved and ready to take risks' (op. cit.).

As the authors point out, 'song singing is the backbone of musical experience in the early years' (op. cit., p. 125). The authors describe a range of ways to make music vocally, including voice play and composing and improvising. They draw on Welch's (2002) research, which describes the development of children's singing: typically they will begin by focusing on the lyrics, followed by the rhythm, and finally by the melody. The authors describe the way in which children often begin by joining in with fragments of the song, or by taking part in the actions or rhythmic movements. They recommend that children sing unaccompanied by tuned instruments, in particular the piano, so that they can hear themselves more clearly. Also recommended are songs that are pitched to suit the developing infant voice. In assessing progress, the teacher should note when children listen attentively, respond for example through facial expression, produce a range of vocal sounds, find their singing voice, join in with fragments of songs and rhymes, and take part in actions or rhythmic movements of the games played.

In discussing music making with very young children, Young (2009) warns that music is 'generally introduced… in a way that emphasises conformity rather than creativity' (p. 29), pointing out that recommendations for practice are often adult-led, with children learning songs from memory and recognising rhythms, for instance. She argues that with children who are under 5, the teaching of music should develop through 'interactive processes between adults and children' (op. cit., p. 19), and what Siraj-Blatchford, Sylva, Muttock et al. (2002) term 'shared, sustained thinking'. Young (2009) gives an account of a teacher responding to and building upon a child initiated piece of music making, and she goes on to recommend a variety of pedagogical approaches, including eliciting and prompting, listening and watching, interacting and structuring, and finally, assisting and instructing – with the need for the instruction, crucially, to be developmentally appropriate. How this might work in practice is something of which I have little experience, and I will return to this in my discussion of my research design and methodology.

Student teachers' experience of music teaching in the early years does not always follow Siraj-Blatchford's model. Sometimes it is used mainly for managing

behaviour, as reported in one student's placement (Poulter, 2014). In other settings, it is not even the class teacher who teaches music, but a visiting specialist (ibid). Often, also, both teachers and trainees shy away from the teaching of music, partly because they see it as a specialist subject. Attempts to address this are often what Young regards as compensatory – the implication being that the adult starts from a deficit position. So for instance, at my university, first year BAQTS students learn rudimentary recorder in their first music pedagogical workshops. She recommends that trainers look for the 'competencies already in place…. A more empowering and thereby productive approach is to start with the assets, identifying the strengths that everyone brings and, in dialogue, plan the way forwards.' (Young, 2003a p.10)

We are looking, then, for a model of listening-led practice where musical activities are well connected with children's abilities and inclinations (Young, 2003a), and where trainees feel confident and empowered to engage in those activities.

In summary then, it has been established that music in the early years can effectively occur with whole class and smaller groups, with individuals and pairs; it can be child-led, and adult-led. It can encompass a huge variety of activities including listening purposefully to sounds and music, making music with the voice, exploring classroom instruments and other sound makers, and games to develop specific skills. Ideally, music should be taught responsively, following the lead of the child, and building on their prior experience. The same approach that values children's prior experiences and current competencies in music, should be applied by the practitioner when evaluating their own competence to teach music in the early years classroom.

2.8 Factors Impacting on Student Teachers' [STs'] Competence and Confidence to Teach Music

Over the past four decades at least, since the 1978 HMI survey of Primary education in England, there has been much discussion about the teaching of music in primary schools, and the challenges it presents (HMI, 1978; Mills, 1989; Bresler, 1993 and 2005; Collins, 2014). More than any other curriculum subject, it appears, music is often perceived by teachers and student teachers alike as one requiring 'special skills', such as being proficient at playing a musical instrument (HMI, 1978; Mills, 1991; Glover and Ward, 1993; Stunell, 2010) and—indeed—it has been reported that teachers with musical qualifications do have more confidence to teach music (Holden and Button, 2006). Currently, music can often be marginalised in the

Primary curriculum because it is held in 'low regard', being seen as a non-academic luxury (Bresler, 1993 and 2005; Hennessy, 2009; Garvis and Pendergast, 2012; Collins, 2014), although this was not always the case in the past century (for example, 70% of all schools in the 1970s recognised that they needed to allocate a special responsibility post for music, (HMI, 1978)). Nevertheless, either because of its specialist conception or because it is simply being squeezed out of the timetable by the so-called 'core' subjects, it is possible to find evidence of some schools/teachers avoiding teaching it altogether (Mills, 1989; Bresler, 2005; Welch and Henley, 2014). Furthermore, education in the teaching of music has often been a low priority for schools and universities (Hennessy, 2000), unless there has been a political commitment to the subject (Purves, 2017).

Many of the above named researchers report an involvement in initial teacher education, and have found these broader issues mirrored in the biographies and perceptions of the student teachers that they have taught (e.g., Mills, 1989; Hennessy, 2000; Welch & Henley, 2014). They have reported that feelings of competence and confidence to teach music are relatively low in comparison with other subjects, and have attributed this to a number of factors; among which, previous musical experience and background, school based experience and initial teacher education feature strongly. This is somewhat paradoxical, given that there are anecdotal reports that many student teachers have ABRSM instrumental music qualifications (Glover & Ward, 1998; Welch – private communication).

One of the most significant factors appears to be that student teachers (STs) perceive, along with serving teachers, that there is a need to have formal training of some sort in order to teach music (Hennessy, 2000; Wiggins and Wiggins, 2008), and that musical ability is fixed, or only given to a chosen few (Hennessy, 2000; Biasutti, Hennessy and Vugt-Jansen, 2014). As Hennessy puts it, 'Another significant factor is a deeply rooted view held by large numbers of people, including teachers, that being able to 'do' or teach music requires special gifts that are only attainable by, or given to, a chosen few' (Hennessey, 2000 p. 183-4). The likelihood is that many students and teachers have instrumental music qualification which have been earned over many years of persistent study. But, instead of opening their minds to the possibility of music for all, this perhaps reinforces a conception of music for the minority if they see a music curriculum through an instrumental learning lens. Such a possibility is likely to be reinforced in the light of the subject content specification of the latest National Curriculum for Music in England (DfE, 2013b), which states that children in Key Stage 2 should:

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression;
- improvise and compose music for a range of purposes using the inter-related dimensions of music;
- use and understand staff and other musical notations, (DfE, 2013b p. 197).

At my university for instance, one of the activities in music workshops concerning the musical dimension of pitch is that student teachers are tasked to pick out familiar tunes on tuned percussion instruments. Most do this successfully, but for some this is very challenging because they appear to be unable either to identify the direction in which the melody is moving, or to say if the note that they are playing is the same as the note they should be hearing in their head. So the expectation that even children in Key Stage 1 should 'play tuned and untuned instruments musically' (op. cit.) is likely to be daunting for such a group of students, who will not easily be able to model the activity or even, perhaps, to assess it.

As for being able to read and understand musical staff notation, from my own experience, student teachers are more likely to be able to do this if they have learned to play a musical instrument. Wiggins and Wiggins (2008) are unequivocal in their response to this problem:

> 'We would not allow someone who had stopped studying mathematics at the fifth grade level to teach mathematics. We would be appalled at the idea that someone could teach language arts if he or she had not read a book or written a word since the age of eleven. Yet we expect that generalist teachers can teach music when their last formal musical instruction, if any, may have occurred at that age or earlier.' (p.4)

However, formal training can be counterproductive, as even Wiggins and Wiggins acknowledge (op. cit.), reporting that teachers who regarded themselves as music specialists were often proficient at playing an instrument, but not at teaching music. In aiming for creativity in music teaching, Kokotsaki (2012) also notes that the holding of a music degree does not guarantee 'an ability to recognize and teach for creativity' (p. 147), a view with which Mellor (1999) and Seddon and Biasutti (2008) concur, suggesting that teachers who are formally trained musicians can fall into the trap of teaching as they were taught, focusing on technical detail, performance or analysis, at the expense of a more holistic response.

Formal training can also foster negative feelings towards music, especially if that formal training has been unsuccessful, leaving the ST with feelings of inadequacy. The same goes for experience of music in Primary education, where 'negative self-perceptions of musical abilities based on experiences in Primary school influence beliefs in the ability to teach music effectively' (Collins, 2014 p.4). Indeed, Hennessy (2000) suggests that it can be better to have no music training at all than to have tried and failed, citing as an example STs with no previous dance experience, who nevertheless taught dance successfully. 'Consequently, student teachers will often have arrived at a view of their own musical abilities (or lack of them) well before they arrive at university to train as primary teachers...Thus, a cycle of low expectation may risk being perpetuated' (p. 184).

On the other hand, there are indications that having a strong musical background can mean that the ST has greater confidence (Russell-Bowie, 2010). In Russell-Bowie's study, the criteria for a strong musical background included, as might be expected, being able to play a musical instrument well, having an understanding of music theory, or having family members who played instruments and coming from a family which was involved socially in musical activities. It was found that STs from this demographic were more likely to feel positive about teaching music themselves (ibid). Where Wiggins and Wiggins (2008, p.19) describe a successful music lesson given by a teacher who played the guitar by ear and 'sang beautifully in tune', but who did not perceive herself as being musically able, they appear to corroborate this view of the significance of musical background.

Researchers appear to be agreed that, crucial to the development of musical competence, confidence and positive attitudes, is the quality of their ST school experience (Hennessy, 2000; Garvis, 2012; Russell-Bowie, 2010). In describing the positive experience of teaching reading on school placement, Russell-Bowie remarks upon the resulting increase in the STs' confidence, arguing that lower confidence to teach music is because of a corresponding lack of teaching experience. Garvis (2012) also compares the teaching of music with the teaching of the core subjects, and argues that in order to gain self-efficacy, STs need amongst other things, mastery experience. Kokotsaki (2012) goes even further, reporting that STs were likely to have richer conceptions of creativity in music if they had actually taught it. Similarly, where there was a lack of understanding of how to teach music creatively, this was attributed to a lack of previous application of the ideas. Thus, Kokotsaki argues that teaching experience impacts on competence, pedagogy and personal philosophy as well as on confidence. My tentative findings in the IFS echo

this (Poulter, 2014): it was the STs who had had the opportunity to teach music, rather than those who were more musically qualified, who were able to theorise about the place of music in the Primary curriculum.

Much has been written about STs' experience of teaching music on school placement (Hennessy, 2000; Garvis and Pendergast, 2012; Welch and Henley, 2014). Too often, it would seem that they do not get the opportunities to teach music, as has been noted above: (a) because the subject is marginalised by the more urgent perceived demands of the 'core' subjects; (b) because class teachers lack the confidence to teach it and, therefore, assume no-one else will want to; and (c) because music is taught by a specialist, during which time the class teacher and the ST have non-contact time to plan, prepare and assess other (non-music) work.

This general picture is mirrored in my IFS study (Poulter, 2014), where 4 out of my 10 respondents claimed not even to have seen any music taught whilst on placement, let alone taught it themselves; and half of them were in schools where music was taught by specialists. Hennessy (2000) argues that confidence to teach depends heavily on opportunities to observe and to teach lessons; it is a matter of some concern, then, that these opportunities may be comparatively hard to come by.

Hennessy (2000) goes further. It is not enough, she says, to have the experience of teaching music. Crucial to the development of music pedagogy self-efficacy was feedback. This could be in the form of response from the children, which 'was often the most immediate and effective factor in motivating students to progress' (p. 193). The role of the class teacher or music subject leader as mentor was, she said, central in the giving of feedback. On the one hand 'Julia' was given substantial constructive feedback by the music specialist and grew in confidence as a result. On the other hand, STs who received no feedback, or feedback that was negative, suffered. The case study participants in Stunell's (2010) study had similar experiences: 'it would seem that working with an empathetic specialist had raised their musical control and self-efficacy beliefs' (p. 101). Garvis (2012) supports this, stating that the growth of self-efficacy depends upon feedback. And this from Hennessy (2000):

> 'The support of a teacher and constructive feedback seemed to outweigh all other factors. Resources might be limited, subject knowledge flimsy, accommodation inadequate and anxiety levels high. However, none of

these presented the obstacle to practice that the absence of encouragement and positive comments from a class teacher did.' (p.193)

Lastly, Initial Teacher Education has an important role to play in the development of STs' competence and confidence to teach music: 'if preservice teachers develop confidence in teaching music on ITE courses, it is anticipated that they will want to teach it when they graduate' (Russell-Bowie, 2013 p. 3). However, as Jeanneret (1997) warned, 'the development to teach music in the generalist primary teacher is far more complex than the literature generally acknowledges' (p. 40). The experience of many teacher educators in universities mirrors what happens in school – namely, that far less time is allocated to training in the foundation subjects than to the core subjects (Welch and Henley, 2014; James, 2016).

In summary, then, the factors impacting on STs' competence and confidence to teach music are reported to be:

- STs' own perceptions of their musical ability and training;
- STs' own musical background;
- Nature and quality of experience of teaching music in school;
- The quality of support they receive whilst in a placement school from their class teacher/mentor; and
- The quality of training in ITE.

2.9 A selection of studies undertaken to develop ST competence and confidence to teach music

Given the challenges of preparing students whose self-efficacy is low as far as teaching music is concerned, teacher educators have found creative ways to respond. Barrett (1994), feeling that traditionally oriented and skills based programmes were ineffective, had her students work through a series of compositional challenges individually, and in small groups, and she expected them to 'do as students what they as teachers must help their students, in turn, to do' (p. 201). As a result of practical, creative engagement, STs were more motivated to develop their own understanding of such things as staff notation. Built into the learning process were opportunities for reflection, which Barrett sees as crucial, and she shows how rich discussion took place about what the students had learned from engaging in composition. Teaching was 'thus seen not as a didactic transmission of pre-formulated knowledge, but an attempt to negotiate shared meanings and understandings' (op. cit. p. 205). Russell-Bowie (2013) developed this notion of

reflection on learning through subject knowledge development, practical Primary curriculum based music-making and lesson planning, in a course based on Kolb's experiential learning cycle of concrete experience, reflection, abstract conceptualisation and active experimentation. She found that this had a significant role in changing the attitudes of her STs, and indeed that 97% of them reported an increase in confidence with nearly 17% then going on to teach music on their next block practice.

Others have put in place music fundamentals courses to address the gaps in subject knowledge and skills (Jeanneret, 1997; Biasutti, Hennessy and Vugtt-Jansen, 2014; James, 2016). As a result of Jeanneret's course, the students assimilated learning both as participants, and as observers of teaching practice – in other words, the instructor was both an imparter of knowledge and the model of how knowledge may be imparted – a theme to which I will return later on. Biasutti and her colleagues (2014) invited STs who had both an interest and basic ability in music, on a week's intensive course. During their time together, they developed their skills and engaged in classroom music activities through a learner-centred approach. It was found that the intense nature of the course helped with confidence to teach music. Collins (2014) approaches initial teacher education from a different angle. She argues that teachers' beliefs about the value of a subject have a direct impact on their confidence and commitment to teaching it. She describes a ten week course in which one group of students were taught only about the aesthetic benefits of music, whilst the second had focused discussions in which 'explicit connections were made between practical music making and brain development' (p.9). She found that the second group indicated higher levels of confidence, which suggests that beliefs affect commitment which in turn, impacts on confidence. Last of all, Welch and Henley's programme, also ten weeks long, sought to develop STs' ability to teach music through a cross curricular approach and included, amongst other things, the development of a handbook and ST reflection. This was the only study of those listed where STs were expected to apply their university learning in school as part of the course. It was particularly effective, with one ST in particular saying, 'I do like that you come in and practise it, learn how you can apply it and then apply it' (Welch and Henley, 2014 p. 14). It was found that the STs had a 'broader understanding of what "being musical" is' (op. cit. p. 19), with many realising that they had more musical skills than they had previously thought. As one put it: 'although I have no specialist music knowledge…I am still equipped to deliver a rich music curriculum' (op. cit.). Furthermore, some of the participants were

beginning to teach music beyond the confines of the course. For me, this last example of initial teacher training is the most convincing, because of the application in school; through their own experiences, the STs could find out what worked and build their confidence on real evidence – that of their growing competence in the field. As Kokotsaki (2012) puts it about her own study:

> 'A key finding…is that teaching experience is vital. All the student-teachers that were found to hold richer conceptions could draw on their own lessons to describe a creative music lesson, were more enthusiastic and keen to talk about what makes a music lesson creative, and were more articulate and comfortable in their responses.' (p.149)

To summarise, then, research has found that the following elements are effective in developing STs' competence or confidence to teach music:

- fundamental skills courses
- courses which are taught intensively (as opposed to spread out over the course of a year, for example)
- tutor modelling
- specifically designed handbook
- knowing the broader benefits to children of music education
- having the opportunity to make cross-curricular links
- courses which have built into them application with children
- intentional and conscious reflection on learning.

2.10 Teacher Education – theory and practice and the role of the teacher educator

2.10.1 Theory and Practice

In the studies of both Kokotsaki (2012) and Collins (2014), theory is explicitly considered. Creativity cannot develop without practical application (Kokotsaki, 2012), and I would argue that creativity and theory also are inextricably linked. For instance, if I have developed my own theory, informed by wider reading, about the efficacy of play as a medium for learning, this will enable me to generate playful activity in the classroom.

One of the problems that the study of teacher education identifies is how the theory of education may impact upon practice, and vice versa (Eraut, 1994;

Korthagen and Kessels, 1999; Korthagen, Loughran and Russell, 2006). Eraut claims that it is of the utmost importance that teachers develop the habit of theorising, warning that the teacher who is incapable of this will fail to develop professionally. Conversely, Korthagen and Kessels (1999) warn that it is practice which is dominant in shaping teacher development, and that 'educational conceptions (theory) tend to be "washed out" during field experiences' (p. 5). Eraut makes the distinction between public and private theory and similarly, Korthagen and Kessels differentiate between two types of theory: episteme, or objective theory, which is conceptual; and phronesis, or theory that is situation specific, and is perceptual. They present a model of learning which suggests that, as a result of student teachers' real experiences in the classroom, they form what the authors label 'Gestalt', or mental image/situational understanding. With more experience, they reduce, or schematize their Gestalt, and begin to build their theories. According to the authors, these personal theories are phronesis. Historically, they say, teacher educators (TEs) have focused too heavily on educational theory; they 'should not try to induce change on the theory level but should go down and start on a lower level – especially the Gestalt level' (op. cit. p.12). Furthermore, pressurising STs to develop theory too quickly 'can become counterproductive'. They recommend that the TE creates suitable learning experiences so that the student may develop their 'Gestalt'; promotes awareness and reflection; offers theoretical notions (because phronesis is better quality if it is fed by episteme); and lastly train students in acting in a productive manner (p. 13 paraphrased). The model of teacher learning that they present, however, is quite linear. Clarke and Hollingsworth (2002) describe other linear models, particularly that of Guskey (1986), for whom the purpose of staff development was to change classroom practice, thus impacting positively on the learning outcomes of the children, and resulting in a change in beliefs and attitudes on the part of the teacher – who would now, because of those changed beliefs, change their practice on a permanent basis. In contrast to this, they offer the interconnected model of teacher professional growth (Figure 2.1).

This interconnected model differs from more linear ones, in that it acknowledges that teacher professional growth may be independent of participation in training activities, and also that teachers may 'postpone consideration of the outcomes (e.g. student learning, the change in their own beliefs) until the techniques are refined and perfected' (op. cit., p. 961). In other words, student teachers may have experiences and education in certain areas, but reserve judgement about them until later on in their career when they have had time to

develop their skills with a wider range of children. This potentially raises problems for the TE who wishes to measure the impact of their programmes on the STs, because the development of personal theory varies from individual to individual, and continues after the ST has completed their initial teacher education.

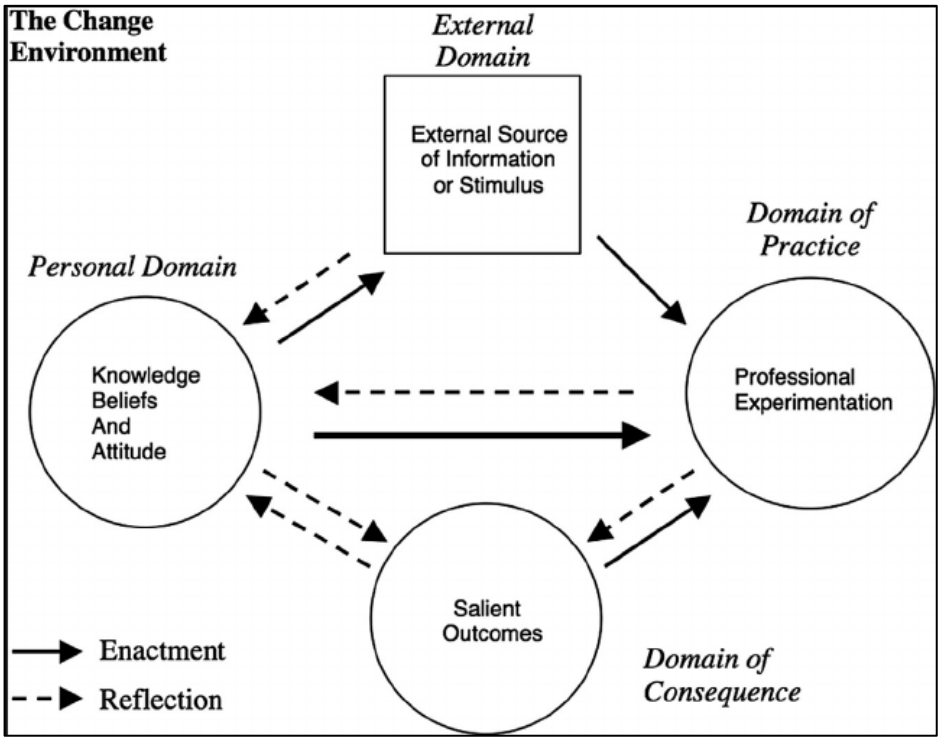


Figure 2.1 The Interconnected model of professional growth (Clarke and Hollingsworth 2002 p. 951)

2.10.2 The Role of the Teacher Educator

Writing about teacher education, Korthagen and his colleagues (2006) found that teacher educators have historically been criticised for their limited impact on student teachers' practice, first because they placed too much emphasis on theory not linked to practice, and later for the opposite fault, focusing on 'tricks of the trade' with no reference to theory at all. The problem, as they describe it, is how theory and practice may be connected in the mind of the teacher so that s/he may be able to handle the issues of everyday teaching through action that is guided by theory.

They make the point that 'one does not learn from experience but reflection on experience and interaction with others' (op.cit., p. 1025). They avouch seven principles of teacher education, all of which are apposite and of interest to this

study,[1] the last having particular relevance – that teaching and learning approaches should be modelled by the teacher educator. They argue that student teachers need to 'see into their teachers' thinking about teaching so that they can access the ideas and feelings associated with taking risks and learning about teaching in meaningful ways' (op. cit., p. 1037).

Lampert and Graziani (2009) echo this concern, complaining that the teacher educator (in the HEI) may advocate pedagogical methods, but is unable then to find out if these are being enacted by the trainee. They suggest that in order for trainees to teach 'ambitiously', that is, to teach in response to the needs of the pupil, they need to have activities modelled by the TE, which they can then incorporate in their own planning. Lunenberg, Korthagen and Swennen (2007) take up this notion of modelling, arguing that trainees do not always comprehend elements of good practice when they are implicit; but, on the other hand, that it is almost impossible for the teacher mentor to articulate different aspects of their teaching. They suggest that the TE should act as a bridge, modelling pedagogical practice explicitly, giving a meta-commentary as they proceed. Lampert, Franke, Kazemi et al. (2013) advocate a 'Cycle of Enactment', whereby groups of trainees observe the enactment of an instructional activity, collectively analyse it, prepare to teach and rehearse it within the group, and then finally enact the activity within a classroom setting, reflecting on the experience afterwards as a group. The cycle then starts again (ibid).

Loughran and Berry (2005) examine an aspect of the teacher educator (TE) as model in greater depth. They recognised that 'explicit modelling is not as simple as saying what one is doing' (p. 197). They argue that just as the classroom teacher may find it challenging to articulate different aspects of their teaching, so may the TE struggle between 'informing and creating opportunities to reflect and self-direct'

[1] Principle 1: Learning about teaching involves continuously conflicting and competing demands
Principle 2: Learning about teaching requires a view of knowledge as a subject to be created rather than as a created subject
Principle 3: Learning about teaching requires a shift in focus from the curriculum to the learner
Principle 4: Learning about teaching is enhanced through (student) teacher research
Principle 5: Learning about teaching requires an emphasis on those learning to teach working closely with their peers
Principle 6: Learning about teaching requires meaningful relationships between schools, universities and student teachers
Principle 7: Learning about teaching is enhanced when the teaching and learning approaches advocated in the program are modelled by the teacher educators in their own practice

(op. cit., p. 198). They therefore propose a model whereby a second TE acts as 'debriefer', helping the STs to interpret and evaluate the presenter's interactions.

Averill, Anderson and Drake (2015) build on the idea of teacher educator modelling in a study done with student teachers learning to teach mathematics. Their concern was that the student teachers should notice, experience, reflect on and discuss teaching practices in action, and they focused on three pedagogies of teacher education practice: representations (e.g. teacher educator modelling), decomposition (where aspects of teaching were named and discussed) and student teacher (ST) enactment. One of the things that the authors found was that, in watching videos of mathematics teaching, the STs were less able to identify critical moments than experienced teachers, and tended to focus on superficial details, for instance the children's behaviour, or the enthusiasm with which they participated, rather than on the quality of the learning. They therefore, like Loughran and Berry (2005) before them, introduced a coaching element whereby a second TE colleague would question and 'debrief' the students during a lesson about the presenter's teaching decisions. They found this to be effective because it enabled the STs to notice and to discuss enactment.

These studies relate to this one for three main reasons. First of all, the importance of modelling is highlighted. This is particularly significant because STs observe very little music as taught by the classroom teacher (Hennessy, 2000; Poulter, 2014). Secondly, they draw attention to the way in which STs may be encouraged to interpret and understand what they are observing through the use of a second TE acting as coach. And lastly, they show that the development of personal theory is not always straightforward, and may take many years.

2.11 Summary of Literature Review

It has been established that language acquisition is a complex process that begins with sound, and that human interaction plays a vital role in that process. It has also been shown that a child's facility with language plays an important role in its cognitive development. Learning to read is also a highly complex process; despite the fact that no one model can explain how children learn to read, the teaching of reading has become politicised. Nevertheless, experts are agreed that phonological awareness plays a central part in reading development.

It has also been shown that music can have a positive impact on the language making mechanisms in the brain. Language and music have similar

grammatical structures; furthermore, both music and language are rhythmic and pitched, and an ability to understand rhythmic and pitched nuances in language enables the listener to comprehend what is being said. Thus, musical training can have a positive effect on a child's developing language skills. Studies have also been undertaken which show enhanced reading skills after musical interventions. Music, therefore, should be an everyday part of the young child's experience in school. It should be playful and interactive. It can be taught in a variety of ways: with whole class and smaller groups, with individuals and pairs; it can be child-led, and adult-led. It encompasses a huge variety of activities. Despite this, research shows that for various reasons, but particularly because of a perceived lack of expertise, generalist primary school teachers often do not teach their own class music. However, a variety of studies have been carried out which show that STs' confidence to teach music can be developed; for instance through tutor modelling, specially designed opportunities to teach music in the classroom, and knowing the broader benefits to children of music education.

Since music can play such a key role in developing children's language and reading skills, and knowing from my own primary school teaching experience and research evidence that children do not have as much access to class music making as they should, there were several things that I felt it incumbent upon me as a teacher educator to do. First of all, in my role as lecturer in primary English, I wanted to set phonics in the wider context of sound and music for the STs, and for them to understand those important links between music and language and reading. Secondly, in my general role as teacher educator, I wanted to give the STs an opportunity to develop their competence and confidence in the teaching of music.

Chapter 3

Methodology

3.1 Critical Inquiry

Given what the research tells us, it is crucial that music is placed at the heart of the Early Years, and that generalist class teachers teach it. I, therefore, return to the research questions:

- What musical activities does research suggest can impact on children's developing phonological awareness?
- How might we use music to support phonological development in the early years?
- How may we encourage student teachers (STs) to teach music in the early years?

In the IFS (Poulter, 2014), I took a largely interpretivist stance in trying to understand the STs' experiences of teaching music in school. However, in the current study, my position has changed and is more aligned with critical inquiry, which, as Crotty (1998) remarks, stands in 'sharp contrast' to interpretivism:

> 'It is a contrast between a research that seeks merely to understand and a research that challenges... between a research that accepts the status quo and a research that seeks to bring about change.' (p. 113)

Critical inquiry is a 'cyclical process… of reflection and action' (op. cit. p.157) and very clearly has a moral purpose. This study is in part inspired by, and draws on, the ideas of Freire (1993). I found myself facing a situation about which I asked 'what should I do?' – what Freire would describe as a 'limiting situation'; in other words, one that is not unalterable, but merely limiting and therefore challenging. In order to transform the world (or one's limiting situation), it is necessary to engage in praxis (or say the 'true word'). Praxis, or 'the true word', comprises two dimensions – action and reflection, which are in 'such radical interaction [with each other] that if one is sacrificed – even in part – the other immediately suffers' (Freire, 1993, p. 69). No-one can say a true word – or engage in praxis – alone; this is only possible through dialogue. Not only this, but it is only through dialogue that critical thinking

can be generated (Crotty, 1998). As will be seen, I have attempted to find a way to address my limiting situation through action, reflection and dialogue with myself and with others. Through this, I also show that 'the teacher is no longer merely the-one-who-teaches, but one who is himself taught in dialogue with the students, who in turn while being taught also teach. They become jointly responsible for a process in which all grow' (Freire, 1993, p.61).

3.2 Action Research

According to McNiff, Lomax and Whitehead (2003), action research is undertaken by the practitioner with both a personal and a social aim - so that she may improve both her own practice and something in her own context or situation. Arguing that 'action research offers many benefits for educators committed to a critical, investigative process of improving… practice, policy or culture' (Hine and Lavery, 2014 p. 3), the authors contend that it is a highly effective means of achieving professional development and growth because the practitioner identifies her own research issues and collects and analyses her own data in order to inform her decision making and actions. Furthermore, it helps her to bridge the gap between theory and practice, thus developing new knowledge relating to her situation (op.cit.). McNiff et al. (2003) describe the process similarly, stating that the practitioner begins by questioning an aspect of her practice, then evaluates it rigorously, and finally explains to others how her own personal improvement can contribute to improvement in the wider context.

There has been much exploration of the dual role of practitioner/researcher. Feldman (2003) contends that, in order to change how we teach, we need to change who we are as teachers: 'in self-study we delve into our existential ways of being in the world' (p. 27). Yet Korthagen (1993) maintains that teachers are deeply influenced, often in ways they do not recognise, by the way that they themselves were taught. Therefore, changing who we are is potentially an enormous challenge. In asking the question, 'What is to be done?', many writers on the subject develop the idea of action research as a tool for working for the common good (Kemmis, 2010; Heikkinen, Huttunen and Syrjala, 2007; Winter, 2002). Every context is different in space and time, and so 'what it is best to do, for each one and for humankind, is always uncertain and contested' (Kemmis, 2010 p. 425). It is, therefore, impossible to live by a fixed set of rules because they simply cannot be applied without adaptation to every situation: rather, wisdom of knowing what to do (phronesis) (Kemmis, 2010) is to be gained by taking action which is both informed

by the traditions of the field (in this case, education), and morally committed to effecting a change for the better. This is praxis. What is more, phronesis is the disposition to act in this morally informed way (ibid). It might also be said that praxis is informed not only by traditions in the field, but the practitioner's own values. McNiff and Whitehead argue that often we are unable to live according to our values – that we are 'living contradictions' (2010 p. 93); this can be either because of outside influences or because of obstacles in our own ways of thinking and being – obstacles of which we are as yet unconscious. An example of this in my own practice is that I very strongly believe in the power of modelling; I know from my own experience what a huge impact having the chance to observe excellent practice has had on my own teaching. However, it can be seen from my reflective diary of 2nd July 2015 (Appendix 5) that I found the prospect of modelling my practice with children for the student teachers hugely challenging – my reputation with colleagues and STs was, after all, at stake here. Thus the project did indeed help me to overcome my nervousness (at least partially), and to live more according to my beliefs than previously. Action research, therefore, can enable us to come to a deeper understanding of our positioning from within and without, or our 'existential ways of being in the world' (Feldman, 2013 p. 27), and 'find ways of overcoming the contradiction so that we might live more fully in the direction of our values' (McNiff, 2002 p. 13).

Because of its focus on self-improvement, action research differs from other types of research because it places the researcher at the centre of the study itself (McNiff et al., 2003). Whilst this has great potential for yielding rich and intimate data, it is also problematic in that it raises issues of subjectivity and bias (McNiff et al., 2003; Smyth and Holian, 2008). As Feldman (2003) remarks, when we gaze at our reflections, how do we know that the mirror does not distort what we see? It is crucial therefore that the researcher is transparent about her data collection and representation (ibid.), that she shows her vulnerability and remains humble; that she is prepared to admit her mistakes, and to change her ideas if she finds herself to be in the wrong (McNiff and Whitehead, 2010). Keeping a reflective diary was very useful for this. For instance, in Cycle 1, I describe how, in the training session, I spoke about the research behind the project. However, I made assumptions about the STs' prior knowledge of the Letters and Sounds phonics phases, and failed to explore these sufficiently, which I regretted because it was a missed opportunity to link the musical activities with Phonics Phase 1.

Validity and reliability are to be found using a variety of mechanisms in action research, and these mechanisms are extremely useful not only in establishing authenticity and trustworthiness, but also in the search for truth itself. As Winter (2002) writes, action research is more than just a personal story; others may be invited to 'participate in the inquiry process as co-researchers' (Cochran-Smith and Lytle, 2009 p. 41) and thus a plurality of voices is included which may provide extended triangulation (Feldman, 2003). In my case, this plurality of voices was provided by the STs and the class teachers, who became co-researchers in the project. Winter describes this as the dialectical principle and, in developing this notion, Heikkinen et al (2007) suggest that each voice is kept as authentic as possible, and that different interpretations of the same events are presented. At the same time, the researcher should question her own motives, suspending her judgements and being open to the point of view of others (McNiff and Whitehead, 2010). The researcher should also demonstrate reflexivity; in other words, it should be made explicit throughout the report that the story is a construction – the researcher's own interpretation (Winter, 2002).This involves consciously reflecting on one's own values and assumptions; as Heikkinen et al. (2007) explain, the relationship between the researcher and the object of her study is 'crucially shaped by [her] identity' (p. 11). Thus making oneself visible helps to expose one's way of knowing. Not only this, but in working for the collective good, it is not always possible to predict what the consequences of one's actions will be and because of this, 'the rationales for decision making are likely to contain delusions and miscalculations' (Winter, 2002 p. 148). It is important to be as open about these as possible. An example of this can be seen in the ST training materials that I put together for the project. There is a very clear focus on addressing Phonics Phase 1 – the crucial pre-reading stage (DfE, 2007). However, it can also be seen that my own understanding of the role of music in developing broader language skills underwent a transformation, especially in the writing up of the study. There is a sense, then, in which my rationales for decision making contained some miscalculation in making the focus too narrow.

Experts in action research agree that the sought after change or improvement is not the end point of the project. Heikkinen et al (2007) suggest that, rather than finding an ultimate truth, the contribution of each AR project is to provide material for discussion, while McNiff and Whitehead (2010) see change as fluid and constant: 'everything is in the process of coming into being' (p. 35). Echoing Freire (1993), Jove (2011) applies this idea of process to her own development: 'We are a

process rather than a product. I am always becoming teacher and becoming researcher; I am never finished' (p. 262). The pressure to find the perfect solution to a problem is acknowledged by Heikkinen et al., who caution against what they call the 'victory narrative' (2007 p. 10).

The commitment to act for this good, knowing that one does not see or adequately understand all perspectives or interests, can be universally shared however, even if, in practice, actions will always fail perfectly to achieve this end. To know and deeply appreciate this frailty is wisdom (phronesis) born of praxis. (Kemmis, 2010 p. 424).

3.2.1 The Cycles

Carr and Kemmis (1986) describe AR as 'a self-reflecting spiral of cycles of planning, acting, observing and reflecting' (p. 162) in which reconnaissance, or fact-finding, informs the planning of action which is then executed and evaluated. The whole process then begins again.

Thus the action research process in the current study followed distinctive phases, and it was driven by two imperatives. There is evidence that music can have a significant role in developing children's phonological awareness (Gromko, 2005; Moritz et al., 2013; Ozernov-Palchik, Wolf, and Patel, 2018). However, many generalist Primary school teachers feel that they do not have the confidence or competence to teach music in their classrooms (Bresler, 1993; Hennessey, 2000; Holden and Button, 2006; Biasutti et al., 2014). The result of this is that student teachers very often do not observe music teaching whilst on placement; nor do they teach it (Hennessy, 2000; Welch and Henley, 2014; Poulter, 2014). The first imperative, then, was that the STs needed to be provided with the opportunity both to observe and to teach music lessons. The second imperative came from the university's 'Hope Challenge' initiative, where teacher educators (TEs) worked with small groups of STs in schools in challenging circumstances, delivering interventions in curriculum areas identified by the school. This required a certain amount of modelling by the TE, either with or without the children, and the rationale for this aspect came from studies such as those of Lunenberg (2007) and Lampert and Graziani (2009). I wanted to be able to model teaching in the context of the Primary school classroom with 'real children'; however, this would come with challenges, as will be seen. The study can therefore be seen to have been undertaken with both a personal and, a social aim (McNiff and Whitehead, 2010).

The first time I undertook a Hope Challenge with STs in a school where the children's writing had been identified as an area for development, I could see how this could be an excellent opportunity if managed properly courses 13.04.15). However, I felt that it was important that, if modelling with the children, the tutor should have already established a relationship with the teacher and at least some of the pupils in their context. I also identified that it was crucial that the tutor worked as closely as possible with the class teacher (ibid). Before I embarked upon Cycle 1, therefore, I conducted a pilot study.

Having gained consent from the Reception teacher at Blackstone Primary School to conduct the project with her class, I visited the school on four separate occasions. The first three visits took place in the previous summer term then twice in the following Autumn term prior to Cycle 1. I wanted, first of all, to try out the songs and activities with the children to make sure that they were appropriate and engaging. I therefore used these both with the Reception class (F2) and with the Nursery class (F1). I also wanted to discuss the project with the class teacher (CT) and to get feedback from her about whether this supported what was going on in the rest of the children's education, for instance. The prepared lessons were well received by the CT, who was able to give advice which I acted upon, about how to adapt certain activities and the general organisation of the lesson, (RD 26.06.15; 09.07.15). The fourth visit took place a few weeks before the beginning of the first cycle. This time, I taught the Reception class only, i.e. the class that the students and I would be working with. I did this in order to get to know the class a little - their personalities, capabilities and preferences - and so that, when I visited with the STs, the children would know what to expect from the session and thus, their responses would be relatively normal. (For further detail about the preparation visits, see Appendix 6.)

For the first cycle in the study, I involved seven STs from the Year 2 cohort of the four-year BA QTS course. We met together for a morning of university-based training followed by an afternoon at Blackstone Primary School with the STs observing me teaching the Reception class, both as a class and then in small groups. We returned for two more afternoons, when the STs took over the group teaching. After each lesson, we met together to reflect on and evaluate the teaching, and I audio-recorded these conversations.

The first cycle proved successful in terms of the STs' teaching and the children's responses. I wanted to see if this could be repeated in a contrasting

setting, so I arranged for the second cycle to take place in a school with higher levels of pupil premium (an indicator of lower socio-economic status) in a different part of the city. I also wanted to find out if this programme would be useful in a different cohort of student teachers, and so I invited participation from the Year 3 cohort of the four-year BA QTS course. I felt that the first cycle had, at three weeks, not been long enough for the STs to observe any progress in the children's learning, so I extended the second cycle programme to six weeks. Finally, I was careful to include the class teacher at every stage in the second cycle, including the group reflections and individual interviewing, as I realised that she had a valuable contribution to make – something that became clear to me only after the first cycle.

3.2.2 Timeline

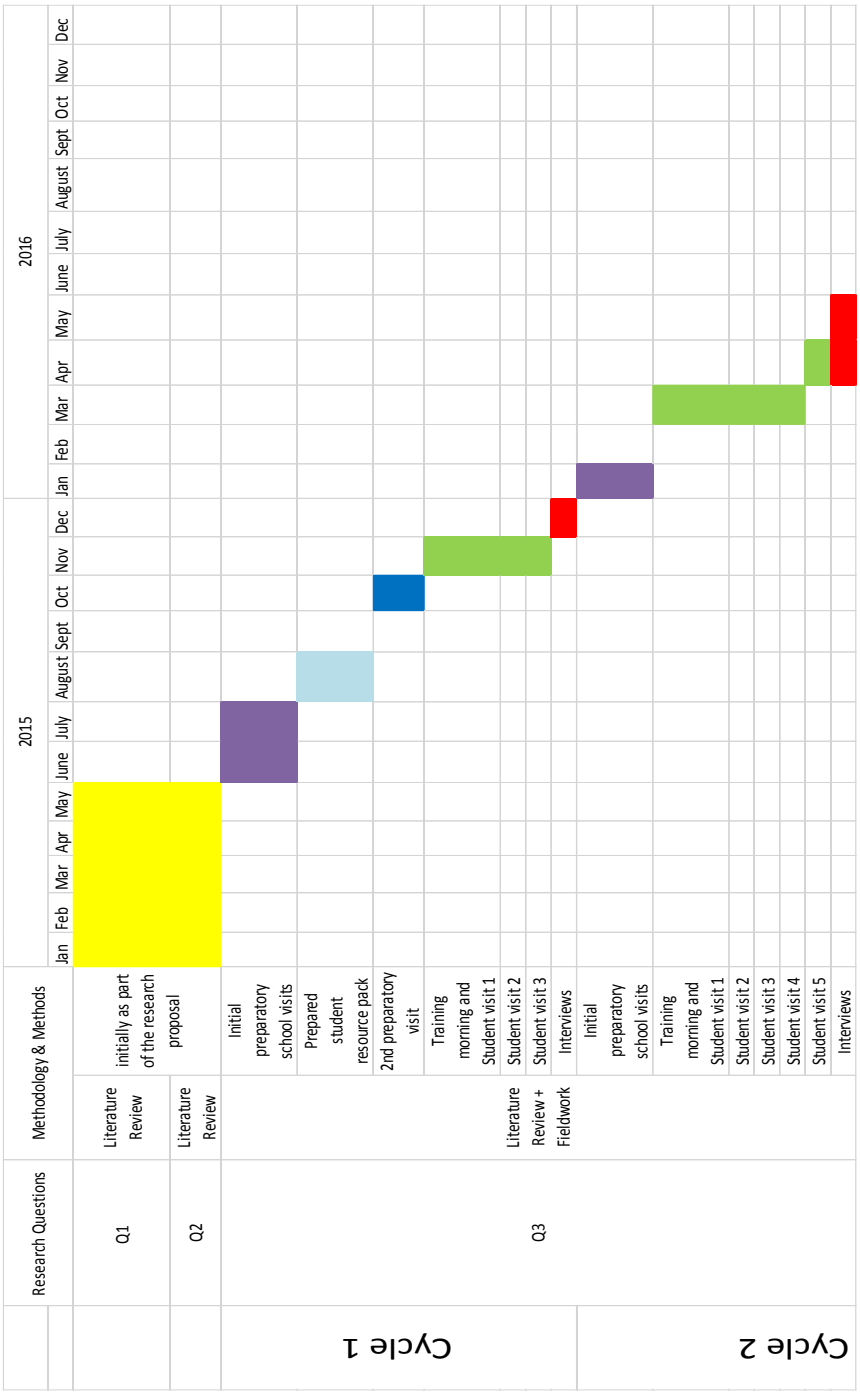


Figure 3.1 Gantt Chart showing timeline for study

3.3 The Resource Pack

Before I began the project with the students, I created a resource pack of songs and musical activities upon which the students could draw. I chose these from a variety of sources, many of which can be found in Primary schools, for instance 'Okki-tokki-unga' (Harrop, Friend and Gadsby, 2005); 'Music Express' (Nicholls, Scott and Hickman, 2003); and 'Singing Sherlock book 1' (Whitlock and Court, 2002).

As can be seen from the extract from the contents list (see Table 3.1), I identified the DfE's Early Learning Goals that mentioned music for each activity and gave a brief description of how the activity would be useful in enhancing phonological development (DfE, 2017b). What I felt was really important was that the students should be able to make the link between musical activity and what they learned about phonics in the university workshops and on placement. I therefore used the framework suggested by the Government 'Letters and Sounds Phase 1' document (DfE, 2007) which is designed for use in the Early Years Foundation Stage (updated 2017), and focuses on developing phonological awareness. This phase comprises seven aspects:

1 – General sound discrimination – environmental sounds
2 – General sound discrimination – instrumental sounds
3 – General sound discrimination – body percussion
4 – Rhythm and Rhyme
5 – Alliteration
6 – Voice Sounds
7 – Oral blending and segmenting

(DfE, 2007 p. 4)

Those aspects in bold are the aspects that I felt the songs and activities covered, and I identified these aspects in a separate column (see Table 3.1). If I had been going in to teach the children on my own, I would have taken my guitar with me because it is very effective in getting the children's attention and they enjoy singing along with it. However, I was conscious that this would be disempowering to those STs who did not play a musical instrument and so every activity and song just used the unaccompanied voice and/or untuned classroom percussion instruments. This was good practice, moreover, as Young and Glover (2005) remind us that *a*

cappella singing is helpful to children in hearing their own voices. I also chose songs with plenty of actions, knowing from experience that children often take part in actions and rhythmic movement of a new song before they sing it.

Table 3.1 Examples of songs and activities included in the Resource Pack

Songs and Activities	Early Learning Goal (see Appendix 7 for full descriptors)	Aspect of Phase 1 Letters and Sounds	Early learning goals (2017) that mention music	Phonological development
Song: Daddy's taking us to the zoo	1, 4, 16	4	• Begin to move rhythmically • Begin to build a repertoire of songs and dances	Rhythmic development – matching actions with words
Song: She'll be coming round the mountain	1, 4, 12, 16, 17	4	• Begin to build a repertoire of songs and dances	Improvisation of verses helps children to hear metre in song
Game: Hot Potato	1, 2, 3, 4, 8, 12, 16, 17	4	• Tap out simple repeated pattern	Copying simple rhythmic pattern

As well as being motivating for the children, it was essential that the songs and activities had the qualities listed above and in the literature review (see Chapter 2) that promoted learning in language and reading. Lots of songs were included because of their particular ability to reduce speed of speech, lengthen syllables and aid syllable segmentation. Songs like 'Farmer in the Fog', 'The Mountain Song' and 'In a Cottage, in a wood' all tell a story; 'Dr Knickerbocker', 'The Mountain Song' and 'Who's that in the middle of the circle' all use repetitive language – all so useful, incidentally, for children learning EAL. 'Clap your hands and wiggle your fingers' and 'She'll be coming round the mountain' both play with language in that the children can make up their own lyrics. 'Dr Knickerbocker', 'The Penguin Song' and 'Clap your hands' all use vigorous and rhythmic physical movement. Moreover, most of these have a very strong sense of fun. 'Hot Potato', on the other hand, encourages rhythm improvisation and discrimination, and 'What am I playing?' encourages

explorative play. There were also games with rules such as ‘Hot Potato’, ‘You can’t see’ and ‘What am I playing?’ and songs that incorporate physical play such as ‘Brown Girl in the ring’ and ‘Who’s that in the middle of the circle?’ For a full list of sources for the above songs, please see the Resource Pack (Appendix 23).

In choosing songs and activities, I was also mindful of other factors. For instance, the ‘Reading by Six’ document relates how some schools found that children’s listening skills were poor partly because of the lack of conversation at home but also because continuous background noise ‘were bound to dull sensitivity to the nuances of sounds’ (Ofsted, 2010b p. 27), and therefore those schools made more time for activities to develop those skills. So I included such games as ‘Stand up, Sit Down’ and ‘What am I playing?’ because these encourage attentive listening to instrumental sounds, and are strongly linked with Aspect 2 of Letters and Sounds Phase 1 (DfE, 2007). Hennessy (2002) argues that when children sing at school it is almost always with other people, so they ‘will have very little opportunity to hear their own singing voice on its own. If you cannot hear your own voice, pitching is impossible, so if solo singing becomes a natural part of performing, there is more likelihood of accuracy and quality developing’ (Hennessy, 2002 p. 34). For this reason, I included ‘Singing names’ and ‘You can’t see’. ‘You can’t see’ also encourages vocal play and voice discrimination (Aspect 6 of Phase 1 ‘Letters and Sounds’). Finally, another reason for including ‘In a Cottage, in a wood’ is because with repeated singing, sections are left silent with just the actions keeping everyone in time with each other. This provided an introduction to developing auditory memory and imagery – in other words, hearing and ‘comprehending musical sound that is no longer present’ (Callaghan, Emmons and Popeil, 2012 p. 568). When I have taught this song previously, I have always been struck with how well the children sing the song at the very end after the ‘completely silent’ verse. (See Appendices 23 for the Resource Pack). The one activity that is mentioned in this study and does not appear in the Resource Pack is a game devised after consultation with CT1 whereby the children learn to follow given signals when playing classroom instruments (the orchestra game).

3.4 The school-based course for STs

Several themes emerge from the literature related to initial teacher education and, more specifically, initial teacher education in music (see Chapter 2):

- The importance of tutor modelling;
- The creation of the 'Gestalt' through practical experience;
- Reflection on practical experience;
- Knowing other theories (episteme) about the importance of music in the curriculum, and developing personal theories (phronesis) through reflection on experience in the light of those public theories; and
- The role of the teacher educator, not just as model, but also as 'coach'.

With this in mind, I now turn to the programme design.

During the academic year 2015-16, I completed two cycles of the research. Both cycles took place in partnership schools. The first was at Blackstone Primary School. According to the Ofsted report of 2014, this is a larger than average sized Primary school (473 pupils on roll). The number of pupils supported by pupil premium, school action, school action plus or with a statement of special educational needs is below average. The second was at Five Oaks Primary School, which is an average sized Primary school. According to the school's Ofsted report of 2012, the proportion of children supported by pupil premium is above average. The proportion of disabled pupils or those with special educational needs is broadly average, with a higher than average proportion of pupils at school action plus or with a statement of special educational needs. The school is specifically resourced for pupils with hearing impairment and/or profound deafness.

The first cycle took place in November 2015. I chose to invite STs from the Year 2 cohort, as they had had some experience in schools the previous year, typically teaching small groups within a whole class context, and so they were familiar with school routines. At this time of year also, their learning was mainly university-based so they were more accessible, unlike the Year 3 and 4 students. Initially, I invited STs who might have a special interest in the project, namely those with Early Years or Music as their specialist subject. I had responses from only four students, and so I extended the invitation to the whole cohort and had three more responses.

The second cycle took place under the umbrella of the 'Hope Challenge'. The Year 3 (Y3) cohort could choose from a variety of projects aimed at supporting

children in the development of their skills in such things as writing, grammar and mathematics. I was allocated six of the students who signed up for ‘Music and Early Reading’, of whom five attended.

Both cycles had a similar structure. A whole day was set aside in the first instance. The morning was spent at the university where the STs were instructed into the course, and in the afternoon, we went into school where the STs observed me as I taught the children (in both cases, the Reception class), both as a whole class and subsequently in small groups. This was followed by a designated time for group questions and reflection. In subsequent weeks, the afternoons typically assumed a similar pattern, with the STs teaching the children in small groups after a whole class introduction from me. Time for reflection was always built in. This was audio recorded on an iPad with appropriate permissions.

There were, then, five distinct elements to the course: the training morning, tutor modelling, small group teaching, reflection and use of the specially produced resource handbook with audio recordings.

For the Y2 cohort, I began the induction morning with a 15 minute talk in which I shared the rationale behind the project. The Y3 students received this in whole cohort lecture.

In the talk, I explained the elements of phonological awareness and why it is significant to reading development. I discussed the work of Forde Thompson and Schlaug (2015) with aphasic patients and I gave a brief description of Melodic Intonation Theory (MIT) and what certain neuroscientists believe happens in the brain when it engages with music. I referred to other music studies that have been undertaken in schools with children across the Primary age range and beyond, including dyslexic children. These studies all suggested that music could have a positive impact on phonological development and/or reading skills, and they had used activities that could be replicated, as far as I could see, by the generalist class teacher (cf Overy et al., 2003; Gromko, 2005; Thomson et al., 2013; Verney, 2013).

I then went on to share the contents pages of the Resource pack, explaining how it had been compiled with four objects in mind: to address (1) the Early Learning Goals for music (DfE, 2013a), (2) ‘Phase 1’ of the Letters and Sounds Phonics programme (DfE, 2007), and (3) phonogical development; and (4) to be entirely accessible to the generalist class teacher. Mindful the work of Collins (2014), I hoped that, by beginning in this way, it would give the students a greater

sense of the importance of music in the curriculum, and of the broader benefits to children – what Collins calls a 'utilitarian rationale' (op. cit. p 14).

I then spent some time teaching the STs a selection of the games and songs that I would be using with the children in the afternoon. I felt that it was important for the STs to have this experience for a number of reasons, not least because it would help them to make an informed decision about which ones they felt most comfortable to teach themselves. Furthermore, without the distraction of having to learn the songs and dances themselves for the first time, they would be able to join in more confidently with the activities when they observed me in the afternoon, and to focus more easily on the children's learning and on my teaching strategies. This approach accords with the findings of Hennessy (2000), who remarks that STs 'were most comfortable when they could recreate, quite accurately, an activity they had previously experienced' (p. 192).

Finally, I shared with the STs the lesson plan that I would be using in the afternoon. This, again, I felt was really important, especially for the Y2 STs, because they had not yet undertaken any sustained teaching on placement, and so they were largely unfamiliar with what a lesson plan looked like, and indeed, how to write one. The lesson plan identified such things as learning objectives and success criteria, and described the activities and assessment opportunities (see Appendix 8). The STs needed to know what to expect, but crucially, the lesson plan became an instrument for reflection: if I deviated subsequently from what was written, for instance, we were able to explore why I had made that decision.

In the afternoon, I taught a twenty-minute to half hour lesson with the whole Reception class, with the STs and the class teacher observing. Typically, the lesson would begin with a warm-up exercise, such as 'Switch', and would include one or two songs and a musical activity, such as 'Hot Potato' or 'You can't see'. I then modelled the teaching of further activities with two small groups of children. I felt that modelling in this way was important, not least because I knew that I would teach the children with an enthusiasm and energy that may be perceived as patronising and inappropriate by the students in their university workshop. In other words, I could demonstrate a lack of inhibition with the children that I wanted the STs to be able to emulate. Thus, I was 'not only the imparter of knowledge but also the model of how this knowledge is imparted' (Jeanneret, 1997 p. 41), and I hoped also to do what Russell Bowie's lecturer did in communicating 'a passion, love and excitement for music' through the teaching (Russell Bowie, 2013, p. 59).

After the lesson, the STs and I met to reflect on what they had seen. In the first cycle, the class teacher joined us for only part of this and subsequent reflections. In the second cycle, the class teacher was a constant presence. The class teacher's role, as will be seen, was more crucial than I supposed to begin with. Although Lunenberg et al. (2007) propose that the teacher educator should model pedagogical practice, all the while giving a meta-commentary on that practice, I found it almost impossible to give this meta-commentary. There were probably several reasons for this. First of all, I was in a very novel position, and one that I found quite challenging, as Lunenberg et al. point out. If the mentor is being observed by her students and the lesson 'fails', it could be quite difficult to recover in terms of confidence and reputation (Lunenberg et al. 2007). It was also very difficult to keep track of all the 'on the spot' decisions that I had made throughout the lesson. I also found it much easier to focus on any perceived mistakes I had made than on what had gone well. The fact of having the class teacher in the classroom and in the reflective sessions afterwards, therefore, facilitated several things:

1. The CT was freed up to watch the children herself – just to observe them and their behaviours, and to notice those whose responses were unusual or out of the ordinary;
2. The CT was able to act as mediator in the reflective session – talking to the STs about individual children and what to look out for with them; interpreting the way they responded and behaved; discussing the musical activities themselves and how they benefited the children; and explaining why I did some of the things that I did; and
3. The CT's presence meant that I did not have to try to explain all my 'on the spot' decisions.

Therefore, having the class teacher there as commentator, as Loughran and Berry (2005) and Averill et al. (2015) suggest, was a useful and effective device.

In subsequent weeks, the STs and I shared the teaching. Typically, the lesson would begin with a whole class introduction from me. The STs then worked in pairs with small groups of children. I felt that working in pairs would be a more supportive model for the STs, as they could jointly plan their lessons and could come to a shared understanding through discussion of how the teaching had gone, and of the children's responses. It was very important to me that the STs had the opportunity to teach – not only did they have the concrete experience of learning the

materials themselves, but they would be able actively to experiment with those materials in a real life context (Russell Bowie, 2013).

Throughout, although the emphasis was on an induction into appropriate musical activities and approaches, there was an underlying concern in the induction and reflection sessions about how music and phonological development could be linked.

3.5 Data Collection

Data was gathered using a multi-methods approach. As discussed above (Chapter 3), this provides opportunities for triangulation; although not in the positivist sense that a multiple data source 'is superior to a single data source' (Cohen, Manion and Morrison, 2011 p. 197), but in order that a plurality of voices may be heard (Feldman, 2003) and a richer picture be seen. Included in the data, then, were the focus group interviews, individual interviews, the reflective diary, short questionnaires and an assignment written by one of the STs. One method that I did consider using was observation of the STs' teaching, perhaps using video equipment to record it, because, as Wellington (2015) noted, this gives a 'first-hand experience of a situation…[and] deals with behaviour rather than reported behaviour' (p. 247). However, I decided against this, partly because I felt that, for some of the STs, this would have been stressful – I wanted them to be able to explore the teaching of music in a risk-free environment. I also believed that there was little more to be gained in formally observing, than in the interview process, through which I could 'investigate and prompt things that we cannot observe… [such as the] interviewee's thoughts...perceptions, views, feelings and perspectives.' (Wellington, 2015, p.137). Indeed, it was the STs' perceptions, views and feelings about the teaching of music and phonics that I was most interested in.

3.5.1 Questionnaires

At the beginning of the two cycles, I asked the participant STs to complete a very brief questionnaire (Appendix 9). This was designed to furnish me with information about their musical backgrounds, how much experience they previously had in learning and teaching music, how confident they felt about teaching music, and what they hoped to gain from the project. The questionnaire schedule contained a mixture of open and closed questions, and four that asked the STs to measure their confidence using a Likert scale of 1 – 5. They were quick and easy to administer, and yielded some useful information (Robson, 2003). Although Robson warns that

respondents do not always report their beliefs and attitudes honestly (ibid.), I felt that the STs in this case had no reason to dissemble about their perceived competencies and confidence. I deliberately did not return to the questionnaires at the end of the cycle, because I felt that rating confidence to teach, for example, at the end of the cycle, using the Likert scale would be crude. However, I have wrestled with this decision since, and wondered whether I did the right thing. Nevertheless, the musical background information was useful in sensitising me about the musical biography of each ST and their emotional engagement with the possibilities of music teaching.

3.5.2 Group interviews

The group interviews were held as soon as the music sessions with the children had finished, and they took place in the same school classroom, which was usually free because the children had gone home. Although the group interviews were principally planned as a vehicle for reflection, nevertheless, they yielded much useful information about the STs' perceived competence and confidence to teach music. Krueger and Casey (2000) describe the Focus Group as a 'carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment' (in Larson, Grudens-Schuck and Lundy-Allen, 2004 p.1). Such interviews are used when it is understood that knowledge is socially constructed (Kleiber, 2004). Thus, the participants engage in thoughtful discussion, and may actually influence the thinking of other members of the group (ibid). Indeed, Kleiber even ventures that 'a group of people who are involved in using an innovative teaching initiative are likely to enjoy the discussion and participate [in the group discussion] eagerly' (2004, p.99). Larson et al. (2004) suggest that the participants should be selected on the basis of shared characteristics, and that the whole process should be controlled by a clear plan. The participants were the STs, the CT and myself. The shared characteristics were that we had all been involved somehow in the teaching. In this case, the planning of the discussions was dictated by the teaching experience that had immediately preceded it, and the questions were generally, 'What did you teach, and how did it go?'; 'How did the children respond?' and 'What will we do next time?'

3.5.3 Individual interviews

Whilst the group interviews proved to be an excellent way to share and gather information about how the STs felt their music teaching had gone, and to reflect on the perceptions of the children's engagement and attainment, I was aware that there may have been aspects about which the STs would be less willing to self-disclose in front of their colleagues (Kleiber, 2004) – particularly if certain activities were not successful. I therefore conducted individual interviews with the STs. A further reason for having individual interviews was to find out if the project had developed the STs' understanding of how the musical activities that we had used might develop the children's phonological awareness. The individual interview also allowed for STs who were less forthcoming in the group discussions to have a voice. The interviews were semi-structured; in other words, I began with a topic schedule, but had the freedom to interpose supplementary questions when needed to probe understanding or explore certain topics more deeply (Wellington, 2015). These took place in the days and weeks after the projects had taken place, and were usually held at the university, though one was conducted over Skype. The schedule can be found in Appendix 10.

I was aware that there were potential drawbacks in the interviewing process because of my own subjectivity and bias (Cohen et al., 2003). How honest could I expect the STs to be, given that not only am I one of their tutors, but also that this was a project that I had designed and implemented? There was a real likelihood that they would say what they thought I wanted to hear and avoid voicing undesirable opinions because they were inhibited by our formal relationship (Denscombe, 2010; Drake and Heath in Sikes and Potts, 2008). In order to reduce the risk of this happening, I included questions about the children's responses, because I felt that in focusing on these, the STs might reveal a more accurate picture of their own developing teaching skills. All interviews, group and individual, were audio-recorded and transcribed verbatim.

3.5.4 Reflective Diary

Throughout the life of the project, I kept a diary. Jasper (2005) contends that the use of reflective writing contributes 'to the trustworthiness of a research study' (p. 248), whilst for Attard (2012), the keeping of the reflective diary is a method of inquiry in itself: it is 'a way of capturing the complexity of professional practice and the practitioner's ongoing development' (p. 171). Furthermore, narrative writing is the best medium for studying experience because we do everything (for instance,

planning, dreaming and interpreting) through narrative (Attard, 2012). Nevertheless, Jasper (2005) warns that the reflective diary (RD) may become confessional in its nature, or infected with anxiety, which presents challenges in terms of accuracy and reliability. Certainly, my RD is a narrative log of events and seeks to be as accurate as possible a representation of my thoughts and feelings at the time, but I am aware that through it I express a great deal of anxiety and self-consciousness, and often I could not get beyond that to a mature and considered reflection. However, the RD was useful as a tool to control that anxiety, and to facilitate the development of my own thoughts and practice. There are parts of it which are reflective, but more reflection is being done as I write at a distance, and can analyse, rethink and interpret the events described (cf Jasper, 2005).

3.5.5 Student assignment

In the fourth year of the legacy degree course, STs complete two Master's level assignments. The first of these is on education theory and practice, and the STs are invited to 'critically evaluate a contemporary teaching and learning strategy in relations to the appropriate theory'. Jane (pseudonym - one of the ST participants in the 2nd cycle of the action research project) chose to write 'An exploration into the importance of synthetic phonic teaching and how phonological awareness can be developed through music.' (North Western University Student Assignment). This was submitted on 8th December 2016, nine months after her participation in the second cycle had ended. I first became aware of Jane's choice of topic when she asked if she could interview me about my research, and I asked her permission if I could read the essay (I was not on the marking team) and include it as part of my findings. There is a sense in which this essay is what Brinkmann (2014) might term 'stumble data', firstly because I could not have foretold that Jane would choose to write her assignment on this topic, even when both cycles had been completed and the initial data collected and transcribed. But secondly, because I returned to it as I was struggling with trying to identify what the STs' understanding of the relationship between music and phonological awareness was, and bricoleur-like (Brinkmann, 2014), I have included this in the overall collage.

3.6 Ethics

Before the study began, I applied for ethical clearance both from my own university and from UCL (Appendix 11). In practitioner enquiry, Cochran-Smith and Lytle argue that the relationship between knowledge and practice is complex, unlike other forms of research, where there are 'sharp demarcations between the researcher

and that which is being researched' (Cochran-Smith & Lytle, in Campbell and Groundwater-Smith, 2007 p. 28). As a result of this, the tensions and dilemmas which emerge are complex, and apply to a wide range of issues, including voice, critique, authorship, representation and accountability (op. cit.).

I conducted my research mainly as an 'insider', as I was researching my own practice, but also as an 'outsider'; an outsider because I am a lecturer rather than a student, and I have focused my enquiry on the STs' learning and reflections. Thus, I have multiple ethical considerations. According to Malone (2003), all research may be coercive, particularly when it is 'done at home'. There was the danger that the STs would feel obliged to take part, especially those who felt that they had a relationship with me either because I might become their professional practice tutor (this turned out to be the case for one ST), or their seminar tutor. I made it very clear in my in my written and spoken communications (initial invitation and in the letter of consent, Appendix 12) that their participation was entirely voluntary and that they could withdraw at any time without explanation.

Relationships of power are more complicated than this though, and extended into the study itself. Potentially, I was putting the STs in a difficult position in asking them to critique my practice. So it was important that the STs felt at liberty to say exactly what they thought, and not what they thought I might want to hear through a desire for favourable treatment, or a fear of upsetting me (Drake and Heath, 2007; Malone, 2003). On the other hand, 'all teaching is imposition' (Cochran-Smith and Lytle, 2007 p. 35) and influence is at the very heart of action research because the practitioner wishes to bring about change (McNiff and Whitehead, 2010). I was acutely aware of this tension: 'In the focus group interview, the students were… fairly reticent about evaluating the lesson… I need to manage the discussion so that students feel able to ask questions even if they think criticism is implied' (RD, 26.02.16). To some extent, I think I managed this, as two STs said explicitly that they felt at ease with the process:

> 'I didn't think of you as a lecturer… I mean I thought of you as a more knowledgeable other and someone I could watch and if I needed anything I could ask you, but I didn't think, 'oh I must be on my best behaviour or I can't try this' because you're very open and you're open to my ideas.' (Simona)

According to Bridges (2001 p. 377), the practitioner is in one sense an insider in that he or she shares some of the attributes of those 'on the inside', but in

positioning oneself as a researcher, one places oneself on the outside looking in. Because of this, there is a danger that outsiders may exploit the insider participants in the communities they research (op. cit.). He suggests that 'researchers who are sensitive to this issue typically look for ways to counter the imbalance of benefit' (op. cit., p.378). A benefit for the participants in this study was that they would have an opportunity to develop their teaching skills within an extra professional placement. They would also encounter the latest research in this field and explore ways in which it might be employed in the classroom through the intended training.

Again, though, the issue is more complex. There was a sense in which I made myself more of an insider than normal because it would usually be my role to observe and critique the teaching of the STs. In adopting a teacher role, I made myself vulnerable, but I felt that my being prepared to take the risk of teaching in front of the STs and not only to receive feedback, but also to be openly self-critical where it was appropriate, helped me to 'disintegrate the boundaries between the knower and the known' (Vicars, 2007 p. 104). I became a 'fellow learner who was willing to risk a comment just as they were expected to do' (Malone, 2003 p. 806). This was only partially successful, however, certainly to begin with, in Cycle 2. When I invited critique after the first session, Simona took me at my word, saying that she thought one of the songs had been sung too fast. However, Emma quickly expressed surprise at how well the children had sung considering how new it was to them, and I wondered if she felt uncomfortable about giving me anything but positive feedback: 'I think she may have been a bit embarrassed by Simona's implied criticism' (RD 26.01.16). Further, when I pointed out a mistake I had made in the whole class input that day, again, it was Emma who was keen to be consoling:

> 'Sometimes I think it's nice to – I know you did it by accident, but… some of them realised and they said, 'Miss you did it wrong' and I think it's nice to actually do that on purpose sometimes so they recognise it.' (Emma)

As Denscombe (2010) argues, participants should not be adversely affected as a consequence of engaging in the research. Therefore, I was careful about the timings of the interviews, arranging them at convenient times for both staff and trainees, and making sure that they did not go on for longer than an hour, so that I did not intrude into people's private lives.

The data remained confidential. I have disclosed the information to no-one in such a way that it could be traced back to an individual. In order for the participants to remain anonymous I have used pseudonyms. Vainio (2012) recommends

anonymisation not only for ethical reasons, but because by doing so, the researcher can change what a person has said into 'data', thus putting a distance between herself and the participants' responses, and making analysis easier. I began by deliberately not anonymising, because I feared that I would forget who was who, and because with different names, the STs somehow lost their vitality, but I have since done this, and this has enabled me to attain greater impartiality, and to 'shift the focus from the particularities of the case to a more abstract level' (Vainio, 2012 p. 691). Vainio also argues that complete anonymity may never be entirely possible in qualitative research, so I have been as careful as possible not to include anything in my reporting that may embarrass any of the participants.

I have not disguised the gender of the participants because I believe that it has an impact on the data. Although the children themselves were not interviewed, individuals were inevitably mentioned by the participants. They have also been anonymised.

Finally, Bridges argues that it is important for the researcher to be alert to the 'prejudices that they bring to their enquiry and a reflexiveness which will allow the enquiry itself to challenge these assumptions' (Bridges, 2001 p. 383). I began the study with a very narrow view of the role that music plays in language and reading development, and to a certain extent, this was slightly misleading for the STs. I show in the discussion how I will change my practice in the future, having been challenged through further study and reflection.

3.7 Data Analyses

Working within a constructionist framework, and on the basis that 'meaning and experience is socially produced and reproduced' (Braun and Clarke, 2006 p. 85) rather than residing in the individual, I chose to use thematic analysis as my tool because it seeks to theorise sociocultural relationships and contexts (ibid).

I followed the model set out by Braun and Clarke (2006), which comprises familiarising oneself with the data; generating initial codes; searching for, reviewing, defining and naming the themes, and producing the report.

I began by transcribing the interviews, which was a very useful way to become familiar with the data (ibid). After repeated re-reading of the interviews, I then generated an initial list of codes in order to organise the data. St Pierre and Jackson (2014) say that if we treat all data as 'worthy of analysis' (p.715), this can

cause the researcher to become indiscriminate. They suggest that theory is used first to determine what might count as appropriate data (op. cit.). The first codes came, therefore, from the interview protocol (Appendix 10), which was itself informed largely by the Teacher Education section of the literature review (Chapter 2.10). Coming as they did from a prior theoretical understanding, this was a deductive approach (Ryan and Russell Bernard, 2003; Fereday and Muir-Cochrane, 2006; Brinkmann, 2014). I began, therefore, with 7 initial codes. After repeated readings of the interviews, I generated a further 27 codes (Appendix 13). These were driven by the data themselves; thus an inductive approach was also taken (Ryan and Russell Bernard, 2003). I used the NVivo software programme to organise the data, creating extra codes when I read things that I felt might be important, such as 'the male voice in the treble classroom' in the Year 2 study, which I made because I was interested in the confidence of young men to be, perhaps, the only adult male in the school and singing in a different register from all other voices. Furthermore, there were so many reflections on the children's responses, for instance, that 10 sub-codes were created to organise the data further (Appendix 14). Even within these sub-codes, further sub-codes were generated.

I looked for repetitions, similarities and differences (Ryan and Russell Bernard, 2003) in what the STs had said, and created mind maps for each cycle (Appendix 15), both for what the STs said about the children and their own learning in my first attempt at searching for themes. For instance, there were 18 mentions of behaviour management in the Year 2 cycle and 11 in the Year 3 cycle of STs, and because the Year 2 STs especially were effectively at the very beginning of their training, not having taught many whole class lessons, it was important to include this as a theme. The three mind maps were then combined into one using the NVivo tools (Appendix 16). This was still unwieldy as a model, so after further thought, such themes as the 'children taking the lead' and 'confidence and unselfconsciousness' were subsumed into 'enjoyment, engagement and motivation'. On the other hand, 'pedagogy' contained too many variables and was at variance with the Teachers' Standards model, so it was replaced by 'adapting activities', since there was much evidence that the STs had indeed been mindful of the children's attainment and engagement and adapted their teaching to cater for these.

It was not possible to anticipate the themes at the beginning of the study (Ryan and Russell Bernard, 2003). As I reviewed my themes (cf Braun and Clarke, 2006), the inclusion of 'enjoyment, engagement and motivation' meant that I needed to include a section in the literature review on 'play'. Although children learning

English as an Additional Language was mentioned by only one ST, nevertheless, I felt it was significant given the global context, and so a section on music and EAL was also added to the literature review (this can now be found at Appendix 3).

I now had eleven main themes:

1. STs' musical background;
2. STs' experience of music in schools;
3. STs' evaluation of preparation;
4. Children's enjoyment, engagement and motivation;
5. Children's musical responses;
6. Adapting activities;
7. Behaviour management;
8. Resource Pack
9. The focus group interview as a vehicle for reflection;
10. Links to other learning;
11. Impact on practice.

At this point, however, I sensed that I had what Brinkmann (2014, p.722) describes as a 'situation'. As well as deduction and induction as methods of reasoning in data analysis, Brinkmann posits a further method: that of abduction. He suggests that abduction is concerned with the 'relationship between a situation and inquiry' (op. cit.); the situation being the result of a breakdown in understanding which means that the researcher is not able to proceed, and the inquiry being the process of trying to understanding that situation.

In other words, there was a breakdown in my understanding which meant I was unable to interpret the data further. A tension had arisen between my attempt to use music in a relatively narrow, prescriptive way to improve phonological awareness, and what I was learning from the literature about the much more far reaching effects music has on language development. This meant that I needed to review my study in the light of that literature, and I struggled to make sense of it. At this point I was invited through my supervisor to give a presentation at an Italian university about the cognitive and pedagogical aspects of improvisation. Through further research into this aspect of music making, I recognised that I had not explicitly considered these aspects of the data, partly because certain features of it were what Ryan and Russell Bernard (2003) describe as 'missing data'. I thus included a section on improvisation in the literature review, and included it as the

twelfth theme in the findings.

Chapter 4

Findings from the two action research cycles

In each cycle similar themes emerged. Consequently, these are reported across cycles and each section of the findings is a representation of both cycles. There are two exceptions: 4.1 – Student background and attitudinal survey; and 4.5 – Children's musical responses. These have been presented separately because there were important differences between the two; in the second cycle, for instance, the STs were able to assess the children's musical responses in greater depth because they had more time.

The findings are presented in a quasi-chronological way, beginning with the STs themselves and their prior musical experiences. This leads into the STs' evaluation of the preparation day, followed by what they observed about the children's responses. Also included here is evidence of the STs' burgeoning teaching skills, and their evaluation of the resource pack and the group interview as a vehicle for reflection. An important aspect of the study was the STs' ability to theorise about music's wider role in the Primary curriculum and particularly the development of phonological awareness, and these findings are shown in section 4.11. Finally, the STs' reflections on the possible impact that this experience would have on their future practice is examined in section 4.12.

4.1 Student background and attitudinal survey

4.1.1 First Cycle

The first cycle was undertaken with seven students, all in the second year of the four-year BA QTS course. Of these, five were women and two men. They ranged in age between 19 and 36. Two of the women were relatively mature students (28 and 36) and had young families. The table below gives the anonymised name and age of each student and their chosen subject specialism.

Table 4.1: Name, age and subject specialism of each participant

Name	Age	Minor Pathway (subject specialism)	Confidence to teach music in EYFS/KS1	Confidence to sing in the classroom
Bernice	36	Early Childhood	3/3	5
Sally	28	Early Childhood	4/3	Not completed
Peter	22	Music	3-4/4	2
Alexandra	20	Biology	3/3	2
Becca	20	English Language	2/3	1
Jemima	19	Mathematics	1/1	1
Owen	19	Music	4/4	2

Five of the students had backgrounds that were musical, either formally or informally. For instance, Owen and Peter were both proficient instrumentalists, with Grade 8 (Associated Board) awards gained in one instrument or more, and were studying music as their minor pathway on the programme. Becca had a GCSE in music, had played the cornet and bugle in bands and had sung in amateur dramatics groups and choirs. Alexandra, Bernice and Jemima had also sung in school and church choirs.

Bernice and Alexandra were particularly enthusiastic about their previous experiences, with Bernice already making links between music and other areas of learning:

> ‘I did play the piano for a time in Primary, but it wasn’t something that I took any further. I regret that now. But I did love the choir. Music is a big part of my house now as well ’cause I do learn through music… I can put things to music and I can learn it. It just gives you that… it’s that repetitiveness of it isn’t it?’

Sally was the one student who did not appear to have much musical experience, although as an Early Years practitioner and a mother she reported that she valued music, and was diligent in teaching nursery rhymes, for instance, to her three-year-old daughter. It was to be expected, seeing that this was a voluntary placement, that those students with an interest in music might put themselves forward.

None of the students remembered very much about what they had learned in school music lessons, neither Primary nor Secondary. They were asked about their own confidence to teach music in the Early Years and Key Stage 1 classroom with a rating of 1 being the least confident and 5 being the most confident. As can be seen from Table 4.1, this ranged from 1 to 4 (and somewhat related to the setting), but reported confidence was fairly good for most of the students. By contrast, only Bernice was really confident to sing in the classroom.

4.1.2 Second Cycle

The second cycle was undertaken with five students, this time in the third year of the course. All these were women aged 21 or 22 years of age. Again, Table 4.2 below gives demographic information and music confidence ratings for each student.

Table 4.2 Name, age and subject specialism of each participant in Cycle 2

Name	Age	Minor Pathway (subject specialism)	Confidence to teach music in EYFS/KS1	Confidence to sing in the classroom
Simona	22	Early Childhood	5/4	5
Juliet	21	Special Educational Needs	2/2	1
Fiona	21	Special Educational Needs	4/4	2
Emma	21	World Religions	2/2	2
Jane	21	Music	2/3	5

Of this group, three students had what they would describe as a musical background. Jane was the most proficient, studying music as her minor pathway. She sang and had played the violin in a regional youth orchestra and had A level music. As Jane talked about her musical background, it became apparent that, for her, music was a deeply social activity, and she placed much emphasis on the importance of making music for enjoyment over passing exams. Fiona had studied flute to Grade 6 (Associated Board), had GCSE music and came from a musical family. She had also undertaken some classroom music teaching since the beginning of the course. Although Simona had no formal musical education, she

came from a singing background and had sung in school choirs and whilst having a leading role on church camp:

> ‘In our family we had so many songs that are passed down from my parents, like soothing songs for children and that, that I still know today and that I would still sing – if I hold a baby – that I would still sing to them.’

Juliet and Emma, on the other hand, had comparatively little musical experience; for Emma, music had ‘never really been an interest’, but for Juliet, some of her experience had been negative:

> ‘Yes there was an opportunity to sing at a local rugby stadium but there was a selection process. I really wanted to do it but I didn’t get picked. I wasn’t good enough.’ (Juliet)

When questioned further, Juliet acknowledged that this had impacted negatively on her view of herself as a singer.

4.2 Music seen on previous placements

The STs were asked in the survey to identify what music if any they had seen taught in schools. Ten of the twelve reported examples. In three cases, music was taught by a specialist musician. Where the CT had taught their own music, it had been done in a rush at the end of term as a box-ticking exercise, at least as reported by the ST. In one school, the online ‘Charanga’ scheme was used (https://charanga.com/site/) and, in others, CDs had been followed to learn songs. Only Jane had actually taught music, because her teacher lacked confidence and deferred to Jane’s specialist skills. (For a more detailed account see Appendix 17 – Music in School Findings – further detail).

4.3 STs’ Evaluation of the Preparation

The teacher education model comprised a preparation morning and TE observation in school. This was positively received by both groups of students. For example, Simona felt that it had addressed all the learning styles:

> ‘It was really well thought through because, again, going back as far as the lecture… having the meeting and then you showing us everything…and then being able to just fully apply that on the day, it was almost reaching all aspects of any way you can learn – whether it’s kinaesthetic or more static.’

Sally echoed this when she observed that seeing the children learn the songs consolidated her own learning from earlier in the day.

Seven of the twelve STs mentioned the TE modelling. Peter and Bernice both made links between this modelling and learning theory. For Peter, a committed Christian, this mirrored what discipleship meant to him: 'I do and you watch and then we do together and then you do and I watch and then you do by yourself'; while Bernice commented thus: 'You know, having the opportunity to see you in action is valuable; it's something that I can commit to memory and I can use that. You became my mode of representation I suppose if want to use Bruner's theory'.

Alexandra valued being able to see 'someone who teaches you teach someone else music'. This was something she dwelt on in the interview, going on to liken watching the TE to watching a friend teach. It was as if it helped her to make more sense of the TE's teaching within the university, being able to visualise this in the Primary classroom: 'You teach me English…and then to see you in an actual Primary school setting… [because] you don't really see that unless you do these things and I think it was nice to see how you deal with the class.'

For the experienced musicians within the student participants, this modelling appeared to be equally useful. As Peter said, 'Even if I have more "confidence" as a musician I wouldn't have liked to just jump straight in; it was very valuable to see it modelled first, definitely.' Jane was glad to be able to get to know the children a little before she taught them: 'We needed that first week just to watch you and to settle ourselves in because we didn't know any of the children.'

Four of the STs specifically commented on their increased confidence from being able to rehearse the songs together before they went into school. It was one thing 'making a fool' of themselves in front of the children, but it was more difficult, they said, to do this in front of their peers. As Emma put it, 'So, if you had…just expected us to go into school, I don't think we would have been so enthusiastic, because I personally… I would have stepped back a little bit because I'd not had that embarrassment with [the others] first.' Furthermore, Bernice noted how useful rehearsal is in preparing to teach new lessons, and it was she who asked for the extra preparation and rehearsal session (which we did).

Different aspects of behaviour management observed through the mentoring model were mentioned by five of the STs. Becca appreciated the 'whole group' class introduction for setting the scene:

> ‘I think they [the children] need that whole class activity first … I think that engages them … and they needed you as well first before they just went off with us because they were familiar with you. I think that definitely worked.’

Sally liked being able to see who was engaged and what they were engaged by: ‘Seeing how the children react to the songs…makes you see how beneficial they are.’ Meanwhile, Jane, for whom enjoyment of music is so important, had this to say:

> ‘And then watching you was very useful – like how you would deliver it – like in a calm manner, and all the children would have been excited to learn and you weren’t being too strict on their behaviour and if they got excited you let them – in a good way – you let them be excited and then you’d say, “OK right, we’re going to start now,” where … some people are very strict on children who are excited to learn.’

Six STs identified various teaching strategies that they had learned during the preparation day. Both Becca and Sally had seen or taken part in music lessons where the songs were taught using a CD, which Becca, in particular, reported to be a rigid and unsatisfactory approach. They both felt that live singing was much more engaging for the children. Emma commented on this further: ‘You kind of showed us the body language you need, you showed us the enthusiasm you need to put across when you’re doing the songs.’ Relatedly, Fiona had been surprised by how songs may be taught to young children:

> ‘I always thought that the best way to teach was to teach the lyrics first and then get them singing. But I saw that, especially in the early years, it’s better to keep singing, with them joining as and when they felt ready, which I felt was really good. The songs were inclusive; anyone could join in and they didn’t have to join in if they didn’t want to.’

Jemima echoed this, remarking particularly on how quickly the children joined in with songs, in spite of not knowing the words: ‘And they’d never heard of the cottage one. That was a new one that you taught them. But yet they picked it up straightaway…But it wasn’t the words that they picked up, it was the actions...’

Juliet appreciated seeing how music could be taught to young children:

> ‘…because I didn’t really see much of that when I was in the early years, except for an outside person coming in and doing things like rhythm and

movement and things like that, but not necessarily singing and the instrument side of things.'

4.4 Children's Non-musical Responses

4.4.1 Enjoyment, Engagement and Motivation

'They are really enjoying this Friday afternoon. When I said, 'And what else happens on a Friday?' and they all went, 'Singing!' So that was really nice… '(CT2)

In both cycles, when discussing the responses of the children, the most frequent reference made was to the level of engagement and enjoyment that the children had displayed. This was a constant theme across all interviews and post-lesson reflections. For the Year 2 group, there were 48 references to engagement and enjoyment found across all sources, and 43 references in the Year 3 group.

STs and CTs noted examples of enjoyment in a variety of different contexts. Particular songs and activities were identified; the enjoyment displayed by particular children was also remarked upon, and the way that engagement enabled the shyer children to gain in confidence. Others reported that, often, heightened enjoyment meant that there was less unwanted behaviour. Elements that discouraged enjoyment were also discussed.

4.4.2 Particular songs and activities

The children in both cycles found nearly all the songs and activities that they were taught enjoyable, according to the STs. Particular favourites were 'Dr Knickerbocker', 'The Penguin Song' and 'Hot Potato'. What the children seemed to enjoy particularly were the active elements of the songs.

Songs that CT2 reported as particularly effective and engaging were 'Switch' and 'Hot Potato' because 'some of the children that would not normally be engaged were particularly engaged because they had to listen to follow the pattern' (CT2). She also expressed surprise at the children's self-control in playing the instruments:

'It was a really, really good introduction with the hand signals to put the instruments down, to put it down, to play it loud, to play it quiet, to put it down… because they wanted to do it right, they wanted to succeed. And they were all in a situation where they could all be successful learners.'

Three of the STs specifically mentioned the children's enjoyment of playing the instruments, and it was noted by two of them that this was something that particularly engaged the boys: '…and it's lovely to see how that individual group works and even the boys were like a little bit stepped back from it [at first] – they did want to have a go in the end, they did want to play the instruments' (Bernice). This was echoed in cycle 2 by the CT: 'I do find that the girls – their language often is better isn't it – it's a boy girl split at this age really. And I feel that the girls are…more receptive to the language that they're receiving. So those activities with the boys, for me, really engaged them.'

The activities that the children appeared to enjoy less were those that the STs did not pursue. For instance, 'Matching Sounds' gave less scope for creativity than the others, and dropped out of the repertoire. Also, most of the STs played 'What am I playing?', some fairly assiduously, but none made special mention of it. It may be that this game needed a little song or jingle to maintain its rhythm and flow, as Becca suggested with another activity: 'So it worked quite well towards the end; it just took a while. Maybe, like you could change it to [include] a song you sing as well, like "You can't see...".'

4.4.3 Enjoyment and Confidence

The STs made fairly frequent references to the increasing confidence of the children:

> 'Yeah, and it's magical really. I mean look, in practice, … how excited they are to sing and use their voices… and even the quietest of children – you know when they're in that crowd, they're still using their voices. It's amazing to see.' (Bernice)

The Year 3 STs made more than twice as many references as Year 2 STs (sixteen as opposed to seven) to the increasing confidence of the children, ascribing this to sustained engagement and enjoyment. This was to be expected, perhaps, as the STs taught twice as many sessions. All the Year 3 STs commented on the observable increasing confidence in the children, both in their individual interviews and in discussions with each other. Out of a class of 30 children, eight were mentioned by name. I wondered if they were seeing increased confidence in the children where they were becoming more relaxed with relative strangers. However, both the CTs also used similar descriptors about the children. For instance, CT1 said of one child's response to Dr Knickerbocker:

> ‘He just wanted to dance, he doesn’t really want to follow … “I’ll just do my own thing…I’m freestyling here.” He’s just having a lovely time and just really enjoys it. And it’s lovely to see because he’s not the most confident child within the setting when you take him out of his comfort zone…It brings some of them alive really.’ (CT1)

In cycle 2, the CT said in the first post-lesson reflection: ‘That’s it, and a lot of the children like that; they need to see what’s going on to develop their confidence,’ and in the second: ‘And then she developed her confidence to actually sing, which was really, really good.’ Also, in the post-lesson reflections, the CTs did not ever say to the STs that the children were simply hesitant because they were being taught by strangers. In describing the progress of one of the children in her group, Juliet had this to say:

> ‘…because E was someone from the first session that I’d picked to work with. It seemed like she became a lot more bold and enthusiastic and willing to take part in some of the activities…[her] participation and enthusiasm definitely increased by the end. In the last couple of sessions, you almost had to get her to calm down…She was so enthusiastic, she couldn’t get her hands off the instruments.’ (Juliet)

Jane noticed an increased confidence and determination to ‘put himself forward’ in one of the boys in her group:

> ‘I remember the first time walking into the classroom and [seeing him]…But he was very quiet and he wasn’t – he was probably the opposite to D. D was all out there…But J was happy enough to sit back, like he was content. But then, whenever he started to enjoy it more, he sort of forced himself to go out there and say ‘Can I do it?’ type of progression.’

Emma also noted J’s progress: ‘And he would then lead on [the orchestra game]. It was fantastic, I thought he was really good. But I wouldn’t have expected that from the first ever day of watching him.’ She attributed the children’s growing confidence also to being in the smaller groups: ‘And I think being in little groups of six was really useful. Because I don’t think M would have shone as a pupil if he was in [the whole] class.’

(i) <u>Enjoyment of particular children – generally</u>

The enjoyment of other children was also noted by the STs. In a few cases, the children’s progress or achievement was attributed to engagement:

> ‘And I think, was it E? He took a while to pick up which instrument was his that he was playing, so we had to do it a few times – he was just sitting there and we were [saying], ‘Can you hear it, can you hear it?’ and he was like [shaking his head]… and then so we played it again and … I can’t remember who it was that had the same instrument, but they were playing it quite quietly. I think that might have been the issue. But yeah, he got it eventually, but he just loved being involved and everything…’ (Becca, Cycle 1)

Two of the Year 3 STs had had a child with Downs Syndrome in their group. The child’s participation was remarked upon positively by the CT, in that he had managed to stay for the whole activity: ‘…and he sat all the way through that, which is a long time for him to sit. Often he’ll sit with his support and then he’ll just, you know, slope off and maybe come back again. But he was so engaged.’ Fiona described this further in her individual interview:

> ‘So we were playing [‘You Can’t See’] and he was really enjoying listening, so the teacher picked up on it and asked if he could have a go. So, we brought him into the middle, put a blindfold on, did everything as normal and then he got up and walked over and tapped the person who was singing on the head…he got the right person…’ (Fiona)

It was also noted by STs that key to some children’s enjoyment and engagement was being given the opportunity to take the lead, or contribute in some way to the adaptation of the activities, as has been mentioned above. For instance, Becca noticed this about N:

> ‘If it was something we’d said he’d be a bit unresponsive, he’d just sit there and then all of a sudden… he was totally into it because he’d [made the suggestion] and he felt that everyone was doing what he’d said, and he loved that.’

(ii) <u>Enjoyment and unwanted behaviour</u>

Five of the STs made special mention of the engagement of the children, which they perceived as resulting in less unwanted behaviour. This was picked up by CT2: ‘When I was here with the second group, every child in that second group was engaged, and they were listening and watching and they were very, very much on task.’ Emma found herself allowing the children to take the lead: ‘Cos you can

sense what mood they're in can't you? So I (just said) 'Ok pick the one you want to do then.' And they picked that one and they were fine.'

This was not always the case, however. Increased excitement needed careful, but firm management, particularly when the children were in the smaller groups. As Sally said,

> 'I think they behaved better in a large group because there's so many people there and they think, 'Oh I don't want to show myself up in front of everyone' type of thing, but then when there's only four of them, it's like "Ah well, she's watching her so I'll go over there.''

(iii) Factors that inhibit enjoyment and motivation

The post lesson reflections were particularly useful for discussion of behaviour management, and it was here that the STs identified factors that they perceived as inhibiting the children from enjoying the session. These included:

- The children being out of a routine (e.g. if there was a 'non-school uniform day');
- Changes in personnel (e.g. if the teacher or teaching assistants were absent);
- Children being tired or uncomfortable (e.g. too warm on a sunny day); and
- The music lesson taking place on a Friday afternoon (at the end of the week when the children are likely to be tired).

Pedagogical factors were also cited by the STs in their comments:

- Lack of pace in the activity;
- Too much repetition of an activity;
- Lack of opportunity for the children to 'take a turn' in an activity; and
- Presentation of the activity not being engaging (e.g. use of CD rather than live voice, or lack of enthusiasm on the part of the teacher).

Teaching the children in small groups allowed the STs to get to know individual children and become more attuned to their responses. For instance, Juliet noticed that H was less involved than she had been previously: 'She was a lot quieter. She'd really come out of her shell last week. But it seems like it's gone back to the week before almost in participating…' Here it was useful to have the CT on hand to explain that the child's close friend was absent that day: 'And it's difficult as

well. We try to develop children's friendships, because if they just have that one close friend, they don't know where to turn when they're not here.'(CT2)

The STs seemed also to recognise that sometimes it was not possible to account for the children's lack of engagement, and reported this several times as feeling that the children were simply not 'being in the mood'.

4.5 Children's musical responses

4.5.1 Cycle 1

The Year 2 STs identified things that the children were able to do, musically, and things with which they had difficulty. For instance, it was reported that children were able to identify instruments from listening to their sounds; they could offer suggestions for new words and actions to songs; and that they learned songs more quickly if there were accompanying actions which helped them to remember words. Particular children with evident musical ability were noticed, for instance E, I and G.

It was also noted that children were beginning to be able to make up their own musical patterns. However, in games such as 'Echoing Rhythm Sticks', where children were required to copy specific patterns, it was observed that they sometimes copied what had gone before. As the class teacher commented, 'Sometimes they're not ready to move on and it's all about them. And if that first one [rhythm] was more catchy…'. In games such as 'Pass the Clap', the STs also noticed that children had difficulty keeping to the original pattern if it was changed by accident. Children also found generating new sounds and rhythms challenging in certain games and tended to revert to copying what had gone before.

4.5.2 Cycle 2

Four of the five STs commented on individual children's musical progress. Sometimes the observations were relatively simple, such as noting that a child had learned the names of all the instruments used, or that a child was able to tell the difference between long and short sounds. The STs frequently attempted to interpret the children's responses, leading them to draw tentative conclusions about the quality of learning. For instance, although they worked with children in different small groups, both Simona and Jane noticed that in trying to identify whether two rhythmic patterns were the same or different, children often responded in unexpected ways:

> ‘You said ‘How do you know it’s different?’ and something he said was, ‘It’s higher.’ So he wasn’t necessarily commenting on the pattern, he was commenting on what he was hearing. (Simona).
>
> ‘It was OK… I think they find it very confusing – some were playing tambours, some were playing tambourines, others had triangles. One little boy clapped and then they were saying ‘it’s different’…they were listening to the sound [timbre]’ (Jane).

Again, in describing the children’s responses to the ‘Stand up, sit down’ game, Simona recognised that it was a challenging activity for the children to direct: ‘The children were confused because J wasn’t playing the maracas for long enough.’ Simona also made an interpretation of the responses of a child with suspected autism:

> ‘Development wise, I was looking at R… in the big group activity when you were doing the difficult [more complex] clap patterns. And the absolute focus on her face as she was trying… she did struggle a bit with it... It was just the (clap clap clap-clap clap), that one...then she would get it, and then she would fall out of rhythm almost; she forgot to keep thinking.’

Fiona was interested in the musical response of a child who was particularly confident musically, observing in her a reticence to participate while she listened intently to new songs: ‘I found C didn’t necessarily always join in with the songs [straightaway]. Sometimes she’d sit back a little bit but then start joining in a little bit later on…she listened before she joined in singing as a whole class.’ Three of the STs also noted the way in which children spontaneously added extra challenge to the ‘What am I playing?’ game by playing the instruments in such a way as to disguise the identity of the instrument, or by playing more than one instrument.

Juliet and Fiona made a particularly detailed study of one child in their group who found it difficult to respond verbally to questions, yet would sing short phrases on her own (You can’t see), and move in time with certain songs. These two STs experimented to find ways to make an activity accessible for her:

> ‘[H is] improving. Initially, she wasn’t responding verbally to questions and we had to try and find a way of giving her a response she could… We tried two thumbs up or one thumb up which didn’t work. So we tried shaking the head. So if it’s the same, nod your head – different, shake your head.

> Things like that. So she shook her head instead of verbally responding. But then she did respond verbally not long after that.' (Juliet)

4.6 The Responsive Practitioner

4.6.1 Engagement

Seven of the STs specifically mentioned ways in which they had adapted the activities to add variety and keep the children engaged. For instance, Owen, who saw how the use of a ditty can help to add pace to an activity, used the 'You can't see' jingle for a 'guess the instrument' game, whilst Becca and Bernice turned the 'guess the instrument' game into a circle game to involve all the children.

4.6.2 Challenge and support

Six of the STs reported adding extra challenge to the activities. Emma and Jane, for example, got the children to disguise their voices for the 'blindfold game'; Owen had the children singing not just their names, but their ages; and Fiona and Juliet had the children guessing two instruments rather than just the one in 'What am I playing?' On the other hand, Sally, who wanted the children to be able to identify rhythms in the 'Hot Potato' game, saw that it might be beneficial to rule out certain variables:

> 'For next week we're doing 'Hot Potato' with the instruments and things like that and we're wondering because they're having issues with picking out the rhythm – they're picking out the pitch [timbre] instead – having matching instruments like a pair that go in the middle …Then there's no confusion going on.' (Sally)

Only Alexandra worried about offering enough support and challenge: 'the only thing is, I wouldn't know how to differentiate things, like the activities that we did.'

4.6.3 Understanding and independence

Several of the STs saw the benefits of encouraging the children to take the lead in activities. So in the 'Hot Potato' game, Alexandra and Sally gave the children the opportunity to clap the rhythm that was to be copied, whilst as soon as Emma and Jane invited one child to conduct the instruments of the 'orchestra game', they found that the game itself gained in popularity with the children because they all wanted to take on the conducting role.

4.6.4 New skills

Emma and Jane felt that it was really important for the children to learn the names of the instruments, and took every opportunity to rehearse and revise these.

4.6.5 Children's suggestions and needs

Four of the STs (all second years in this case) described ways in which they had responded to the children's needs and suggestions. In the case of one child who was too shy to sing, Owen had given her an instrument to play instead; one particular child in Becca and Bernice's group was not easy to engage, but when they followed the boy's suggestion of taking turns in a particular game, he was much more cooperative.

4.6.6 New activities

Owen, who has extensive experience of being a Scout Leader, made the link to singing games that he already knew, and was keen to try these out with the children alongside those in the booklet.

Some were also able to articulate how they would change the activity if they were doing it again:

> 'But then if we were playing it again, I'd try to actually have a bit of singing, like you do with the song. I'd probably try and [include] that instead of just talking it, but I hadn't really had enough time to plan it through. But I think they would have found it a bit more fun if they could sing before they sat down.' (Becca)

The two STs who had less to say than the others about adapting activities were Peter and Simona. For Simona, this may have been because she was partnered with the TE and, therefore, despite the latter's assurances to the contrary, felt inhibited to make suggestions and to take complete control of the teaching. Although Peter was a proficient musician, he acknowledged that he had had much more experience with older children, and could have been less at ease in this context, particularly as he and Owen did not teach collaboratively as the others did. (They taught individually on separate weeks.)

Another point of interest was that the Year 2 students appeared more ready to experiment with the content and structure of the games than the Year 3s (see 'Engagement' above), suggesting a more playful approach.

4.7 Improvisation

Improvisation was possible on at least two levels; for instance, by the STs adapting the activities (see above), as well as the activities themselves promoting improvisation on the part of the children.

As has been reported, the STs were ready to allow the children to take the lead in activities which leant themselves to improvisation. These included 'Leader of the Band', 'Clap your hands and wiggle your fingers' and 'Hot Potato'. In the resource pack, further improvisatory songs and activities included 'She'll be coming round the mountain', 'Echoing rhythm sticks patterns' and 'Repeated rhythm patterns'. Most of the other songs and activities were performance orientated, although one or two could be extended to include an improvisatory element, such as 'What am I playing?' and 'You can't see'.

Owen used improvisation as a way to re-engage the children when they were observed to be going off-task, and to manage behaviour. A child in his group had been unwilling to sing and started to play with nearby toys:

> 'But then I moved him away from the toys... And then he just refused point blank. And then… I picked a pen up off the floor and that's who got to decide what we were singing. We were passing the pen around and then when it got to him he started singing. It was as if 'I'm the leader'. So I said, 'Do you want to have another go?' Like he seemed to enjoy having another go. And all the other kids were fine with that. So that was interesting to see how giving the naughty kid the leadership over the group [sic]. He suddenly went really well behaved all of a sudden.' (Owen)

Sally remarked on the fact that the children had enjoyed an activity specifically because they could make it their own:

> 'They liked the fact that they can make their own little rhyme up, like I did 'Clap your hands and nod your head' I think, and then there was another one in the book that we [did]. And then we asked each child to do their own, so they really enjoyed that [because] they all had their own little rhyme in [it].' (Sally)

'Hot potato', in which the children explicitly improvise their own rhythm pattern, was the one activity where Peter was able to make the link between music and language. When asked if he could see any connections between music and

early reading, he replied, ‘That one really jumped out at me as soon as we were sat with the kids doing ‘same, different’ I thought ‘Wow!’ That’s why – it was so clear.’

Improvisation was something that Becca enjoyed. She said, ‘[I liked] the singing. I liked it because they could get up, they could dance; you could even develop putting your own hand percussion into the games.’ She was also pleased at the way that she had learned to extend the games played.

Emma felt that, if she were familiar and confident with a greater repertoire of songs and activities, she would be better able to adapt and improvise herself within the lesson:

Also, as the literature suggests (see sections 2.7 – 2.10), the children should have the opportunity to choose to play and improvise during continuous provision. This was not explored for either of these two cycles.

4.8 Behaviour Management

Unsurprisingly perhaps, given the relative differences in their school experiences so far in their course, behaviour management was a common feature of the interviews. The Year 3 STs spent some time discussing behaviour management with the CT in the post lesson reflection after the first lesson they had taught; however, three of the five returned to this theme only briefly in the individual interviews. The Year 2s, however, appeared more conscious of this aspect of their teaching, possibly because they had less teaching experience and also because they were in the process of preparing for an assignment on behaviour management. Bernice, in particular, described the way that she had been careful to try to match her expectations of the children’s behaviour with of the CT.

4.8.1 Importance of knowing the children and organisation of learning

Seven of the twelve STs recognised the importance of effective behaviour management by the teacher and of children knowing one another. Peter noticed the behaviour of a particularly able child, and suggested that his apparent disengagement was because he was finding the tasks too easy. Bernice, Owen and Becca had each discovered that one way to engage certain children exhibiting challenging behaviour was by giving them responsibilities. In fact, so impressed by this was Owen, that he specifically reported referring to it in his university assignment on behaviour management. Challenging behaviour was an issue in the Year 3 cycle as well and, in the first post lesson reflection, the CT and STs

discussed one particular child, and how some behaviours needed to be ignored or catered for differently, with Emma making a comparison with a child in her placement class. For Sally and Simona, knowing how to organise the children physically was crucial. Sally felt that behaviour was easier to manage in the larger group where children were more likely to conform to expectations and the collective peer behaviour, whilst Simona described a way of managing the small group:

> '…and then AJ, just the life of the party, depending on where he sat. If you positioned him in a good place, he was very responsive, so I thought, to the music and, as soon as we started singing, he would just sort of – obviously not every week – you definitely could see him just – 'Right, we're singing now, I'm going to do this.' (Simona)

It was also noted by Sally that the quality of the activity was crucial to engagement:

> 'Yeah, I think they were more interested when it wasn't the CD cos the teacher's just sitting there pressing start and play and then they started messing about but when they're listening to you they're more engaged with it I think.'

4.8.2 Special nature of behaviour management in music

Jane commented on the importance of interpreting the children's behaviour and being able to distinguish between excitement for learning and 'naughtiness'. This was something taken up by Jemima also:

> 'I think it's recognising, when that boy was getting a bit carried away, dancing closer to you? … I couldn't tell whether that was something that needed to stop…but the teacher left it didn't she? I think that's because he obviously never gets properly involved in [things]. So instead of shouting at him to stop being silly…she was like well no, he was actually properly going for it for once. So, I just left it…because if you'd said 'Stop being silly' he might not have been confident do it again and join in.'

Jemima had previously thought that the teacher would have to work harder to get the children engaged, 'but they didn't need encouraging, like most of them wanted to do it straightaway… whereas I thought we [would be] trying to get them to want to join in.' (Jemima)

Juliet's comments suggested that she was also conscious of a fine line that needs be trodden when teaching music – on the one hand, as she said, 'You don't want to control [the children] too much'; however:

> 'Music is one of the ones where you've got to be more on the ball in terms of managing the behaviour, because it's all well and good to make lots of noise but it's got to be controlled and well managed. Because you've got to make sure they're … they're actually going to learn and not just learn how to make lots of noise with any given instrument.' (Juliet)

For the second cycle, the sessions took place on Friday afternoons, which was a challenge in itself, because many of the children were tired at this end of the week. Added to this, there were two occasions where there had been a special celebration and the children were off timetable and out of routine. The year 3 STs commented on this several times; however on more than one occasion CT was encouraging about the way they managed the children.

4.9 Resource Pack

The resource pack was favourably received by the STs and the CTs. None of the activities that were attempted with the children were seen as too challenging for the teacher to lead. However, Emma proposed that 'starter' and 'main' activities be identified, and Simona suggested that the pack be structured in such a way as to help with lesson planning:

> 'The only thing I think might be easier is if you had even a section on starting off – a section just to say, "OK, so you've never done this before, you want to develop phonological awareness through music – look at this section first." Then they can explore it a bit more, because I think that would be an easier stepping stone rather than being like (huge intake of breath) "Which one's applicable to me and my children? Which one should I try?" Because not everybody knows songs other than nursery rhymes for children.' (Simona)

Emma also acknowledged that the recordings were even more important for her than the booklet, particularly as she did not read music.

Both CT2 and Juliet felt that there should be an accompanying CD or even DVD with the resource pack, because as the CT said, 'If I hadn't have seen that done, I would never attempt that cold myself. But I would now.' Juliet also made the

point that ‘It’s always going to be different reading what the actions are and actually seeing it, so if [there] was a mass produced DVD showing the different actions as well [that would be good].’

CT2 also suggested that for each activity there could be a list of resources, and a repeat of the information from the table, i.e., providing a link at the bottom of each activity to the Early Learning Goals (whatever their next iteration) and the Phonics Phase 1 aspects.

4.10 The Group Interview – vehicle for reflection

4.10.1 Discussing and interpreting children’s responses

A large proportion of the post-session time spent was used in discussing and interpreting the children’s learning and responses. For example, in reflecting on the ‘Hot Potato’ game that particular STs had played with their group, Sally and Alexandra discussed and interpreted the response of one child in particular:

> Sally: And I said, ‘Was that the same?’ and she [the child] was, ‘No!’ She knew it wasn’t the same! So I said, ‘Well, do you want to listen again and see if you can copy the pattern?’ And then she did copy it.
>
> Alexandra: I think she just wanted to add her own. And then when we were doing the clapping one, she did it for ages, she was like (claps a lot)… (Cycle 1)

From cycle 3:

> Juliet: H did really well today. You know she only did the little quiet response at the end last week – she was much more confident with her response – she did do the response first time. Without any prompting, she actually did participate really well.
>
> Fiona: [ ] a couple of times. And then joined in with ‘Behind the curtain’ as well. So she’s definitely coming out of her shell.
>
> CT: That’s good.
>
> TE: Who was that?
>
> CT: H. She’s painfully shy isn’t she?
>
> Juliet: We can see a marked difference. I think she’s the one we’re seeing the most difference with so far. We’ve only done two weeks. (Cycle 2)

4.10.2 STs' reflection on their own performance

The STs also talked about what they themselves had done, reflecting occasionally on their own performance. Becca had questions about how to manage behaviour, for which Bernice had an answer:

> 'We were having this conversation, funnily enough, because Becca was wondering how we speak, and I went, 'You take the lead from the class teacher' and it depends how she is speaking to them as well. And we're quite lucky in the fact that Miss has got a really nice manner about her and …she's got that really natural tone with them.' (Cycle 1)

4.10.3 Adaptation of activities

There was frequent reference in the STs' accounts of the ways in which they had adapted their teaching to the perceived needs of the children. This included both the needs of individual children as well as the needs of the collective group. Some of these adaptations had taken place in the moment – small examples of reflection-in-action – and some had been, or were being planned. There was also some discussion about the structure of the lesson and the way this impacted on the children's responses. Here, Emma had begun by observing that the children were less engaged when they went straight to their small group with no whole class introduction:

> Jane: I thought it was more to do with the non-uniform because [ ] threw them off, but then that's a very good point, I would really agree with that. There's only one way to find out and that's to try again.
>
> TE: We had to try it didn't we? Yes.
>
> Emma: You do the starter which gets them all engaged and then we take them off. I think it worked better last week. That's just my personal opinion.
>
> Jane: I liked the end of it though, bringing them all together and sort of celebrating what they all did, the way you were asking them questions – 'Oh L, what did you do in your group?' I really liked the end of it too. (Cycle 2)

4.10.4 Building on the ideas of others

The STs also appeared to build on each other's ideas. Having listened to Owen's adaptation of the 'You can't see' game, Becca had this suggestion:

> ‘I don’t know if this will work. I had an idea. If you’ve got six children, give them two triangles, two have got triangles, two have the tambour and two have the cymbal or whatever. Then put the blindfolded one in the middle with their instrument and then when they hear the instrument that’s the same as theirs, play theirs, or something like that?’ (Cycle 1)

A related comment was made by Simona:

> ‘And everybody had so many great ideas that coming together at the end brought that alive. I feel also that whenever they [other STs] were talking, they were mentioning things that they noticed about the kids that were changing and the things they were clicking onto more and because of that we were more able to see [progress] in our kids.’ (Simona, Cycle 2 – individual interview)

4.10.5 Children’s progress

One key difference between the two Cycles was that Cycle 2 was longer, and so— arguably— the STs had more opportunities to observe behaviours and possible progress in their children. After four weeks of working with their group, Juliet and Fiona, who had taken special interest in H, a child identified by the CT as being ‘painfully shy’, said this:

> Juliet: It was about H. She’s improving. Initially, she wasn’t responding verbally to questions and we had to try and find a way of giving her a response she could [make]… We tried two thumbs up, or one thumb up, which didn’t work. So we tried shaking the head. So, if it’s the same, nod your head – different, shake your head. Things like that. So, she shook her head instead of verbally responding. But then she did respond verbally not long after that. Yeah, it took her less time to respond in that way.
>
> Fiona: Yes, she’s taking less time each week to start verbally responding, which is good.

4.10.6 Class Teacher support

One of the main differences between the group interviews in the first and second cycles was the presence of the class teacher. CT2 took an active part in the discussions. Right from the very beginning, she set the scene, focusing on the children and their responses:

> ‘I think [throughout] the whole group input the children were very engaged and all of them were eager to take part. When I was here with the second group, every child in that second group was engaged, and they were listening and watching and they were very, very much on task. There were two children in that group – there was M and he’s a very shy boy, he’s one of the youngest children. He could possibly have – if his birthday had been a week later, he would be in Nursery. It makes a massive difference. Then you’ve got the likes of T. She’s very, very confident, she’s very able, and she’s the type of child, if she’d been born a couple of months [earlier] in the Summer term, she’d have been in Year One. So that massive gap in Reception was very evident within that little group then. But they were very engaged, so that’s where your differentiation would come in, and I think that was well done as well.’ (CT Focus group interview 1)

She was also able to give the STs a context for the children’s progress. Here, she and Juliet talk about a particularly shy child:

> Juliet: Yes, H sang back, it wasn’t – she didn’t always respond in a verbal way to questions and that, but by the end of it, in the ‘You can’t see’, she did respond; she did (sings) ‘Yes ,I do.’
>
> CT: Yes, because when we did ‘Hot Potato’, she wouldn’t answer and the clapping and that she couldn’t say – she wouldn’t say, though she knew. And then she developed her confidence to actually sing, which was really, really good. And I thought the most interesting thing was J – our little Downs Syndrome boy. He did the blindfold.
>
> TE: Did he?!
>
> CT: And he was actually able to go over and touch the person that had sung. So that was amazing.

The CT affirmed the students in their teaching. Here, she commends Emma on her behaviour management:

> ‘I’d just like to come in on the behaviour management – it was really good. You know, C was waving her hand in your face all the time and you were really good saying to her, ‘You know you don’t need to do that, I can see that – even though you’re sat next to me.’ She was just being really enthusiastic and then you were good as well stemming T’s enthusiasm.’

The CT was also able to give advice about teaching strategies:

> 'I mean, with very young children, you have to be sort of larger than life. Like a performer and snappy with the pace and, if something's not going to work, just change tack or move on, or 'What is it that you like? OK, let's do that then.'

She was also able to make the links for the STs between the musical activities and phonological awareness:

> 'I particularly like the huntsman (IACIAW) song because I can see the children who're developing language and their listening skills – they're really, really tuned in. And they're looking at other children kind of tapping it out in their head and what have you, and I think the aim of the phonological development through music – you know that particular song, for me is good evidence of doing that with the poor ability children.'

4.10.7 The value of the reflective session

When asked later about the usefulness of the reflection session, Bernice was positive about that aspect of the cycle:

> 'It was just other things … obviously Becca had a different take on it and I was thinking 'Oh yeah' (I was) being a little magpie I suppose. I took things from Sally, I took things from Alex, I took things from Becca and the boys as well. It was just, and seeing you. It was that magpie thing isn't it? I thought, right I'm having that, I'm going to keep that and I'm going to take that with me. It was that opportunity.' (Bernice, Cycle 1)

Four of the five STs in the second cycle also evaluated positively the group reflection sessions, reporting that they found it helpful to hear about each other's interactions with the children:

> 'Yes, definitely, because I know we listened in on some activities that Emma and Jane had done, and that actually influenced our following session and how they'd [done] what you did, putting the instruments down, letting them have a play on the instruments. We'd had one with instruments that hadn't gone as well as we'd hoped. It was trying to find time for everyone to have a go on the instruments, but hearing how well they'd found it worked, and how well they'd followed them, we thought, well we'll try it in our next session and it worked really well.' (Fiona, Cycle 2)

4.11 Links to other learning

Both the class teachers, as well as Fiona, Bernice and Sally made the link to Phonics Phase 1, identifying some of the aspects covered, such as instrumental and voice sounds and alliteration:

> 'The recognition of the sounds. Recognising other people's voices that they were making a noise, where it was coming from… being able to pinpoint that – listen, pick up from it – you can see kind of where that fits into the phonics, definitely. And recognising the instruments – it's very similar to knowing what your sound is and being able to recognise that when it's spoken.' (Fiona).

> 'And when I looked at… now I can see how music relates to phonics because it's developing the sounds and putting the words together and things, but at first I was like, 'How does music relate to phonics?' (Sally)

Five STs felt that music made things memorable and was an aid to memory. Owen, Bernice, Becca and Simona felt that music was valuable for making cross-curricular links, and in a science lesson that I observed Simona teaching over a year later, she did indeed use a song to help the children learn about life cycles. Throughout her individual interview, Alexandra also made links to her other experiences, showing particular interest in song as a vehicle for learning other languages, and a television programme she had seen in which young children used song as a means of self-regulation and self-expression.

In theorising about the role of music, both Jane and Bernice drew on their own personal experience as beginner readers, Bernice as a dyslexic with a dyslexic son and Jane as a 'slow reader':

> 'because I've always noticed whenever I was singing and reading music and playing instruments, my mummy said my reading had improved because I was always a slow reader… And she said … that had always helped me.' (Jane)

Four of the STs made the link between music and phonological awareness, particularly syllabification. For example:

> 'Well … from rhythm and syllables and singing different simple melodies with their intervals, I would have always been aware of that, but … I was never really told, 'That is right'. If children can tap out a rhythm they can tap

> out syllables; I didn't really make that connection, I just knew that it helped them…' (Jane)
>
> 'Like you can't just sing a sentence without it fitting syllabically into music, … I'm trying to think of a song. Like 'Baa baa black sheep' is all one syllable words, so that's why it will work to the tune that it's set to, whereas if you tried singing 'Baa baa black sheep' to 'Highway to Hell' or something, it wouldn't work.' (Owen)

Jane, Peter, Owen and Juliet both felt that music can help with expression, fluency and, therefore, meaning in reading.

> 'Because … you're reading ahead to see what comes next, you're kind of predicting where the melody's going to go, the same way as if you were reading a story, you're kind of predicting where the story's going to go. Whenever you're reading out a book you kind of read the next couple of words to find out maybe how to raise your voice or lower it if it's getting sad. I always find music's just helpful in that way.' (Jane)
>
> 'So singing does vary in terms of expression and tone and things like that and I think if they can grasp it in song in an enjoyable form then when faced with a book that they have to read, it's going to come more naturally to them to add that expression, add different tones and things like that.' (Juliet)

Peter made reference to the 'Mountain Song' which includes rudimentary word painting:

> 'But that ties in really well with when a kid's reading a book, you know you can tell the great readers because they hush when a character's speaking quietly and then they get louder and it kind of encouraged that a bit I felt.' (Peter)

This extract from Owen's interview is rather long but worth including because he worked in the interview to articulate difficult concepts:

> 'Like when you read, even though you're not aware of it, everything is based round syllables, that's how like sentences flow…. But when you're singing, it makes more of an awareness of that fact if you get me, so when you're reading a book to a kid, you don't realise you're doing it, but you're actually trying to make the sentences flow so that you know when you've

> finished, but when you're singing you have to make a point of saying full stop, next line… and um like verse in lyrics as well. That's really important so the kids need to know… like that rabbit song that you did and the hunter, like even though you don't make a point of saying 'Now we've finished the sentence', they know the sentence has finished when they're singing. Whereas when you're reading them a story they might not necessarily know cos they're still learning to read.' (Owen)

When asked if she could make any connections between our project and the children's reading, Simona answered honestly: 'In those sessions maybe – I couldn't see the strongest links between them. Although I knew there was a sense of – that music does help. There was no hard evidence of it though was there?' This disappointment was echoed by all the Year 3 STs. They wanted to be able to see the impact of what they were doing on the children's literacy:

> 'I think again it's just seeing the impact the songs have on phonics would definitely be kind of… once you'd seen that it would just tie everything together to kind of see, right this is where they started, this is what we did, this is where they went. So just seeing the 'where they went' stage would be – that would be the main thing.' (Fiona)

It was not always easy to understand exactly what the STs meant by what they said when they were theorising in this way, which should not be surprising because they were basing their theories on comparatively little experience. Owen said as much: 'I think it's hard to explain because it's not really a thing you talk about very often.' However, he valued the space in which to discuss theory:

> 'It's interesting to talk about. Cos we don't get to talk about it, even in the music specialism we don't get the chance to talk about this stuff cos there's so much to learn. It's just nice to have the time to just talk about… cos that is the reason I took music to think in this sort of way. Cos I think there should be more music, there's not enough really. Music and art there's not enough of it.' (Owen)

Early in the following academic year, Jane wrote an assignment which examined phonics as a teaching strategy, and explored the ways in which phonological awareness could be developed through music. (For an abridged version of this, see Appendix 18). In it, she states that her interest in the area of phonics has been developed through involvement in my fieldwork. There is clear

evidence that she is engaging with the literature surrounding the subject. Here she draws on one of my sources, but introduces new ones of her own:

> ‘Composers often align linguistically strong syllables with musically strong beats (Verney, 2013). Moreover, Palmer and Kelly (1992) stated that the alignment of strong syllables with musically strong beats is thought to aid memorisation which supports Bald’s theory…’

She also reflects on the progress made by children in her group in syllable awareness, and shows an understanding of how musical activities may impact on phonological awareness, in this case, syllabification:

> ‘From my experience with the Hope Challenge, this encouraged the children to repeat words rhythmically by carefully listening to individual beats whilst singing their name; this was modelled in falling thirds by repetition. A representation to show this would be ‘so-mi’ in a regular scale. Children could clearly hear the syllables in their name and then they progressed to their favourite food which provided challenge. From the teacher’s assessment sheets for the children’s grouping in class, it was obvious to see which children would struggle. In my group, I had two children with little phonological awareness. After the six sessions, I had noted that those children had engaged with the activity at a confident and high level.’

Furthermore, Jane shows how she became aware of children in her class on placement (which she completed in the two months after Cycle 2 ended) who found it difficult to segment words into their component phonemes, and to identify and generate rhymes. She describes how she applied knowledge gained from the research project in a different setting:

> ‘Research carried out by Moritz (2007) suggest that activities involving production of rhythm patterns or songs with rhyming lyrics could be used to bolster phonological awareness skills. In Willow Primary, my teacher introduced me to songs that help teach and practise the onset and rime skills for the children as we were introducing family of words scaffolding the learning. The first song introduced was by Jack Harmann’s Family of Words, which gave the children the rhyme to repeat and the onset changed each time, these songs also drew upon the skill to blend phonemes.’

4.12 Impact on future practice

In the interviews, I asked the following two questions: 'What have you learned (from the project)?' and 'What will be the impact on your practice?' I feel that amalgamating the responses gives a clearer picture of the STs' view of their own progress because it is sometimes easier to identify the new skills or confidence that one has gained from a learning experience by thinking about how one's practice will change as a result.

Five STs reported a rise in confidence to teach music. This included all three of the STs who had had the least amount of music in their background. Sally's response was heartfelt:

> 'I definitely feel more confident to do it now because I'd have thought 'Oh my god, how am I going to teach music because I haven't got a clue?' but definitely, definitely more confident now.'

Emma was very mindful on the impact this and other voluntary projects would have on her wider practice:

> 'Confidence was like my main thing; confidence in doing music and knowing how to tackle it because I wouldn't have before. I would have pushed away from doing music on placement if [the teacher] said 'What foundation subject do you want to do?' …whereas now, I'd probably say 'I'll do music'. So it's that sense of your professional development – it's kind of gone up a level in music.' (Emma)

For Juliet, who had been rejected from a children's choir when she was at Primary school, growing confidence included singing in front of others:

> 'I think I got out of it what I was hoping to get out and that was more confidence in terms of being able to teach music [because I] had that experience now to back me up. And I'm a bit less self-(conscious) in how I come across to other people in terms of my singing and things like that. Kids generally don't care – that's what I've learned – kids don't care how you sing, they just like to sing…' (Juliet)

Furthermore, Juliet felt that developing confidence in itself was a transferable skill:

> ‘Because I can go in singing to a bunch of thirty kids that I’ve never met before in my life – I should be able to go and approach PE with a class that I’m very familiar with for instance. Those transferable skills… then really taking more risks because I’ll have that confidence – well I wasn’t very confident in music and was able to go in and do all of that.

During a Year 1 class placement, Jane identified that certain children could not hear rhyme, or break words into their component syllables. She played games and songs to help with this, based on the work that she had done previously in the project.

Four of the STs specifically valued the repertoire of songs and activities that they had learned. Becca, Peter and Jemima were all going to be placed in Early Years or Key Stage 1 classrooms, and were looking forward to having a bank of ideas to use. As Jemima said, ‘I’ve never had Nursery before and this is the only thing that I feel confident on at the minute so I’ll do this and then I’ll have to take it from there.’ She had seen for herself how the children in her class loved singing games and predicted that they would be engaged by ‘Hot Potato’, for instance. Becca echoed this: ‘I think if I hadn’t done this, I think I’d have been really nervous about going into Nursery, I think I would have been, “What am I going to do in Nursery?” but I’ve got loads now, out of this and… it’s really good.’

Other aspects that STs felt they had learned were how to structure a music lesson, and how to introduce songs and games. Bernice in particular valued the written lesson plan and the opportunity for reflection, and highlighted the way in which this sort of practical learning was quite different from university workshops:

> ‘… when we do music here (at university), how can I use that in a Year 2 class? How can I use that in a Reception class? It misses that for me…Let’s come back, let’s look at that lesson plan. Is the objective right? Is this right? ‘Cause let’s be honest, you’ve got to have that documentation haven’t you. So that’s what I loved about it. I could actually see your lesson plan, we talked about it, and I saw it in practice. I came away, I reflected on it, you reflected on it, and then we went back in and we did something a little bit different and then we reflected on it and we went back in and did something… and isn’t that what it’s about? And that’s what I loved. I loved that lesson plan, I was very excited about it!’ (Bernice)

Six of the STs subsequently used some of the songs and games elsewhere: Emma and Jane whilst on placement, Simona at home with the children her mother

minded, Alexandra and Fiona with Brownies and Cubs, and Sally had taught her three-year-old daughter 'Dr Knickerbocker'. This she took a video of and sent it to me.

As I have already mentioned, several STs expressed disappointment that they had not been able to make a better link to phonics during the project. However, Simona felt that knowing that the project was research informed was important to her practice:

> 'Yes. Yes. I really have a strong passion to be in the early years when I graduate and whenever I begin to teach and I think one hundred per cent I'll use it. Knowing that there is research into it and there are links made. It just sort of empowers you a little bit more to do it. One hundred per cent. I really enjoyed it and I think the children really enjoyed it and as you say, being able to see the development and link it to music… especially if it's opening doors to early reading – it's going to influence them in so many ways. It's incredible research to be doing.' (Simona)

4.13 Summary

The twelve STs participating in the study had a range of musical experience, but all evinced a positive attitude to the teaching of music in the classroom. The preparation day was well received. STs valued not only rehearsing songs and activities but having the teaching of them to children modelled by the TE. They were particularly impressed with the level of engagement shown by the children. They noted in particular the enjoyment of the boys, for example, and how much the children loved the active elements of the songs. They commented on children's musical responses, e.g. accuracy of pitch in singing and playing back rhythms, and their ability to discriminate between musical phrases. The STs showed that they were able to adapt activities in response to children's perceived needs and preferences. The Resource Pack was favourably received. The group interviews were prized as an opportunity for joint reflection.

Chapter 5

Discussion

There are several aspects of the findings which require further consideration. The narrative begins with a comparison of the study findings with the official Teachers' Standards to ascertain whether there is any evidence of STs' developing competence to teach music in the Early Years. The findings suggest that the teaching model and resource pack did indeed develop STs' competence and confidence to teach music. Therefore, the discussion explores the elements which appear to have helped to make it successful, such as the STs' own musical backgrounds and peer support, and the Cycle of Enactment and resource pack. Also discussed are areas which require further development, such as aspects of the resource pack and the problem of how to help STs to theorise about the impact of music on developing language.

5.1 Comparison of the findings with the Teachers' Standards.

I begin the discussion by returning to the last of my research questions: 'How may we encourage student teachers to teach music in the early years?' I wanted to find out if it was possible to increase student teachers' competence and confidence to teach music through a cycle of enactment which involved specific training, rehearsal and teaching experience, and with a view to using music as a vehicle for language development. It seems clear from the findings that the two groups of STs felt that their confidence and competence to teach music had developed through each of the cycles. However, it will be useful to examine these particular findings through the lens of an independent measure to gauge their reliability; namely, the Teacher's Standards (DfE, 2012). In February 2014, the Ofsted report for my university recommended that we 'make even better use of data and information from focused observations, evaluations and trainees' profiles to identify precisely where support is needed to ensure all trainees make the best progress against each of the Teachers' Standards' (Ofsted, 2014 p. 4; DfE 2012). This we have striven to do. Recent data (Appendix 20) show that our student teachers are reported to be particularly strong in areas such as behaviour management and subject knowledge (Teachers' Standards (T) 3 and 7), whilst they are weakest in T2 – promoting good progress

and outcomes; T5 – adapting teaching to respond to children's strengths and needs; and T6 - making accurate and productive use of assessment.

What follows is a brief consideration of selected T Standards. T4 does not appear because detailed lesson planning was not a requirement of this project. I also omit T3 because the transmission of content knowledge was part of the training, and T8, which covers wider professional development because it is not relevant here (although the very fact that the STs volunteered for this project is evidence itself of their commitment to their wider professional development).

T1 Set high expectations which inspire, motivate and challenge pupils:

It was clear from the way the STs discussed their interactions with their children, that they were extremely mindful of the need to create a safe environment where children felt able to take risks. Juliet and Fiona epitomised this in the efforts they made to encourage Heidi to participate by meeting her on her own terms and not forcing her to speak before she was ready to. Bernice, Emma and Jane all saw the importance of modelling. Bernice felt that children learned more quickly when activities were modelled:

> 'You know, like I modelled with the instrument and I followed your instruction and that really impacted that particular group. Whereas in the second group, there was no modelling, but they got it after a couple of tries type of thing.'

She also felt that the children were motivated by an adult who is prepared to join in fully with games and activities, and Jane recognised that children were readier to take risks if the teacher was modelling 'risky' behaviour:

> 'But then I figured out then they weren't doing that whenever I was asking them normally, so I had to ask them the question in a silly voice for them to answer in a silly voice to see who it was.'

T2 Promote good progress and outcomes by pupils

The importance of taking a child-centred approach to teaching was a constant theme taken by the tutor and evidenced in the ST comments. The STs were very aware of the importance of knowing the children, both in terms of their

capabilities and likely learning styles. STs were observed and reported to follow the children's lead and inclinations, and to seek to make the lessons as inclusive as they could by taking into account the children's preferred way of participating. Emma, for example, felt that children would gain a better understanding by taking the lead where appropriate, rather than by always following the teacher. They also saw the need to keep activities short and well-paced, and the children active:

> 'Yeah, I think it's really good, I think a lot more people need to do it than… because people are just, as I've done myself last year, they're not really using music in any of the phonics things, they're just sitting there going 'this letter's this' and playing games, putting it in the bin if it's wrong or… they'll be more engaged because it's an activity rather than having them all sitting on the carpet staring at a whiteboard, which most phonics lessons usually are.' (Sally)

It should be noted here that Sally and Emma were two of the three STs with the least amount of music in their background, so it is encouraging to note that they were confident enough in their materials to be able to look beyond their own performance and observe the children's responses.

T6: Make accurate and productive use of assessment; T5: Adapt teaching to respond to the strengths and needs of all pupils

In the first cycle, where the STs taught only two sessions, there was no real opportunity to address this T Standard. However, in the second, we attempted to use the Sounds of Intent in the Early Years framework (Ockelford, 2015) in order to record the children's progress. This proved unsuccessful, probably because even five weeks was too short a time in which to get to grips with the SOI documentation, on top of acquiring new teaching skills. Simona also set up a Google document that was shared with the group, but again, this was only sparingly used. The STs, therefore, reverted to more informal assessment of the pupils' progress. As has been demonstrated in 'Children's Musical Responses', the STs used the group interview after each lesson to discuss and reflect on the children's learning.

Assessing children's progress in music is central to the teaching process (Glover and Ward, 1998), and 'it plays an important part in aiding progression because it provides the teacher with understanding and information as a basis for matching activity or instruction to the child's needs' (p.62). The authors emphasise the importance of assessing each child's individual progress, and suggest three broad stages in the process of that assessment:

- Looking at learning (using a range of skills to access the child's musical capabilities and understanding);
- Drawing conclusions about learning (reflecting on what has been observed); and
- Making use of conclusions (to inform future planning) (1998, adapted from p. 63).

The authors note that assessment will not be a simple process, as teachers will be making judgements about a 'wide spectrum of activity' (op. cit. p.65) including improvising, playing and singing in different styles, listening and moving.

As has been seen in 'The Responsive Practitioner' above, most of the STs adapted their teaching extensively and reflexively in response to their perceptions of the strengths and needs of the pupils. This was something that they tended to do, regardless of their own musical background.

Many of the STs' comments related to the first stage, i.e. Looking at Learning, for instance noting whether the children had learned names of instruments, or could recognise long and short sounds. STs were also reflecting on their observations, showing an emergent ability to interpret the children's responses, such as where they recognised how the child and the adult might have a different understanding of a particular question. This was an encouraging sign. As Glover and Ward (1998 p. 69) state,

> 'There is a danger with all targeted strategies that the complexities underlying carrying out the activity are overlooked by the teacher and also that the 'one-off' occasion takes on too much significance… a child may have difficulty with the task for a whole variety of reasons and further observation in different contexts over time may be needed to find out what the problem is.'

There was less evidence of the third stage of assessment, making of conclusions, possibly because of time restrictions. Nevertheless, Juliet and Fiona, for example, showed how they adapted their planning to cater for H, the child who was particularly shy and withdrawn, and Sally explained how she would rule out certain variables to make an activity more accessible the following week.

T7 Manage behaviour effectively to ensure a good and safe learning environment

The findings from the available data show that, not only did the STs recognise that it was important to have high expectations of the children's behaviour, but that behaviour needed to be managed both positively and sensitively so that the children's enthusiasm should not be quashed. There were multiple examples that STs gave of ways in which they had sought to manage challenging behaviour by adapting activities, such as to simplify them, or make them more challenging, and to give children more responsibility.

The findings suggest that this sort of model for teacher education can help to develop STs' competence and confidence to teach music, certainly in the early years classroom. I will now explore in this discussion those elements that appeared to contribute to its success. I will also explore the limitations and shortcomings in order to reconcile what we did with what the literature suggests, and what I have learned as a result.

5.2 Musical background and peer support

I begin with the STs themselves. As was reported earlier, three of the twelve were taking music as their minor pathway, six had music in their background – two were instrumentalists and others had enjoyed singing in school choirs – whilst three had relatively little musical experience. The STs had been invited originally to be involved in the project, so perhaps those who were particularly interested in music were more likely to volunteer. Indeed, Sally had been 'talked into' participating by Bernice – there was a strong sense of camaraderie between these two as they were both mature students, parents of young children and studying the same minor pathway. Even though many of them expressed some apprehension at the start about singing in the classroom, none of them were reluctant to join in with the rehearsal of the activities in the training and, as far as I could tell, each one had a good ear and a strong sense of pulse. 'They were all prepared to sing on their own too – some pitch more accurately than others' (RD 11.11. 15); '[the] students were all ready to participate in the activities, joining in with enthusiasm with the singing and rhythm games' (RD 26.02.16). All the STs, then, started the project with a positive attitude, which appears to corroborate Russell-Bowie's (2010) contention that there is likely to be a strong correlation between the ST's musical background and their confidence to teach music, at least when working with older children. Of note was that both Owen and Alexandra, for instance, were leaders in young

people's groups (Scouts and Brownies). Neither of them felt confident about singing in the classroom at the beginning of the cycle, and yet communal singing was a regular activity in their groups. Both remarked on the transformative effect that the intervention had had on their perceptions of singing, with Alexandra eagerly teaching her Brownies the songs that she had learned. This led me to wonder whether, even though they both had musical backgrounds, they readily make an overt link between their personal and professional lives. It was possible that the music teaching that we did together validated their previous experience. As for the three STs who had the least musical backgrounds, I certainly did not perceive them as being at a disadvantage compared with the other STs during the project. In a review of research undertaken into peer-coaching, Lu (2010) found that the collaborative nature of such a strategy 'made student teachers feel more relaxed, comfortable and confident… [and] student teachers reported that they… developed a mutual sense of trust, honesty and equality' (op. cit. p. 750). Although, strictly speaking, the STs were not coaching each other, nevertheless they were collaborating and supporting each other in field experiences, much as the STs in the studies Lu describes, because they were working in small groups/dyads. As Bernice said, 'I think that was what was really important from the team teach, we just had that dialogue. And I think [Becca] liked working with me and I benefited from working with her.' Becca corroborated this: '…but for me I definitely need that pair interaction. I bounce off someone else at the moment, the stage I'm at.' It could be that the less confident STs benefited from being paired with those who were more confident. This happened naturally; in future one would perhaps need to be aware of this as STs pair up. Certainly, Emma and Jane both found being part of a pair useful (indeed, the week that Jane was absent, Emma reported that her lesson did not go as well as in the previous week), and Juliet had this to say:

> 'Yeah, I think [working as a pair]… gave us a chance to observe and do in the same time frame, so you could see how the other does it within and see how that same group of children react to things, so we can observe and take part. And when you're trying to… you can't really scribble things down when you're singing and things like that, so it was good to just sit back and just kind of see what was going on and try to get some of the more quiet children a bit more involved while the other was leading the activity.'

Furthermore, I was struck by how perceptive the remarks were that Simona made about the children in our group. This could have been partly because she was freer to observe whilst I was doing the teaching. Jane put this into words thus:

> 'Yeah that was good because Emma maybe observed something differently than what I observed in our little session, and then she would have mentioned it to you and I would have said, 'did they?' Like I didn't realise that – you can't have eyes everywhere, you try your best. But I thought it was good having the second person because they pick up different things.'

Although the pairings were informally made in the first cycle, Jemima found herself without a partner and did not join others to make a three in that first week. 'Jemima is a little diffident – I've noticed she keeps herself aloof from some of her colleagues at times and today was one of those times' (RD 11.11.15). She did not return for subsequent weeks because of illness. It may be that having a partner might have helped her to feel stronger. I also noted that Owen and Peter were the only STs to have taught entirely on their own, and Peter was the only ST who acknowledged that he struggled with behaviour management – where he had to 'speak to [a child] fifteen times in twenty minutes'; Owen had used re-engagement strategies with the same child the week before. This could have been an opportunity for Peter to learn from his peer had they worked together.

5.3 The Cycle of Enactment

As has been noted in section 2.10.2, the project included elements of the Cycle of Enactment (Lampert et al 2013)[2], but an extra element was added, most notably in Cycle 2, where the classroom teacher acted as coach or 'debriefer' (Loughran and Berry, 2005; Averill et al, 2015), interpreting some of the pupils' interactions of the lesson in the light of her knowledge of the children. The findings suggest that the value of all the elements – enactment, rehearsal, enactment within the classroom and reflection on the experience – were acknowledged positively by the STs. In describing the teaching that they had seen undertaken by the music specialist, even though what they had seen had been effective, there was an underlying feeling that they did not feel that they could emulate what they saw:

[2] whereby groups of trainees observe the enactment of an instructional activity, prepare to teach and rehearse it within the group, and then finally enact the activity within a classroom setting, reflecting on the experience afterwards as a group.

> ‘But I’ve never really seen it taught by a teacher – does that make any sense whatsoever? I’ve only ever seen it as musical specialists coming in… it was nice to see that, it was nice to see as a part of a lesson done by a teacher and not by a music specialist as such.’ (Bernice)

This may have been because, as Hennessey (2000) suggests, they perceived the specialist as having gifts and talents to which they could not aspire. There did not seem to be this barrier when they observed me, even though I was no more the children’s normal class teacher than the music specialist, despite what Bernice said. What did appear to be significant was that the STs felt that they had a relationship with me that they might not have at first with their class teacher:

> ‘Well you see, when you’re on placement and stuff you…don’t really know the class teacher very well; whereas in uni, you see your tutor quite a lot, so you know them quite well… so it’s kind of like seeing your friend teach and seeing how they do it and seeing all the different ways it could be done.’ (Alexandra)

Although this was never said, the fact that I am not a music specialist at the university may also have been a positive aspect of the modelling, and perhaps this encouraged the STs to think in a more cross-curricular fashion, which became apparent as they discussed the place of music in the curriculum during their interviews. I was certainly careful to strip myself of any advantages, such as playing a tuned instrument, in order to make the teaching as accessible as possible. This was noted by both the CTs. ‘I’ve learned so much,’ commented CT1. ‘We’ve done transition days and I’ve put singing and rhymes into them and the children have loved it.’

> ‘And I think people are kind of pulling away from it because [if] you’re not a musical expert, you feel like you can’t deliver it. And watching this being done as well, the classroom assistant and I were saying, ‘Right, that’s it. We’re going to pencil it in and we’re going to do this session every week.’ Which we wholeheartedly intend to do. Because the children enjoyed it so much. And we’ve enjoyed it. And sometimes it re-inspires you doesn’t it, it gives you a bit more like, ‘Ooh, I can do that!’’ (CT2)

The CT in Cycle 2 did indeed continue with the music and invited me to the class assembly in June. I became aware here that it is not possible to divest oneself of all one’s other-than-conscious musical advantages derived from personal and professional craft knowledge. As the children started to sing the unaccompanied

songs, they were given no starting note and, when the CT tried to help, her voice was pitched too low for the children. As she herself had commented during our interview, 'if you're anything like me, [a starting note] is what you need.' I remarked on this at the time, as follows:

> 'This was a real lesson for me. I was in the mind-set that it's better not to have a CD at all, but just do everything *a cappella*. However, I can see that… there are certain people who do need to use one (and not just those who find pitching difficult). I started to feel terrible that I hadn't explicitly modelled pitching with the students, and this is something that does need to be addressed I think… but if you give little children a starting note, perhaps it's meaningless to them – you just have to start the song. This I do easily because my vocal range is similar to the children's – but if it isn't, one needs to be aware and prepared.' (RD, 17.06.16)

An important factor in the STs' learning was their actual personal experience of teaching music. As Juliet put it, 'You're always going to experience more doing it yourself. And that's what I found.' All the STs who taught stated that this experience had impacted positively on their competence and confidence to teach music. I was aware when I interviewed them that perhaps they were unlikely to say anything different because they would be unwilling to displease me as their lecturer. However, the fact that many of them were actively thinking about how they would put their newfound skills into practice was encouraging: for instance, Emma was eager to start a music club in her final placement, and Jemima and Becca were pleased to have ideas to use in their early years placement.

> 'But actually to have practical application; do you know what? That music lesson that I had the privilege to be part of, because that's what it was, it was a privilege to be a part of, I can use that template now going forward for anything, and we've got lesson plans!' (Bernice)

Thus, like the Primary-age focused STs reported in Welch and Henley's study (2014), some of these STs were beginning to teach music beyond the confines of the project.

A key element of the teaching experience was the feedback that the STs received from the children. As Alexandra said, 'But I think I could go into a Reception class now and teach a music lesson like that and I think… they'd be really engaged with it because you saw the reaction that they had and they loved it so.' This was echoed by other STs including Emma: 'Once you're an actual teacher,

I'd be able to see the effect it was making [and] actually use it in practice. Which I would use this in practice. I think it's useful and the children react to it well.' This confirms Hennessey's finding that the response of the children is 'often the most immediate and effective factor in motivating the students to progress' (Hennessey, 2000 p. 193). Not only did STs comment, but also CT2 commented particularly on the engagement of the boys in the class, who appeared to come to life because of the practical aspect of the music-making. This is in line with the findings of Barret, Welch, Zhukov and Brown (2016; 2017) in their study of teacher mentoring in music in Australia.

What was particularly striking in the findings for me was the perceptiveness of the Year 3 (cycle 2) STs' remarks about the children, and the level of the STs' determination to help individual children to make progress. It was clear that the STs were interpreting the children's responses accurately, because the CT often corroborated what they said in the reflection times, such as when Simona described R's interactions. There were a number of factors that appeared to enable this to happen. First of all, the learning of the songs and activities before we went into school meant that the STs could straightaway focus more on the children's responses rather than their own behaviour, something that proved quite revelatory to Peter:

> 'So that's my mind-set, so even going into a Reception class I thought 'Are they going to engage with this?', but they do! They really do. So, that was very useful. And, overall, it was great to see how much the kids wanted to get stuck into the music stuff, yeah.' (Peter)

Secondly, the STs generally worked in pairs. This gave them the opportunity, when they were not leading an activity, to observe and encourage the more apparently diffident children, as described by Juliet and Jane above. Another significant factor appeared to be the opportunity for group feedback in the post-lesson reflection sessions. These were particularly valued by the Year 3 STs, as they taught for five weeks as opposed to two in the first cycle, so they had the opportunity to listen to each other's thoughts and ideas and to incorporate them into their own teaching. Crucial to the cycle 2 post-lesson reflection sessions was the presence of the CT as 'debriefer'. Relatedly, Averill et al (2015) reported that, in their observations, STs tended to focus on the children's behaviour or their enthusiasm, and this was certainly a feature of the STs reflections in this project, particularly the Year 2 STs. However, in cycle 2, right from the very beginning, the

CT drew the STs' attention to individual children and their progress and provided a really valuable context for the STs' learning. This, in turn, meant that they were able to move on from focusing on superficial details to the children's learning.

Finally, as has been seen, the STs were on the whole ready for a more playful, creative approach to their teaching. Sally noted how much the children enjoyed making up their own verses for 'Clap your hands': 'They liked the fact that they can make their own little rhyme up, like I did 'clap your hands and nod your head' I think, and then there was another one in the book that we [did]'. Fiona commented on her developing skills: 'how to get the games going and how to extend them – my knowledge on that definitely improved'. Nevertheless, this appeared to be a risky strategy for some. For instance, one of the more confident children in Peter and Owen's group showed the subversive streak described by Whitehead (2010):

> 'I don't know how well this ties to this, but some of them [pupils] deliberately almost sarcastically getting things wrong and then saying 'It's the same' and laughing about it, so a girl might scrape something and then tap it five times and then the next girl who was one of the high ability girls… she'd tap it once and then look at me and say 'Same' and then laugh, obviously knowing that what she'd done was different.' (Peter)

One response to this sort of challenge might be to ask the child to take the lead, which Peter was not confident to do at that stage, so perhaps a greater part of the training and reflection could focus on exploring how to promote a more child-centred approach in which the children have a sense of ownership in their music making.

It should also be noted that, as a group, I found the Year 2 STs more playful and relaxed. This could be partly because there is less of a sense of urgency at this point of the course to 'get things right'. It could also have been because the Year 3 STs were more challenged, teaching as they did on a Friday afternoon (as opposed to a Wednesday afternoon), when the children were more tired and perhaps more difficult to engage.

5.4 The Resource Pack

The Resource Pack was a useful point of reference in the first cycle. However, I cannot be sure that the STs used it while we were engaged in the project. The fact that they asked for and attended a second training session to learn more of the

activities (RD 18.11.15) suggests that they were not confident to use it independently. As noted, at the end of the first cycle, I made recordings of each of the songs which I then uploaded to Google drive, and shared with the STs. As a temporary measure, this worked well; Emma, for instance, made explicit mention of having used them. However, a CD would be more accessible, as CT2 and Juliet proposed. In order to make it a really useful working resource, it will need further refinement. For instance, the activities could be categorized so that there is a clearer sense of possible progression, both through the lesson and in terms of challenge, as Emma and Simona recommended. There is also more material that I would like to add, including simple raps and more songs with potential for improvisation.

5.5 Theorising about music and language

A conclusion that I drew in my IFS (Poulter, 2014) was that, if teachers are to continue to develop as professionals throughout their careers, they must be able to theorise explicitly. What is more, they need to learn to do this as early as possible, i.e., when they are undergoing their initial teacher education (Eraut, 1994). It was evident that theory cannot be divorced from practice and, indeed, that the most meaningful theorising drew on experiences of practice. To paraphrase Kokotsaki (2012), in order to build rich conceptions (by making connections and theorising), teaching experience is vital.

I believed that if, during the training, I were to make explicit connections, as Collins (2014) did, between music and phonological awareness, that this would impact on the STs' beliefs about music and, therefore, on their confidence to teach it. Furthermore, I hoped that the experience of teaching musical activities that could help in building phonological awareness, together with the opportunity to reflect on that teaching, would assist the STs to build their own personal theories, grounded in evidence, including experience and reading, about the potential positive role of music in the development of phonological awareness and early reading.

It was encouraging that all the STs across both cycles were ready to begin to theorise about the connections. The links that they made were often based partly on their own prior experience as learners; so, for instance, they could see how music was an aid to memory, or could identify it as a factor in the development of their own reading skills. Only four made the link between what they had learned from the project and their teaching experience. It was not always easy to follow the

STs' reasoning, especially when they spoke or wrote at length, as Owen and Jane did. Perhaps this was to be expected, as the concepts involved are not easy. The Year 3s would have liked the children to have made progress in phonics because of the overall aims of the project, but acknowledged that we had not been in school for a long enough time to have made any major difference, whilst noting that I did not set this up as an empirical study with phonological competence measures before and after the music programme.

Comparing Jane's essay with her responses during interview is interesting. The essay, understandably because of the greater time for reflection, shows a level of sophistication which is absent from her answers at interview. Through the former, she had an opportunity to engage with relevant literature in order to develop her own knowledge and understanding, to reflect on her experiences in the project, to show how she had applied what she had learned in practice, and to build (if cautiously) her own personal theory or phronesis (Korthagen and Kessels, 1999) about the likely relationship between music and phonological awareness. Although this is something that cannot be generalised, nevertheless, I believe that it is significant that the project gave not only her, but Owen also, who prized the chance to talk about music in this way, the permission to theorise about the role of their specialist subject (music) in the curriculum. Thus, a study such as this may enable the generalist Primary school teacher to teach music in the early years, but it may also serve to strengthen the personal theories of the so-called specialist musician.

I realised in hindsight that in my eagerness to make the project appealing and relevant to the STs, I had probably made the link between formal phonics teaching and the music project seem more straightforward than it actually is. Although, as can be seen from the resource pack, the musical activities and songs match very well with the Letters and Sounds Phonics Phase 1 aspects (*cf* DfE, 2007), this was not a guarantee that the link would be made with the subsequent phases where formal grapheme-phoneme correspondences (GPCs) are learned. This could very well be because, as CT2 pointed out, we were not teaching the ideal year group – in order to have the greatest impact, she felt that this needed to be done either in Nursery or in the first term in Reception. However, it could also be that the link between Phonics Phase 1 and the subsequent phases is not made explicitly enough in the Letters and Sounds teaching materials, which make no reference to any research or rationale for why activities are chosen and recommended. What also became apparent was that the University's Hope

Challenge, which is set up with the explicit intention of making a positive impact on pupil progress (even though the interventions are very short), is probably not the best context for this sort of project, because arguably it raises the STs' expectations that progress will be made in certain specific areas. This then may prevent them from observing other sorts of progress, and making other sort of connections.

It may also be that my expectations of the STs, in terms of their readiness to theorise about the relationship between music and early reading, were too high. For most of the STs, this was their first experience of teaching music. Thus, to follow Korthagen and Kessels' (1999) reasoning, they were at the 'Gestalt level' of learning. In other words, most of the STs were at the stage of building their own situational understanding. It may be that it is only when we have had a number of experiences that we can reflect on that we can begin to generalise – to schematise the Gestalt – and start to build our own theories. Moreover, it could be argued that the disappointment voiced by the Year 3 STs that they could not measure the impact of their musical work on the children's phonological awareness may be evidence that they were making the link between to the two, which would support Collins' (2014) findings. It also suggests that the Year 3 students had a greater expectation from their general ST programme that measurement can be important.

Most importantly, however, I realise that my own focus was too narrow. In the beginning, I was interested only in the relationship between music and phonological awareness, and the context was the teaching of phonics. The four part phonics lesson which is advocated by the Letters and Sounds (DfE, 2007) is comprised typically of short games and activities which are all strongly teacher- led (e.g. 'What's in the Box?', 'Buried Treasure') because of the need for pace. Perhaps influenced by this rather prescriptive approach, I compiled a set of songs and activities that could be provided in the same way – for instance, 'What am I playing?', 'You can't hear'. However, whilst all the games lend themselves to adaptation, for instance 'Buried Treasure' may be played at any phonics phase with any GPC and 'What am I playing?' can use instruments that are unrelated or closely related depending on the level of challenge desired, or extended, so that more than one instrument may be played, the danger is that they can remain games that remain directed by the teacher.

Of course, all this has its place. But as the literature review has shown, music has a wider and more profound role to play in language development. It is an important element in early language acquisition and, in turn, improvisation is its tool

(sections 2.3, 2.4 and 2.6). The improvisation that has been explored in this thesis is strongly egalitarian. In turn-taking, for instance, it is important for both partners to listen and to respond to each other (section 2.6) and arguably, a child may only learn to listen and respond if this is modelled for them. Therefore, children need to be given the opportunity to take the lead, and to explore sound making on their own terms (ibid). This could be achieved through the further adaptation of existing games, for instance, allowing the children to take the lead in 'Hot Potato' and playing with the language of existing songs, or by including more imaginative, open-ended activities, for example, using voice and instruments to create soundscapes such as those described by Koutsoupidou and Hargreaves (2009). Children also need to have the opportunity for independent musical exploration and play in the continuous provision of the classroom (section 2.7). For the STs also, the role of music in language acquisition needs to be made much more explicit through the training materials, e.g. lectures, workshops and written documents, in order to help them make the links and build theory.

Chapter 6

Conclusion

6.1 Summary

To conclude, I return to the research questions:

- What musical activities does research suggest can impact on children's developing phonological awareness?
- How might we use music to support phonological development in the early years?
- How may we encourage student teachers (STs) to teach music in the early years?

In the Literature Review, it was demonstrated that although learning to read is a complex process, research shows that a child's phonological awareness, or the awareness of sound structures in words, is a strong predictor of future reading success (see section 2.6). Relatedly, studies have been conducted which show that engaging in musical activity can develop phonological awareness (Gromko, 2005; Thomson et al, 2013; Verney, 2013) (section 2.7). There is also evidence to suggest that music plays an important part in the acquisition of language (Trehub and Gudmundsdottir, 2015; Gratier et al, 2015). Both language and music are rhythmic and pitched; therefore, being able to hear rhythmic and pitched nuances in language aids understanding. Singing (particularly with vigorous actions or rhythmic accompaniment) and rhythm games for very young children help to develop such things as rhythmic and phonemic awareness and syllable segmentation, skills that are central to learning to read (see section 2.7). For instance, the identifying of stressed, unstressed, long and short syllables, which children with dyslexia find challenging, may be developed by improvising with lyrics of known songs, but also by playing games which use non-speech rhythms, such as 'Hot Potato' (York, 1988).

Many of the activities used in the above studies may be imitated and taught by the generalist Primary school teacher, especially with appropriate support

(Barrett, Zhukov, Brown and Welch, 2017). Musical activity should be playful and interactive, and may be taught in various forms: with different sized groups, from whole class to individuals and pairs. It may be adult-led or child-initiated, and may happen at any time within the Early Years classroom, from large group inputs to individual play in continuous provision (section 2.11).

However, the generalist Primary school teacher often feels that they are either not competent or confident enough to teach music in their classroom (HMI, 1978; Mills, 1991; Glover and Ward, 1993; Hennessy, 2000; Stunell, 2010). Furthermore, opportunity and/or motivation may be denied them by the presence of a so-called specialist music teacher employed by the school (Garvis and Pendergast, 2012; Welch and Henley, 2014). Nevertheless, some studies suggest that the less musically educated classroom practitioner may be the more effective teacher of music (Young, 2003b and 2009; Mellor, 1999). Not only this, but recent research conducted in Australia suggests that a music programme led by the generalist teacher may have a positive impact on children's attitudes to and progress in music (Barrett et al, 2017). All this may mean that vital opportunities to develop children's phonological awareness and readiness to read are being lost, such as when the generalist class teacher is not taking regular opportunities of daily contact to support young children's phonological development through musical means.

The aims of this study were twofold. I hoped firstly to develop student teachers' competence and confidence to teach music, and secondly to help them to develop their own personal theories about the value of music in the Primary curriculum, particularly in relation to supporting language development – which includes phonological awareness – a crucial factor in the development of early reading.

There were two cycles to this action research project; it took place in two different Primary schools with two different groups of student teachers in the academic year 2015-16. It was loosely based on the Cycle of Enactment (Lampert et al, 2013), and followed this model:

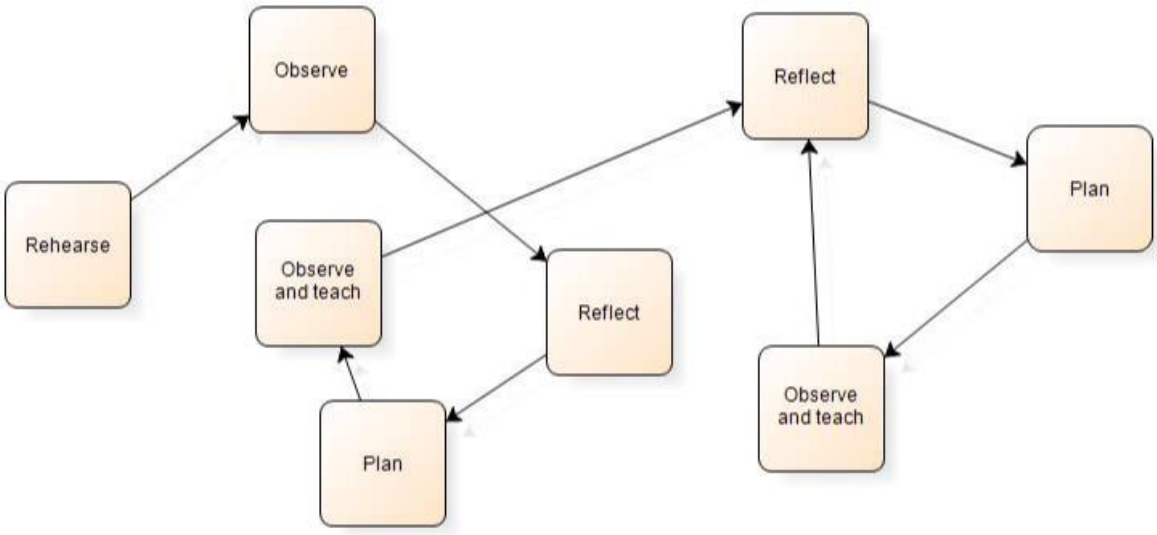


Figure 6.1 Cycle of Enactment research process for enabling student teachers to teach music in the Early Years

Largely, the empirical evidence suggests that this study was successful in its achievement of the second aim, to develop the confidence and competence of student teachers to teach music in the Early Years. One of the strengths of the study is considered to be the design of the training with its particularly powerful action research cycle of joint rehearsal of activities with the STs, observation of the TE modelling in a Reception classroom, post-lesson reflection with the TE and CT, followed by ST planning and teaching in pairs to teach small groups of children in subsequent sessions, together with further observation and joint reflection. This was reflected in the data collection, which included initial questionnaires, recordings of the group reflections, individual interviews of STs and CT2, an assignment written by one of the STs, and the reflective diary. This ensured that a plurality of voices (Feldman, 2003) was heard both during and after the project and a richer picture painted.

On the other hand, it must be remembered that this was a small-scale study. Twelve STs were involved over the two cycles, which meant that the programme was relatively labour intensive for the TE and CT. It also implies that any generalisation of the results is likely to be inappropriate, especially as the STs—in these cases—were all predisposed to have positive attitudes to teaching music, since they had each volunteered for the project. Many of them, too, had musical backgrounds, which made it likely that they had a personal biography that was conducive in taking on the challenge (Russell-Bowie, 2010; Wiggins and Wiggins,

2008). Should the project be repeated with STs that might be more reluctant, or less enthused about the possibility, the outcome might be different. The support for phonological development through musical means provided an initial basis for the research and its design. This led, when compiling the resource pack, to the selection of a focused range of musical activities. The continuous act of writing this thesis and reflecting on the project, together with opportunities for dissemination, have contributed to a greater understanding on my part of the role of music in developing not only phonological awareness, but language itself (Chen-Haftek and Mang, 2012; Trehub and Gudmundsdottir, 2015). In addition to this, most of the school-based programme activities were adult led. I will be careful to include child-led activities (Young, 2003a) – perhaps making use of the continuous provision in the Early Years setting – in future iterations of the project. Finally, the project appeared to be less successful in developing STs' personal theories about the role of music in the Primary and Early Years curriculum. A contributory factor may have been the explicit suggestion on my part that the children's phonological awareness would improve as a result of these activities, causing the STs to look specifically for progress in that area, rather than having a broader scope for their action and reflection. Having said this, many of the STs declared that they felt more confident to teach music in the future than before the project and, as Simona, said, knowing about the research which shows that music can 'open doors to early reading… it just sort of empowers you a little bit more to do it.' It may very well be that a project like this one, which has a clear rationale and opportunities for action and reflection, may develop the music teaching abilities of STs with a range of expertise. On the one hand, it offered relatively musically inexperienced STs (Sally, Emma, Juliet) the chance to develop teaching skills; on the other, the more proficient musicians (Owen, Jane) had occasion to reflect more deeply on the role of music in the Primary curriculum and the life of the child.

6.2 Contribution to knowledge

In many ways, this study drew on the expertise and findings of other researchers in the field (Barrett, 1994; Kokotsaki, 2012; Biasutti et al, 2014; Collins, 2014; Welch and Henley, 2014; James, 2016). The insistence on the part of these researchers on practical experience is universal. However, the nature of that experience differs widely from study to study. For instance, James (2016) aimed to develop her STs' competence to play a tuned classroom instrument; and Barrett (1994), Russell-Bowie (2012) and Biasutti and her colleagues (2014) provided their STs with a

course of classroom-based music making experiences. On the other hand, for Welch and Henley (2014), it was most important not only for the STs to have a level of competence gained in the university workshops, but that they should then teach real children in a real classroom in order to improve their confidence. I, too, believed that it was vital that the STs had experience in teaching (Kokotsaki, 2012). All our internal phonics data (see Appendix 21) at the university, for example, attests to the power of actual teaching experience for establishing self-efficacy, and no amount of university-based workshops will compensate for this.

As in Welch and Henley's study (2014), a handbook was prepared. This one, however, included specially chosen songs and activities that not only addressed the music Early Learning outcomes (DfE 2013a) but made explicit cross-curricular links, and showed how aspects of Phonics Phase 1 (DfE 2007) would be met.

A key ingredient for Russell-Bowie (2013) and Welch and Henley (2014) was the keeping of a reflective diary. As Hatcher and Bringle (1997) argue, when STs reflect on their experiences in school, assumptions may be challenged, and new frameworks and perceptions built through which future action may be influenced. Although our reflections in the current research were joint, and took an oral rather than a written form, nevertheless, the effect appears to be similar. STs interpreted the children's responses and, in doing so, challenged their previous assumptions; discussed such things as behaviour management; and built on or 'magpied' (Bernice) each other's ideas for future lessons. Drawing on the work of Averill et al (2015), in which a coach was used to expand upon and interpret the actions of the modelling TE, the CTs participated in the group reflection, and were able in addition to explain individual children's behaviours, very often affirming the STs in their teaching approaches.

Finally, the findings of the current study were similar to those reported by Collins (2014), who found that STs who were taught about the cognitive benefits of music were more likely to avouch a confidence to teach it themselves, possibly because the profile and status — as well as their understanding – of the subject was raised. Central to the current study was the evidence that music impacts on language and reading development, and this was the driving force for the project itself. Too often it seems, Primary school teachers are given a curriculum to deliver and the rationale for the programmes are not fully explained nor explored. For example, Phase 1 of the Letters and Sounds programme (DfE, 2007) contains many of the kinds of activities that are included in the Resource Pack in this study.

However, because there is no explanation as to the impact of these activities on children's developing phonological awareness, I would argue that the potential for some of them is overlooked.

I argue, then, that this study makes a contribution to knowledge in the following ways:

1. It extends the ideas of Collins (2014) by putting the development of language and phonological awareness at the heart of the music teaching; thus giving a new and urgent imperative for the teaching of music (broadly conceived to include sound exploration and play) in the Early Years.

2. Through participation in the programme, STs' music teaching skills were scaffolded and extended under the supervision of the TE and CT in the context of the Early Years classroom, and in such a way as to minimize the risks (because of collective action and reflection) of trying out new and potentially challenging ideas and activities. The STs received immediate feedback from the children, and from the CT, which arguably increased their self-efficacy.

3. Echoing Welch (1992) nearly twenty years earlier, Hallam and Creech (2010) call for a partnership between school and university that goes beyond a simple placement, in order for students' teacher education to be really meaningful. The present study suggests an effective model for future adaptation in the notion of the teacher educator working alongside class teacher as model and coach respectively to facilitate STs' reflection and accelerate their progress.

6.3 Dissemination and Implications for Practice

During the time I have been writing this thesis, I have been privileged to present aspects of my findings at a selection of conferences (TEAN in May 2017, BERA in September 2017, Rome in December 2017). I also shared initial study outcomes at a Faculty of Education Learning and Teaching Day in January 2016, and was invited to repeat the presentation when Angela Milner, a member of Her Majesty's Inspectorate, visited the university later that month. Her response was that the study was scalable; she recommended that the university offer it as a continuing professional development package for Early Years teachers and teaching

assistants. Support for this proposal is provided by Barrett, Flynn and Welch (2018), who make a strong case for music becoming a compulsory requirement in any Early Years programme. This will be welcomed by my institution in the light of the current financial concerns of universities across the country (Hall, 2018). Head teachers from partnership schools also attended the HMI meeting, and one commented that she had been 'doing these activities all [her] life, not knowing how valuable they were' (RD 02.02.16). This resonated with me, as I remembered the slight guilt that I always felt when I taught music – that it was a poor relation to the other subjects and should only be visited occasionally. CPD that draws on the findings of this research may well provide a greater validation (should it be needed) for music, including for those practitioners who already use it in their classrooms.

In the meantime, the study has generated a lecture on the role of music in developing phonological awareness which is provided yearly to STs in the North Western University PGCE and BAQTS year 2 cohorts. In addition to this, I have designed a workshop in which STs in the year 1 cohort (BAQTS) learn about how to support Phonics Phase 1 (DfE, 2007) using musical songs and activities.

I would like to note that studies such as these which take place during the school day in the Primary school classroom may benefit the classroom teacher (CT) as well as the STs. Participating in CPD that is focused on knowledge areas that teachers feel less confidence to teach can engender anxiety or resistance. Yet involvement such as this where the teacher is observing the training of others with the teacher's own class could be a very powerful model. Both the CTs in this study revealed that they had taught music in their classrooms as a result of the project. This has similarities with work done in Australia in recent years whereby generalist teachers (pupil age 4-8) were mentored by music specialists, which showed a positive impact on the teachers' competence and confidence to teach music (Barrett et al., 2016).

6.4 A Final Word

One of the aims of this study was to find a way to help the student teachers to be able to advance their practical teaching and their personal theories of education (phronesis). Eraut (1994) contends that if student teachers acquire and sustain the disposition to theorise,

> 'they will go on developing their theorising capacities throughout their teaching careers, they will be genuinely self-evaluative and they will continue to search

> for, invent and implement new ideas. Without it they will become prisoners of their early school experience, perhaps the competent teachers of today, almost certainly the ossified teachers of tomorrow.' (p. 71)

As Welch (1992) argues, development of knowledge depends upon 'a questioning of current certainties' (p. 36). Carr (2006) takes this a stage further, and argues that this disposition to theorise and be self-evaluative is part of a moral enterprise. For him, the committed teacher is 'one who is capable of taking moral issues and questions seriously, and who is no less seriously committed to self-improvement than to the improvement of others' (p. 178). In undertaking this enterprise with my STs, I hoped to enable them to adopt practices and at the same time to understand the principles that underpinned those practices and to make vital connections between different areas of learning (Askew, 1999). As Pring (2001) maintains, if the curriculum is provided simply as an unmediated product, the teacher then has little room to respond to the needs of the learner. However, I also found that my own understanding of my role as teacher educator deepened throughout the study; not only this, but my sense of self-efficacy increased immeasurably, not only through undertaking the project, but also through the rigour of data collection and analysis, and reflection through the act of writing. As Carr (2006) puts it:

> 'there is an inherently vocational aspect to good education and teaching: on this view, teachers and their pupils are bound together in a common search for truth and virtue as constituents of the good life—which means that good teachers may stand to benefit (morally and spiritually) no less than their students from their pedagogical associations and endeavours.' (p. 179)

Lifelong teacher development requires a holistic approach, in which the teacher learns alongside the students.

References

Adachi, M. and Trehub, S. (2012). 'Musical Lives of Infants' in G. McPherson and G. Welch (Eds.), *The Oxford Handbook of Music Education*. Oxford: Oxford University Press.

Adams, M. (1994). *Beginning to Read : Thinking and Learning About Print*.[Online]. Cambridge, Mass. MIT Press. Available from: EBSCOhost. [Last accessed 30/06/18].

Addessi, A.R. (2014). 'Developing a Theoretical Foundation for the Reflexive Interaction Paradigm With Implications for Training Music Skill and Creativity'. *Psychomusicology: Music, Mind, and Brain*, 24 (3), 214-230.

Addessi, A.R., Anelli, F., Benghi, D. and Friberg, A. (2017). 'Child–Computer Interaction at the Beginner Stage of Music Learning: Effects of Reflexive Interaction on Children's Musical Improvisation'. *Frontiers in Psychology*, 8 (65).

Alexander, R. (2006). *Towards Dialogic Teaching: Rethinking Classroom Talk*. (3rd ed). Cambridge: Dialogos.

Andrews, J., Robinson, D. and Hutchinson, J. (2017) 'Closing the Gap? Trends in Educational Attainment and Disadvantage'. (Education Policy Institute Document). [Online]. Available at: https://epi.org.uk/publications-and-research/closing-gap-trends-educational-attainment-disadvantage/. [Last accessed 15/04/2018].

Anvari, S. H., Trainor, L. J., Woodside, J., and Levy, B. A. (2002). 'Relations among musical skills, phonological processing, and early reading ability in preschool children'. *Journal of Experimental Child Psychology*, 83, 111–130.

Askew, M., Rhodes, V., Brown, M., Wiliam, D., and Johnson, D. (1997). *Effective Teachers of Numeracy: Report of a study carried out for the Teacher Training Agency*. London: King's College, University of London.

Askew, M. (1999). 'It ain't (just) what you do.' in I. Thompson (Ed.), *Issues in teaching numeracy in Primary schools*. Buckingham: Oxford University Press.

Attard, K. (2012). 'The role of narrative writing in improving professional practice'. *Educational Action Research*, 20 (1), 161 – 175.

Averill, R., Anderson, D. and Drake, M. (2015). 'Developing Culturally Responsive Teaching through Professional Noticing within Teacher Educator Modelling'. *Mathematics Teacher Education and Development,* 17.2, 64 – 83.

Bance, L. 2012 . *London Early Years Music Network: EYFS Framework – A Musical Overview.* (Sound Connections briefing paper). Available at: http://www.sound-connections.org.uk/wp-content/uploads/2012-06-EYFS-Framework-A-musical-overview.pdf [Last accessed 26/06/18].

Barnes, J. (2011). *Cross-curricular learning 3-14*. (2nd ed.). Los Angeles: Sage. Available from: EBSCOhost. [Last accessed 03/08/18].

Barrett, M. (1994). 'Music Education and the Primary/Early Childhoold Teacher: A Solution'. *British Journal of Music Education*, 11 (03), 197-207.

Barrett, M. (2006). 'Inventing songs, inventing worlds: the 'genesis' of creative thought and activity in young children's lives'. *International Journal of Early Years Education,* 14 (3), 201–220.

Barrett, M. (2010). 'Musical narratives: A study of a young child's identity work in and through music-making'. *Psychology of Music*, 39 (4), 403–423.

Barrett, M., Flynn, L. and Welch, G. (2018). 'Music value and participation: An Australian case study of music provision and support in Early Childhood Education'. [Online]. *Research Studies in Music Education,* 1–18. Available at: http://journals.sagepub.com/doi/full/10.1177/1321103X18773098 [Last accessed 28/06/18].

Barrett, M., Welch, G., Zhukov, K., & Brown, J. (2016). *Evaluation of the National Music Teacher Mentoring Program pilot in NSW and Victoria. Progress Report, April 2016.* Brisbane: University of Queensland School of Music. [pp 59].

Barrett, M., Zhukov, K., & Brown, J., & Welch, G., (2017). *Evaluation of National Music Teacher Mentoring Program pilot in NT and NSW. Brief Report, May 2017.* Brisbane: University of Queensland School of Music. [pp 16].

Bautista, A., Wong, J. and Gopinathan, S. (2015). 'Teacher Professional Development in Singapore: Depicting the Landscape'. *Psychology, Society and Education*, 7 (3), 311- 326.

Besson, M., Schon, M., Moreno, S., Santos, A. and Magne, C. (2007). 'Influence of musical expertise and musical training on pitch processing in music and language'. *Restorative Neurology and Neuroscience*, 25, 399–410.

Biasutti, M., Hennessy, S. and de Vugt-Jansen, E. (2014) 'Confidence development in non-music specialist trainee primary teachers after an intensive programme'. *British Journal of Music Education,* 32 (2), 143–161.

Biggs, M., Homan, S., Dedrick, R., Minick, V. and Rasinski, T. 'Using an Interactive Singing Software Program: A Comparative Study of Struggling Middle School Readers'. [Online].*Reading Psychology*, 29 (3), 195–213. Available at: http://www.tandfonline.com/doi/abs/10.1080/02702710802073438 [Last accessed 26/06/18].

Boyle, B. and Bragg, J. (2006). 'A curriculum without foundation'. British Educational Research Journal, 43 (4), 569-582.

Braun, V. and Clarke, V. (2006). 'Using thematic analysis in psychology'. *Qualitative Research in Psychology*, 3 (2), 77-101.

Bresler, L. 1993. 'Music in a Double-Bind : Instruction by Non-Specialists in Elementary Schools'. *Bulletin of the Council for Research in Music Education*, 115, 1–14.

Bresler, L. (2005). 'Music and the Intellect: Perspectives, Interpretations, and Implications for Education'. *The Phi Delta Kappan*, 87 (1),24-31.

Bridges, D. (2001). 'The ethics of outsider research'. *Journal of Philosophy of Education,* 35 (3), 423-442.

Brinkmann, S. (2014). 'Doing without data'. *Qualitative Inquiry*, 20 (6), 720 –725.

Bryant, P.E., Bradley, L., MacLean, M. and Crossland, J. (1989. 'Nursery rhymes, phonological skills, and reading'. *Journal of Child Language*, 16, 406-428.

Bryant, P. MacLean, M. Bradley, L. and Crossland, J. (1990). 'Rhyme and Alliteration, Phoneme Detection, and Learning to Read.' *Developmental Psychology,* 1990, 26 (3), 429-438.

Callaghan, J., Emmons, S. and Popeil, L. (2012). 'Solo Voice Pedagogy' in G. McPherson, and G. Welch (Eds.), *The Oxford Handbook of Music Education*. Oxford: Oxford University Press.

Castles, A. & Coltheart, M. (2004). 'Is there a causal link from phonological awareness to success in learning to read?' *Cognition*, 91 (1), 77–111.

Carr, D. (2006). ‘Professional and personal values and virtues in education and teaching’. *Oxford Review of Education,* 32 (2), 171-183.

Carr, W. and Kemmis, S. (1986). *Becoming Critical: Education Knowledge and Action Research.* [Online]. London: Routledge Farmer. Available from: EBSCOhost. [Last accessed 30/06/18].

Chen-Hafteck, C. & Mang, E. 2012. 'Music and Language in Early Childhood Development and learning'. In G. MacPherson and G. Welch, (Eds.), *The Oxford Handbook of Music Education Volume I*. Oxford: Oxford University Press.

Chua, S.L. (2018). *Growing Music Teacher Identity and Agency: Influencers and Inhibitors.* Unpublished PhD thesis, UCL Institute of Education.

Clarke, D. and Hollingsworth, H. (2002). ‘Elaborating a model of teacher professional growth’. *Teaching and Teacher Education,* 18, 947–967.

Cochran-Smith, M. and Lytle, S. (2007). ‘Everything’s ethics: practitioner inquiry and university culture’. In A. Campbell and S. Groundwater-Smith, (Eds.), *An Ethical Approach to Practitioner Research: dealing with issues and dilemmas in action research*. Oxon, New York: Routledge.

Cochran-Smith, M. and Lytle, S. (2009). ‘Teacher Research as Stance’ in S. Noffke and B. Somekh, (Eds.), *The Sage Handbook of Educational Action Research*. London: Sage.

Cohen, L., Manion, L. and Morrison, K. (2011). *Research Methods in Education*. (7th ed.) London: Routledge Farmer.

Collins, A. (2014). ‘Neuroscience, Music Education and the Pre-service Primary (Elementary) Generalist Teacher’. *International Journal of Education and the Arts*, 15 (4).

Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research Process*. London: SAGE. Available from: EBSCOhost. [Last accessed 03/08/18].

Cullingford, C. (2001). *How children learn to read and how to help them*. London: Kogan Page.

David, D., Wade-Woolley, L. Kirby, J. and Smithrim, K. (2007). 'Rhythm and reading development in school-age children: A longitudinal study'. *Journal of Research in Reading*, 30 (2), 169–183.

DCFS. (2008a). *Teaching effective vocabulary: What can teachers do to increase the vocabulary of children who start education with a limited vocabulary?* (Government Document). Crown Copyright.

DCFS (2008b). *Bercow Report of Services for Children and Young People (0-19) with Speech, Language and Communication needs*. (Government Document). Nottingham: DCSF Publications.

DCFS. (2009a). *Independent Review of the Primary Curriculum: Final Report.* (Government Document). Crown Copyright.

DCFS. (2009b). *Learning, Playing and Interacting: Good practice in the Early Years Foundation Stage*. (Government Document). London: DCFS/QCDA.

Degé, F. and Schwarzer, G. (2011). ‘The effect of a music program on phonological awareness in pre-schoolers’. *Frontiers in Psychology*, 2, (124).

Denscombe, M. (2010). *The Good Research Guide for Small Scale Social Research Projects*. (4th ed.) Maidenhead: Open University Press.

DES. (1975). *The Bullock Report (A Language for Life).* (Government Document). London: DES.

Deutsch, B.D., (2010). 'Speaking in Tones: Music and Language Partner in the Brain'. *Scientific American*, (July/August), 36–43.

DfE (2007). *Letters and Sounds: Principles and Practice of High Quality Phonics*. (Government Document). Crown Copyright.

DfE (2010). *Investigating the role of language in children's early educational outcomes.* (Government Report). Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/181549/DFE-RR134.pdf [last accessed 07/08/17].

DfE. (2012). *Teachers' Standards in England*. (Government Document). London: Crown Copyright. Available at https://www.gov.uk/government/publications/teachers-standards [last accessed 26/06/18].

DfE. (2013a). *Early years outcomes: A non-statutory guide for practitioners and inspectors to help inform understanding of child development through the early years.* (Government Document). Available at: http://www.foundationyears.org.uk/wp-content/uploads/2012/03/Early_Years_Outcomes.pdf [last accessed 26/06/18].

DfE. (2013b) *The National Curriculum in England: Key Stages 1 and 2 framework document.* (Government Document).
Available at: https://www.gov.uk/government/publications/national-curriculum-in-england-primary-curriculum [last accessed 26/06/18].

DfE. (2015). *Special educational needs in England: January 2011*. Available at: https://www.gov.uk/government/statistics/special-educational-needs-in-england-january-2015 [last 7th August 2017].

DfE. (2017a). 'Unlocking Talent, Fulfilling Potential'. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/667690/Social_Mobility_Action_Plan_-_for_printing.pdf [last accessed 01/04/2018].

DfE. (2017b). *Early years foundation stage profile: 2018 handbook.* (Government Document). London: DfE.

DfEE. (1998). *The National Literacy Strategy: Framework for Teaching*. London: DfEE.

DfEE. (1999), *The National Numeracy Strategy: framework for teaching mathematics from reception to Year 6*. London: DfEE.

DfES. (2006a). *Primary Framework for literacy and mathematics*. London: Crown Copyright.

DfES. (2006b). *Primary National Strategy: Teaching phonics and early reading in the renewed framework.* Training Materials. Crown Copyright.

Dombey, H. (2009). 'The Simple View of Reading.' [Online]. Available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.430.2749&rep=rep1&type=pdf last accessed 01/04/2018.

Drake, P. and Heath, L. (2007). 'Insider research in school and universities: The case of the professional doctorate'. in P. Sikes and A. Potts (Eds.), *Researching Education from the Inside: Investigations from within*. London: Routledge.

Duncombe, R., Cale, L, and Harris, J. (2018). 'Strengthening 'the foundations' of the primary school curriculum'. *Education 3-13*, 46 (1) 76–88.

Edden, J. 2003. 'Can I play the drum Miss?' in D. Whitebread (Ed.), *Teaching and Learning in the Early Years*. (2nd ed). New York: Routledge Falmer.

Education Endowment Foundation (2017). 'The Attainment Gap'. Available at https://educationendowmentfoundation.org.uk/evidence-summaries/attainment-gap/ [Last accessed 01/04/2018].

Eraut, M. (1994).*Developing Professional Knowledge and Competence*. [Online]. London: Falmer. Available from: MyiLibrary. [Last accessed 31/05/18].

Feldman, A. (2003). 'Validity and Quality in Self-Study'. *Educational Researcher*, 32 (3), 26-28.

Fereday, J. and Muir-Cochrane, E. (2006). 'Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development'. *International Journal of Qualitative Methods*, 5 (1), 80-92.

Fontana, D. (1995). *Psychology for teachers*. (3rd ed.) Basingstoke: MacMillan.

Forde Thompson, W. and Schlaug, G. (2015). 'The Healing Power of Music'. *The Scientific American Mind*, 26 (2), 32–41.

Freire, P. (1993). *Pedagogy of the Oppressed*. London: Penguin.

Garvis, S. (2012). 'Beginning generalist teacher self-efficacy for music compared with maths and English'. *British Journal of Music Education*, 30 (1), 85–101.

Garvis, S. and Pendergast D. (2012). 'Storying music and the arts education: the generalist teacher voice'. *British Journal of Music Education*, 29 (1), 107-123.

Glover, J. and Ward, S. (1993). *Teaching Music in the Primary School*. London: Cassell.

Glover, J. and Ward, S. (1998). *Teaching Music in the Primary School*. (2nd ed.) London: Cassell.

Gomez-Dominguez, M., Fonseca-Mora, M. and Machancoses, F. (2018). 'First and foreign language early reading abilities: The influence of musical perception'. *Psychology of Music*, 1-12.

Gordon, R., Schön, D., Magne, C., Astésano, C. and Besson, M. (2010). 'Words and Melody are Intertwined in Perception of Sung Words: EEG and Behavioral Evidence'. *PLoS One*, 5 (3), 112.

Goswami, U. (1999). 'Causal connections in beginning reading: the importance of rhyme'. *Journal of Research in Reading*, 22 (3) 217 – 240.

Goswami, U., (2006). 'Neuroscience and education: from research to practice?' *Nature reviews. Neuroscience*, 7 (5), 406–11. Available at: http://www.ncbi.nlm.nih.gov/pubmed/16607400 [Last accessed 10/07/14].

Goswami, U. (2011). 'A temporal sampling framework for developmental dyslexia'. *Trends in Cognitive Sciences*. 15(1), 3–10.

Goswami, U. (2012a). 'Language, music and children's brains: a rhythmic timing perspective on language and music as cognitive systems'. In P. Rebuschat, I. Cross, J. Hawkins, and M. Rohrmeier (Eds.), *Language and Music as Cognitive Systems*. Oxford: Oxford University Press.

Goswami, U. (2012b). 'Entraining the Brain: Applications to Language Research and Links to Musical Entrainment.' *Empirical Musicology Review,* 7 (1-2), 57- 63.

Goswami, U. (2013). 'Dyslexia – in tune but out of time'. *The Psychologist,* 26 (2), 106–109.

Goswami, U. (2014). 'Sensory theories of developmental dyslexia: three challenges for research.' *Nature Reviews Neuroscience*, 16, 43–54.

Goswami, U. and Bryant, P. (1990). *Phonological Skills and Learning to Read*. East Sussex: Earlbaum.

Goswami, U., Huss, M., Mead, N., Fosker, T. and Verney, J. (2013).'Perception of patterns of musical beat distribution in phonological developmental dyslexia: Significant longitudinal relations with word reading and reading comprehension', *Cortex*, 49 (5), 1363–1376. Available at: http://dx.doi.org/10.1016/j.cortex.2012.05.005

Gratier, M., Devouche, E., Guellai, B., Infanti, R., Yilmaz, E. and Parlato-Oliveira, E. (2015). 'Early development of turn-taking in vocal interaction between mothers and infants', *Frontiers in psychology.* 6 (1) 167 1-10.

Gromko, J.E. 2005. 'The Music Effect on of Instruction Awareness Phonemic in Beginning Readers'. *Journal of Research in Music Education*, 53 (3), 199–209.

Guskey, T. R. (1986). 'Staff development and the process of teacher change'. *Educational Researcher*, 15(5), 5–12. Cited in Clarke, D. and Hollingsworth, H. (2002). 'Elaborating a model of teacher professional growth', *Teaching and Teacher Education,* 18, 947–967.

Hall, R. (2018). ' "A policy change away from collapse": universities' fears for 2018'. [Online]. *The Guardian.* Available at: https://www.theguardian.com/higher-education-network/2018/feb/01/a-policy-change-away-from-collapse-universities-fears-for-2018. [Last accessed 19/06/18].

Hallam, S. and Creech, A. (Eds.) (2010). *Music Education in the 21st Century in the United Kingdom*. London: The Institute of Education, University of London.

Harrison, C. (2004). *Understanding Reading Development*. London: Sage.

Harrison, C. and Pound, L. (1996). 'Talking music: empowering children as musical communicators'. *British Journal of Music Education*, 13, 233-242.

Harrop, B., Friend, L. & Gadsby, D. (2005). *Okki-tokki-unga: action songs for children.* (2nd ed.). London: A & C Black.

Hatcher, J. A., and Bringle, R. G. (1997). 'Reflection: Bridging the gap between service and learning'. *College Teaching*, 45 (4), 153–158.

Heikkinen, H.L.T., Huttunen, R., and Syrjala, L. (2007). 'Action research as narrative: five principles for validation'. *Educational Action Research*, 15 (1), 5-19.

Hennessy, S. (2000). 'Overcoming the red feeling: the development of confidence to teach music in primary school amongst student teachers'. *British Journal of Music Education*, 17 (02) 183-196.

Hennessy, S. (2002). *Music 7-11: developing primary teaching skills*. [Online].London: Routledge. Available from: EBSCOhost. [Last accessed 30/06/18].

Hennessy, S. (2009). 'Creativity in the Music Curriculum'. In A. Wilson (Ed.), *Creativity in Primary Education.* Exeter: Learning Matters.

Hille K., Gust K., Bitz U., and Kammer, T. (2011). 'Associations between music education, intelligence, and spelling ability in elementary school'. *Advances in Cognitive Psychology*, 7, 1-6.

Hine, G. and Lavery, S. (2014). 'The importance of action research in teacher education programs: Three testimonies'. In: University of Western Australia, 'Transformative, innovative and engaging'. Proceedings of the 23rd Annual Teaching Learning Forum, 30-31 January 2014. Perth: no pagination.

HMI. (1978*). Primary Education in England: A survey by HM Inspectors of Schools*. (Government Document). London: Crown Copyright.

Holden, H. and Button, S. (2006). 'The teaching of music in the primary school by the non-music specialist'. *British Journal of Music Education*, 23 (1), 23-38.

Horner, P. (1978). 'Learning and Teaching Reading Skills' in Fontana, D. (Ed.), *The Education of the Young Child*. Oxford: Blackwell.

House of Commons. (2012). *Great Teachers: Attracting, Training and Retaining the Best*. London: Education Committee.

House of Commons Education and Skills Committee. (2005). *Teaching Children to Read.* Eighth Report of Session 2004–05. London: Education Committee.

Hyde, K.L., Lerch, J., Norton, A., Forgeard, M., Winner, E., Evans, A. and Schlaug, G. (2009). 'Musical training shapes structural brain development'. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 29 (10), 3019–3025.

James, A. (2016). *Building competence and confidence in the trainee primary teacher to deliver music in the classroom: An exploration of how one ITE provider might impact upon the confidence and ability of its primary trainee teachers to teach music*. Unpublished EdD thesis: Liverpool Hope University.

Jasper, M. (2005). 'Using Reflective Writing Within Research'. *Journal of Research in Nursing*, 10 (3), 163 – 169.

Jeanneret, N. (1997). 'Model for developing Pre-service Primary Teachers' Confidence to Teach Music'. *Bulletin of the Council for Research in Music Education*, 133, 37-44.

Johnston, R.S. and Watson, J.E. (2004). 'Accelerating the development of reading, spelling and phonemic awareness skills in initial readers'. *Reading and Writing*, 17(4), 327–357.

Jove, G. (2011). 'How do I improve what I am doing as a teacher, teacher educator and action-researcher through reflection? A learning walk from Lleida to Winchester and back again'. *Educational Action Research,* 19(3), 261-278.

Kemmis,S. (2010). 'What is to be done? The place of action research'. *Educational Action Research*, 18 (4), 417-427.

Kleiber, P. (2004). 'Focus Groups: More than a Method of Qualitative Enquiry' in K. De Marrais and S. Lapan (Eds.), *Foundations for Research: Methods of Enquiry in Education and the Social Sciences*. Mahwah, New Jersey/London: Routledge.

Klijn, K. (2003). 'Music: feel the beat' in H. Cooper and C. Sixsmith (Eds.), *Teaching across the early years, 3 – 7: Curriculum coherence and continuity*. New York: Routledge Falmer.

Knapik-Szweda, S. (2015). 'The effectiveness and influence of vocal and instrumental improvisation in music therapy on children diagnosed with autism. Pilot Study.' *Journal of Education, Culture and Society*, 1, 153-166.

Kokotsaki, D**.** (2012). 'Pre-service student-teacher's conceptions of creativity in the primary music classroom'. *Research Studies in Music Education,* 34 (2), 129-156.

Korthagen, F. (1993). 'Two modes of Reflection'. *Teacher & Teacher Education*, 9 (3), 317-326.

Korthagen, F. and Kessels, J. (1999). 'Linking Theory and Practice: Changing the Pedagogy of Teacher Education'*. Educational Researcher*, 28 (4), 4-17.

Korthagen, F., Loughran, J. and Russell, T. (2006). 'Developing fundamental principles for teacher education programs and practices'. *Teaching and Teacher Education*, 22(8), 1020–1041.

Koster, B. and Dengerink, J. (2001). 'Towards a professional standard for Dutch teacher educators'. *European Journal of Teacher Education*, 24 (3), 343 – 354.

Koutsoupidou, T. and Hargreaves, D. (2009). 'An experimental study of the effects of improvisation on the development of children's creative thinking in music'. *Psychology of Music*, 37 (3), 251-278.

Kratus, J. (1991). 'Growing with Improvisation'. *Music Educators Journal*, 78 (4), 35-40.

Krueger, R., and M.A. Casey, 2000. *Focus Groups: A Practical Guide for Applied Research*. (3rd edition). Thousand Oaks, Calif: Sage. Cited in Larson, K., Grudens-Schuck, N. and Lundy-Allen, B. (2004). 'Can you call it a Focus Group?' [Online]. Iowa State University. Available from: https://store.extension.iastate.edu/product/6456 [Last accessed 28/05/18].

Lampert, M., Franke, M., Kazemi, E., Ghousseini, H., Turrou, A., Beasley, H., Cunard, A. and Crowe, K. (2013). 'Keeping it Complex: Using Rehearsals to Support Novice Teacher Learning of Ambitious Teaching'. *Journal of Teacher Education*, 64 (3), 226–243.

Lampert, M. & Graziani, F. (2009). 'Instructional Activities as a Tool for Teachers' and Teacher Educators' Learning'. *The Elementary School Journal*, 109 (5), 491–509.

Langston, A. 2014. *Facilitating Children's Learning in the EYFS.* Maidenhead: Open University Press.

Lareau, A. (2011). *Unequal Childhoods: Class, Race, and Family Life*. (2nd ed.) University of California Press. Available from: MyiLibrary. [Last accessed 16/12/18].

Lindon, J. (2012). *Understanding child development: 0-8 years*. (3rd ed.) [Online]. London: Hodder Education. Available from: MyiLibrary. [Last accessed 30/06/18].

Liverpool City Council. (2015). 'The Index of Multiple Deprivation 2015: A Liverpool analysis'. Available at: http://liverpool.gov.uk/media/10003/2-imd-2015-main-report-final.pdf. [Last accessed 29/06/17].

Long, M. (2008). *A Rhythmic View of Reading: From word recognition to reading comprehension*. London: IPPR.

Loughran, J. and Berry, A. (2005). 'Modelling by Teacher Educators'. *Teaching and Teacher Education,* 21, 193 – 203.

Lu, H-L. (2010). 'Research on peer coaching in preservice teacher education – A review of literature'. *Teaching and Teacher Education,* 26, 748-753.

Lunenberg, M., Korthagen, F. and Swennen, A., (2007). 'The teacher educator as a role model'. *Teaching and Teacher Education*, 23(5), 586–601.

Malone, S. (2003). 'Ethics at home: informed consent in your own backyard'. *International Journal of Qualitative Studies in Education,* 16 (6), 797-815.

McNiff, J. (2002). *Action research for professional development: Concise advice for new action researchers*. (3rd ed.) Available at http://www.jeanmcniff.com/ar-booklet.asp [Last accessed 27/08/17].

McNiff, J., Lomax, P. and Whitehead, J. (2003). *You and Your Action Research Project*. (2nd ed.) London/New York: Routledge.

McNiff, J. and Whitehead, J. (2010). *You and Your Action Research Project*. (3rd ed.) London/New York: Routledge.

Mellor, L. (1999). 'Language and Music Teaching: the use of Personal Construct Theory to investigate teachers' responses to young people's music compositions'. *Music Education Research*. 1(2) 147-158.

Mills, J. (1989). 'The Generalist Primary Teacher of Music: a Problem of Confidence'. *British Journal of Music Education,* 6 (2) 125-138.

Mills, J. (1991). *Music in the Primary School*. Cambridge: Cambridge University Press.

Moog, H. (1976). *The Musical Experience of the Pre-school child*. London: Schott.

Moore, J., Pearson, M. and Cronin, S. (2016). 'The Hope Challenge: A new model of partnerships for school improvement'. In Moore, J. and Bamber, P. (Eds.), *Teacher education in challenging times: lessons for professionalism, partnership and practice*. London: Routledge.

Moritz C., Yampolsky S., Papadelis G., Thomson J. and Wolf M. (2013). 'Links between early rhythm skills, musical training, and phonological awareness'. *Read Write*, 26, 739–769.

Moyles, J. (2010a). 'Introduction' in Moyles, J. (Ed.), *The Excellence of Play*. (3rd ed.) Maidenhead: Open University Press.

Moyles, J. (2010b). 'Introduction' in Moyles, J. (Ed.), *Thinking about Play: developing a reflective approach.* Maidenhead: Open University Press.

Murray, J. and Male, T. (2005). 'Becoming a teacher educator: evidence from the field'. *Teaching and Teacher Education*, 21, 125-142.

Nicholls, S., Scott, P. and Hickman, S. (2003). *Music Express, Foundation Stage*. London: A & C Black.

Ockelford, A. (2015). *Sounds of Intent in the Early Years*. London: International Music Education Research Centre.

Ofsted. (2010a). *The special educational needs and disability review*. Crown Copyright.

Ofsted. (2010b) *Reading by six: how the best schools do it.* Crown Copyright.

Ofsted. (2012). *Liverpool Hope University: Partnership Initial Teacher Education inspection report*. Crown Copyright.

Ofsted. (2013). *Unseen children: access and achievement 20 years on*. Crown Copyright.

Ofsted. (2014). *Liverpool Hope University: Partnership Initial Teacher Education inspection report*. Crown Copyright.

Overy, K. (2000). 'Dyslexia, temporal processing and music: The potential of music as an early learning aid for dyslexic children'. *Psychology of Music*, 28, 218–229.

Overy, K., Nicolson, R., Fawcett, A. and Clarke, E. (2003). 'Dyslexia and music: Measuring musical timing skills'. *Dyslexia*, 9 (1), 18–36.

Ozernov-Palchik, O., Wolf, M. and Patel, A. (2018). 'Relationships between early literacy and nonlinguistic rhythmic processes in kindergarteners'. *Journal of Experimental Child Psychology*, 167, 354-368.

Patel, A.D. (2011). 'Music and the brain'. In S. Hallam, I. Cross, & M. Thaut, (Eds.), *Oxford Handbook of Music Psychology*. Oxford: Oxford University Press. Available at: https://panet.andover.edu/bbcswebdav/institution/SCIE/SCIE/science 490/Music/music and the brain.pdf [Last accessed 11/02/14].

Patel, A.D. (2012). 'Language, music and the brain: a resource-sharing framework'. In P. Rebuschat, I. Cross, J. Hawkins, and M. Rohrmeier (Eds.), *Language and Music as Cognitive Systems*. Oxford: Oxford University Press.

Patscheke, H., Degé, F. and Schwarzer, G. (2016). 'The Effects of Training in Music and Phonological Skills on Phonological Awareness in 4- to 6-Year-Old Children of Immigrant Families'. *Frontiers in Psychology,* 7, 1647.

Peretz, I. (2012a). 'Music, language and modularity in action'. In P. Rebuschat, I. Cross, J. Hawkins, and M. Rohrmeier (Eds.), *Language and Music as Cognitive Systems*. Oxford: Oxford University Press.

Peretz, I. (2012b). 'Modularity in music relative to speech: framing the debate'. In P. Rebuschat, I. Cross, J. Hawkins, and M. Rohrmeier (Eds.), *Language and Music as Cognitive Systems*. Oxford: Oxford University Press.

Perkins, M. (2015). *Becoming a Teacher of Reading*. London: Sage.

Poulter, V. (2014*). Student Teachers' perceptions of the role of music in the development of early reading*. Institution Focused Study. UCL Institute of Education, London.

Poulter, V. (2018). 'Teaching Latin to Primary School Children at North Western University: An Impact Study'. Journal of Classics Teaching. [In press]

Pring, R. (2001). 'Education as a Moral Practice'. *Journal of Moral Education,* 30 (2), 101-112.

Purves, R. (2017*). Young people's access to local authority instrumental music tuition in England: a historical and contemporary study*. Unpublished PhD Thesis, UCL Institute of Education, London.

Richardson, U., Thomson, J., Scott, S. and Goswami, U. (2004). 'Auditory processing skills and phonological representation in dyslexic children'. *Dyslexia*, 10(3), 215–233.

Robson, C. (2011). *Real World Research: A Resource for Users of Social Research Methods in Applied Settings*. (3rd ed.) Chichester: John Wiley and Sons.

Rose, J. (2006). *Independent review of the teaching of early reading*. Nottingham: DfES publications.

Rosen, M. et al. (2006). 'Chapter 10' in M. Lewis and S. Ellis (Eds.), *Phonics: Research, Practice and Polic*y. London: Sage.

Rowe, J., Herrera, M., Hughes, B. and Cawley, M. (2012). 'Capacity building for primary languages through initial teacher education: could specialist and nonspecialist student teachers' complementary skills provide a winning combination?' *The Language Learning Journal*, 40 (2), 143–156.

Russell-Bowie, D. (2010). 'A ten year follow-up investigation of preservice generalist Primary teachers' background and confidence in teaching music'*. Australian Journal of Music Education,* 2, 76-86.

Russell-Bowie, D. (2013). 'Mission Impossible or Possible Mission? Changing confidence and attitudes of primary preservice music education students using Kolb's Experiential Learning Theory'. *Australian Journal of Music Education*, 2, 46-63.

Ryan, G. and Russell Bernard, H. (2003). 'Techniques to Identify Themes'. [Online]. *Field Methods*, 15 (1), 85-109. Available from: <http://fmx.sagepub.com.ezproxy.hope.ac.uk/content/15/1/85.full.pdf+html> [Last accessed 12.02.18].

Saffran, J., Johnson, E., Aslin, R. and Newport, E. (1999). 'Statistical learning of tone sequences by human infants and adults'. *Cognition*. 70 (1), 27–52.

Schlaug, G., Marchina, S. and Norton, A., 2008. 'From singing to speaking: why singing may lead to recovery of expressive language function in patients with Broca's aphasia'. *Music Perception*, 25(4), 315–323.

Schön, D., Boyer, M., Moreno, S., Besson, M., Peretz, I. and Kolinsky, R. (2008). 'Songs as an aid for language acquisition'. *Cognition*, 106, 975–983.

Seddon, F. and Biasutti, M. (2008). 'Non-music specialist trainee primary school teachers' confidence in teaching music in the classroom'. *Music Education Research*, 10 (3), 403-421, Available at: DOI: 10.1080/14613800802280159

Sheridan, M., Harding, J. and Meldon-Smith, L. (2002). *Play in early childhood: from birth to six years*. London: Routledge.

Siraj, I. and Mayo, A. (2014). *Social Class and Educational Inequality: The impact of Parents and Schools*. Cambridge: Cambridge University Press.

Siraj Blatchford, I. and Clarke, P. (2000). *Supporting Identity, Diversity and Language in the Early Years*. Maidenhead: Open University Press.

Siraj-Blatchford, I., Mayo, A., Melhuish, E., Taggart, B., Sammons, P. and Sylva, K. (2011*). Performing against the odds: developmental trajectories of children in the EPPSE 3-16 study.* London: Department for Education/Institute of Education, University of London.

Siraj-Blatchford, I. and Sylva, K. (2004). 'Researching pedagogy in English preschools.' *British Educational Research Journal*, 30, 5.

Siraj-Blatchford, I., Sylva, K., Muttock, S., Gilden, R. and Bell, D. (2002). 'Researching Effective Pedagogy in the Early Years'. London: Department for Education and Skills. Available at: http://eprints.ioe.ac.uk/6099/

Smyth, A. and Holian, R. (2008). 'Credibility issues in research from within organisations'. In P. Sikes and A. Potts (Eds.), *Researching Education from the Inside: Investigations from within*. London: Routledge.

Standley, J., 2008. 'Does Music Instruction Help Children Learn to Read? Evidence of a meta-analysis'. *Applications of Research in Music Education*, 27(1), 17–32.

Stunell, G. (2010). 'Not Musical? Identity Perceptions of Generalist Primary School Teachers in Relation to Classroom Music Teaching in England'. *Action, Criticism & Theory for Music Education*, 9 (2), 79-107.

St. Pierre, A. and Jackson, A. (2014). 'Qualitative Data Analysis After Coding'. [Online*]. Qualitative Inquiry*, 20(6), 715-719. Available from: <http://qix.sagepub.com/content/20/6/715.short?rss=1&ssource=mfr> [accessed 12.08.18].

Thomson, J., Leong, V., and Goswami, U. (2013). 'Auditory processing interventions and developmental dyslexia: a comparison of phonemic and rhythmic approaches'. *Reading and Writing,* 26 (2), 139–161.

Tough, J. (1984). 'How young children develop and use language' in D. Fontana (Ed.), *The Education of the Young Child.* (2nd ed.) Oxford: Blackwell.

Trehub, S. and Gudmundsdottir, H. (2015). 'Mothers as Singing Mentors for Infants' in G. Welch, D. Howard and J. Nix (Eds.), *The Oxford Handbook of Singing*. In development.

Trevarthen, C. and Malloch, S. (2012). 'Musicality and musical culture: sharing narratives of sound from early childhood'. in G. McPherson and G. Welch (Eds.), *The Oxford handbook of music education.* Oxford: Oxford University Press.

Twiselton, S. (2007). 'Seeing the wood for the trees: learning to teach beyond the curriculum. How can student teachers be helped to see beyond the National Literacy Strategy?' *Cambridge Journal of Education,* 37 (4), 489-502.

Vainio, A. (2013) 'Beyond research ethics: anonymity as "ontology", "analysis" and "independence"'. *Qualitative Research*, 13(6), 685–698.

Verney, J.P. (2013). *Rhythmic Perception and Entrainment in 5-Year-Old Children. An Exploration of the Relationship between Temporal Accuracy at Four Isochronous Rates and its Impact on Phonological Awareness and Reading Development*. PhD thesis. Cambridge University.

Vicars, M. (2007). 'Is it all about me? How Queer!' in P. Sikes and A. Potts (Eds.), *Researching Education from the Inside: Investigations from within*. London: Routledge.

Vygotsky, L. (1978). *Mind in society: the development of higher psychological processes.* London: Harvard University Press.

Wan, C., Zheng, X., Marchina, S., Norton, A. and Schlaug, G. (2014). 'Intensive therapy induces contralateral white matter changes in chronic stroke patients with Broca's aphasia'. *Brain and language*, 136C, 1–7. Available at: http://www.sciencedirect.com/science/article/pii/S0093934X14000509

Welch, G.F. (1992). 'When will they ever learn? Trends and Issues in Initial Teacher Education in the UK'. *The Teacher Educator, 27*(4), 33-46.

Welch, G. (2002). 'Early childhood musical development' in L. Bresler and C. Thompson (Eds.), *The Arts in Children's Lives: Context, Culture and Curriculum*. Dordrecht: Kluwer Academic Publishers.

Welch, G. and Henley, J. (2014). 'Addressing the challenges of teaching music by generalist primary school teachers' *Revista Da ABEM* [Online], 22(32), 12-38.

Wellington, J. (2015). *Educational Research: Contemporary issues and practical approaches*. (2nd ed.) London: Bloomsbury.

Wetherick, D. (2014). 'Music therapy and children with a language impairment: Some examples of musical communication in action'. *Psychology of Music,* 42(6), 864–868.

Whitebread, D. (2003). *Teaching and learning in the early years*. (2nd ed). London: Routledge.

Whitebread, D. (2012). *Developmental Psychology and Early Childhood Education: a guide for students and practitioners*. Los Angeles: Sage.

Whitehead, M. (2007). *Developing Language and Literacy with Young Children*. (3rd ed.) London: Sage.

Whitehead, M. (2010). 'Playing or having fun? Dilemmas in early literacy' in J. Moyles (Ed.), *The Excellence of Play*. (3rd ed.) Maidenhead: Open University Press

Whitlock. V. and Court, S. (2002). *Singing Sherlock: the complete singing resource for primary schools, book 1*. London: Boosey and Hawkes.

Wiggins,R. and Wiggins, J. (2008). 'Primary music education in the absence of specialists'. *International Journal of Education & the Arts*, 9 (12), 1-27.

Williams, K., Barrett, M., Welch, G., Abad, V. and Broughton, M. (2015). 'The longitudinal benefits of early shared music activities in the home: Findings from the Longitudinal Study of Australian Children.' *Early Childhood Research Quarterly*, 31, 113-124.

Winter, R. (1997). 'Action-research as a format for vocational higher education'. *Teaching in Higher Education,* 2, 341-346.

Winter, R. (2002). 'Truth or fiction: problems of validity and authenticity in narratives of action research'. *Educational Action Research*, 10(1), 143-154.

Wood, D. (1998). *How Children Think and Learn.* (2nd ed.) Oxford: Blackwell.

York, M. (1988). *Gently into Music: possible approaches for non-specialist primary teachers*. London: Longman.

Young, S., (2003a). *Music with the Under Fours*. London: Routledge.

Young, S. (2003b). 'The interpersonal dimension: a potential source of musical creativity for young children?' *Musicae Scientiae*, 7, 175–179.

Young, S. (2009). *Music 3-5*. London: Routledge.

Young, S. & Glover, J., (2002). *Music in the Early Years*. London: Routledge. Available at: http://dx.doi.org/10.1076/digc.11.3.156.8864.

Appendix 1 Special Needs – Further Detail

The 2017 Liverpool Census Report on Special Educational Needs begins by stating that the number of children in city schools with special educational needs has dropped since 2011 by 27% (Liverpool City Council, 2017). This drop is not explained, and on the face of it seems like good news. Perhaps outcomes for Liverpool children have improved over the last six years? However, the figures do not speak for themselves. In a special needs review in 2010, Ofsted found that in some schools and local authorities, many children with what the inspectors deemed to be lower levels of need were being inappropriately identified as having special needs, and they recommended that 'schools should stop identifying pupils as having special educational needs when they simply need better teaching and pastoral support' (Ofsted, 2010a p. 72). In addition to this, they stated that a disproportionate number of children with special educational needs came from disadvantaged backgrounds. This was followed by a change in the regulations as to how children with special needs are to be identified. The old Statement of Special Needs was replaced by an Education, Health and Care Plan (EHCP) and a new code of practice was published (DfE/DfH, 2014) which recommended amongst other things that,

> 'teachers should use appropriate assessment to set targets which are deliberately ambitious. Potential areas of difficulty should be identified and addressed at the outset. Lessons should be planned to address potential areas of difficulty and to remove barriers to pupil achievement. In many cases, such planning will mean that pupils with SEN and disabilities will be able to study the full national curriculum' (DfE/DfH, 2014 p. 94).

The Code of Practice and its recommendations came under severe criticism from the Association of Teachers and Lecturers (2016), who stated that countrywide, between 2010 and 2015, the proportion of pupils identified with special educational needs and disabilities (SEND) has dropped from 21.2% to 14.4%, and that the government claim that this is because there is now better identification of need, and because 'behaviour' is no longer an SEN category. They also complain that teachers have not been sufficiently trained in special educational needs, especially 'in the light of the requirements of the new SEND code of practice' (ATL, 2016 p. 10). Whatever the explanation for the drop in numbers, the proportion of children with SEND in Liverpool Primary schools is higher at 17.4% than the

National average, which is 14.4%. In Knowsley the figure is 20.2%, and in St Helens, 18.9% (DfE, 2015).

Additional References

ATL. (2016). 'Are SEND students being let down?' (Conference Resolution 43 Report). [Online].Available at: https://www.atl.org.uk/sites/www.atl.org.uk/files/SEND-resolution-43-report.pdf. [Last accessed 07/08/2017].

DfE/DfH. (2014). Special educational needs and disability code of practice: 0 to 25 years. Available @ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/398815/SEND_Code_of_Practice_January_2015.pdf [last accessed 7th August 2017]

DfE (2015). Special educational needs in England: January 2011. Available at: https://www.gov.uk/government/statistics/special-educational-needs-in-england-january-2015 [last 7th August 2017]

Liverpool City Council Children's Services, Education Data and Analysis Team (2017). Special Educational Needs. Available at: https://search3.openobjects.com/mediamanager/liverpool/fsd/files/sen_jan_17_school_census_report.pdf [last accessed 7th August 2017]

Appendix 2 Early Reading

In order to be able to learn to read, experts generally agree that children need a certain reading readiness. Horner writes, '(i)t should be remembered that reading is a skill developed by societies in an advanced state of civilisation, and cannot be compared to physical skills like walking and talking' (Horner, 1978 p. 185). Horner argues that reading readiness depends on a combination of factors: psychological (which includes acuity in hearing and sight and 'the correct functioning of the speech organs' (ibid.)), environmental (e.g. linguistic background and social experience, intellectual (which includes visual and auditory discrimination) and emotional (which includes motivation). Motivation is also cited by others as a powerful factor, and Perkins (2015) argues that it begins with the knowledge that print, and in particular environmental print, carries meaning (conveyed by language). For both Cullingford (2001) and Goswami (2014), mastery of language is a crucial factor:

> 'Learning to read is sometimes erroneously considered to be a visual skill, but it is actually a linguistic process. A brain that can read gains linguistic information from a visual code that represents speech. Hence, speech processing skills are integral to reading.' (Goswami, 2014 p. 1)

Lindon (2012) takes up this theme of the importance of spoken language, and posits five building blocks for later literacy which include confidence in spoken language and a large vocabulary, and crucially, 'alertness to sound and sound making, rhythm and rhyme and the steady beat of music making and singing' (p. 153).

Harrison (2004), on the other hand, focuses less on skills and more on the body of knowledge children need. He contends that children need four types of knowledge: knowledge of the world, or contextual and cultural knowledge, knowledge of how language works, knowledge of how stories work or semantic knowledge, and grapho-phonic knowledge, in other words, being able to decode the written word.

Thus, common themes emerge across the different models, and all agree that a facility with spoken language is of central importance, as is the recoding of that language into print. It should be noted that this has huge implications for the language deprived child, because without language, it is impossible to access literature.

How then, do children learn to read? Perkins presents several models for the student teacher including those of Frith (1985) and Ehri (1999), which focus very much on the development of fluency. According to these models, children progress from recognising whole words in environmental print, to learning explicit knowledge of the alphabetic code with the attendant skills of blending and segmenting, to building an ever increasing bank of sight words through regular reading, and developing the ability to make analogies, which then leads to proficiency (Perkins, 2015). Echoing (or perhaps inspiring) Harrison's knowledge types, Adams (1994), however, proposed an interactive rather than stage model of four processors which children employ when they are learning to read. These she calls the context, meaning (of a word or phrase), orthographic (print) and phonological (speech) processors. These last three are all connected in both directions to one another, with the meaning of the text depending on context.

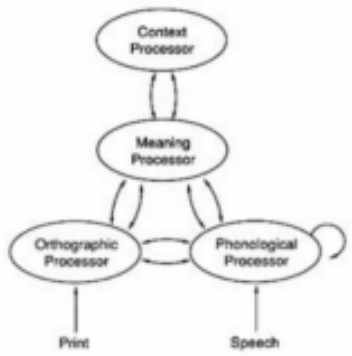


Figure 2 'Adding the Phonological Processor' (from Adams, 1994 p. 158)

Additional references

Ehri, L. (1999). 'Phases of development in learning to read words' in J. Oakhill and R. Beard (Eds.), *Reading development and the Teaching of Reading*. London Blackwell. Cited in Perkins, M. (2015). *Becoming a Teacher of Reading*. London: Sage

Frith, U. (1985). 'Beneath the surface of developmental dyslexia'. in K.Patterson, J. Marshall and M. Coltheart, (Eds.) *Surface Dyslexia*. London: Lawrence Erlbaum. Cited in Perkins, M. (2015). *Becoming a Teacher of Reading*. London: Sage

Appendix 3 English as an Additional Language.

Between 2013 and 2016, the proportion of children in Liverpool local authority Primary schools who speak English as an additional language rose from 11.4% to 15.6% (DfE, 2013; DfE, 2016); on average that is 1 in 7 children, or at least 4 per class. Compared with other English cities, this is a relatively small number. The numbers rose in Manchester, for instance, at a similar rate, but there the proportion is 40%. In Leeds the proportion is 20%, in Sheffield, 22%, Bolton, 28% and Oldham 36%. It is important to mention these other authorities, however, because our student teachers regularly find the first jobs in those areas. It is highly appropriate, therefore, and indeed timely, to consider the learning needs of this group of children.

Experts tell us that it is of utmost importance that a child's first language is valued in the school setting (Siraj-Blatchford and Clarke, 2000; Whitehead, 2007; Mehmedbegovic, 2008). Quoting the Bullock Report (1975) and DfES (2006), Mistry and Sood (2015) maintain that it is crucial for children's success as learners that their home culture is recognised within the school and classroom. For one thing, a child's 'first language has a continuing and significant role in identity, learning and the acquisition of additional languages' (DCFS, 2007 p. 4) and for another, 'children need to feel safe, settled, valued and secure. They need a sense of belonging.' (DfES, 2006 p. 7). As Siraj-Blatchford and Clarke (2006) argue, this then impacts on the child's feelings of self-worth: if the child sees that others do not value their background and culture, they will begin to have doubts about the value of it themselves. A sense of belonging and of self-esteem are necessary factors in building resilience, which is argued to be at the foundation of learning (Langston, 2014). It may be also that if the child's home language has a place in the classroom, it will highlight for the teaching staff the differences in sounds between languages which will, in turn, influence the way that they teach phonology.

As with general language acquisition, there are several models offered for learning a second language. Siraj-Blatchford and Clarke present a six phase model:

1. Continued use of the home language;
2. Use of non-verbal communication – nodding, shaking the head, tugging at others' clothes to get attention; all making it possible for the child to communicate before he knows words in the new language;
3. A silent period where the child is absorbing the new language and developing his comprehension;

4. Use of repetition and language play – the child practises words and phrases and shows that he is ready to join in;
5. Use of formulae, routines and single words – the child use longer chunks of language which helps him to join in with others; and
6. More complex English.

Siraj-Blatchford and Clarke (2006)

Cummins (2000), on the other hand, makes a distinction between the kinds of language that the child will need to learn: BICS, or basic interpersonal communication skills which are needed for social intercourse, and CALP, or cognitive academic language proficiency, the language that is specific to subject areas. The BICS are often context specific 'and the language…supported by a wide range of meaningful and situational cues' (Cummins, 2000 p. 68). A child may take two years to become proficient in BICS. CALP, on the other hand, is often context-reduced, and 'relies primarily on linguistic cues to meaning' (ibid) and may take between five and seven years to learn. Gibbons' Language Framework (1991) aims to scaffold the learning in the classroom by identifying the language functions (e.g. describing, explaining, use of prepositions) and structures (I looked *at*, I looked *through*) and lastly vocabulary to be used.

Learning a new language, however, starts with sound and sight. Not only do the children need to learn to listen (Siraj-Blatchford and Clarke, 2000), but they need to be able to watch the speaker for physical gestures, facial expressions and mouth and lip movements as well (ibid; Whitehead, 2007). Initial problems that children encounter may include hearing the sounds of a new phonology (Siraj-Blatchford and Clarke, 2006), separating words and syllables in the sound stream of speech, recognising differences in stress, rhythm and intonation (ibid; Schön, Boyer, Moreno, Besson, Peretz, and Kolinsky, 2008), developing vocabulary and grammatical knowledge, learning about the rules of discourse and the pragmatics of social intercourse – for instance knowing how to apologise, or make a request (Mistry and Sood, 2015). Therefore, when teaching young bilinguals, there needs to be a focus on meaning (Whitehead, 2007; Siraj-Blatchford and Clarke, 2000). This goes also for monolinguals – as Whitehead (2007) contends, a curriculum that is good for young bilinguals will be good for all the children.

These last three sources mention a range of meaningful activities to engage bilingual children and to develop their language skills, but I would like to focus on those that are relevant to this study. What is striking is that music, and singing in

particular, is recommended by all the authors (Whitehead, 2007; Siraj-Blatchford and Clarke, 2000; Mistry and Sood, 2015). Whitehead maintains that songs (not only in English, but also in other languages), rhymes and stories should be at the heart of every oral curriculum because this supports both bilingual and monolingual children in their language development (Whitehead, 2007). Mistry and Sood (2015) make the point that songs help children to learn phonics because children with EAL need plenty of practice hearing and making English sounds; some, indeed many of which, may be different from the sounds of their own language, and as Patscheke et al. attest, learning the phonology of a second language is hugely challenging (Patscheke et al., 2016). Furthermore, songs aid fluency in language because they help the children to produce language without pausing (Paquette and Rieg, 2008). Songs with repetition in them will help the children to learn vocabulary. Many songs that are used with young children are highly context specific, as Paquette and Rieg (2008) point out. This makes them ideal for teaching early language, not just for vocabulary, but also for language structures. So a teacher using Gibbons' framework might note that a song such as 'Clap your hands and wiggle your fingers' (see Resource Pack, Appendix 24) uses the command and the personal pronoun. Siraj-Blatchford and Clarke (2000) stress the role that singing has in helping the children to increase their knowledge and use of routine phrases (for example, 'Happy Birthday to you') which, in turn, help them to develop their self-confidence and ability to interact with others. (Whitehead calls this practising 'well-loved chunks of the language over and over again' (Whitehead, 2007 p. 25)). They also give numerous examples of children for whom singing was their way into learning English (ibid). Moreover, songs with rhymes and actions will encourage the children to participate, thus giving them a sense of belonging, and strengthening their social bonds one with another (Mistry and Sood, 2015; Paquette and Rieg, 2008). Furthermore, the environment in which children learn English as an additional language should be focused on the meaning of the language rather than on the forms, and 'staff (should therefore):

- Use speech rhymes, songs and chants to develop rhythm and fluency;
- Use intonation to highlight patterns in shared-book readings, rhymes and songs;
- Encourage children to make up their own changes or complete chants or lines in stories; and
- Use music, rhythm, pitch and clapping activities to show stress, loudness, softness and tone.'

(Siraj-Blatchford and Clarke, 2000 p. 59)

A study was undertaken in a German kindergarten with a group of immigrant children by Patscheke and her colleagues. They believed that musical training might complement second language learning because as they said, 'music is motivating and trains language without focusing on language deficits' (Patscheke, Degé and Schwarzer, 2016 p. 2). They found that the music training programme did indeed increase the children's phonological knowledge of the new language for several reasons. First of all, they argue, the musical training tapped into the neural resources that music and speech share. Secondly, the rhythmic nature of the exercises, and the drumming and singing required a high level of precision. Furthermore, there was lots of repetition, the children found the activities hugely rewarding and, being trained in a small group, they were highly attentive (ibid).

Singing is, then, a particularly powerful medium to use with all young children and especially those whose first language is not English. Because of the pitch contours, children are helped with syllable and word discrimination in the sound stream as syllables, and indeed words, are often sung at different pitches (Schön et al, 2008). Also, as has been mentioned earlier, singing slows down speech and highlights its transitions (Overy, 2000), which means that the language is easier for the children to process and this then impacts positively on their phonological awareness. Not only that, but songs have an emotional appeal and, because of this, they can increase the level of focus and attention (Schön et al, 2008). Furthermore, assuming a relaxed atmosphere in which singing takes place means that a weak affective filter is achieved, and optimal learning can occur (Paquette and Rieg, 2008). As Schön and her colleagues contend, 'learning a foreign language, especially at the beginning where you have to segment the sound stream into words, may largely benefit from the motivational and structuring properties of song' (Schön et al. 2008 p. 982). Moreover, in a study undertaken with 41 singers, Christiner and Reiterer (2008) found that the ability to sing is a good indicator of the ability to imitate speech. There are several reasons for this. Firstly, in order to sing well, one needs to fine tune 'the palate, the tongue and the lips as well as the larynx' (Christiner and Reiterer, 2008 p. 8). Secondly, learning to sing can be similar to learning one's first language because one becomes aware of one's own voice and the way the face and mouth muscles are used in vocalisation. Thirdly, the authors found that 'the ability to sing helps (the singer) to detect rhythmic cues in foreign languages' (ibid. p. 9) and concluded that 'singing training

could be applied to teaching foreign and second language pronunciation because singers are in the possession of enhanced working memory and vocal flexibility'. In the words of a young EAL learner when asked how he learned and remembered words so quickly, 'Easy, put anything to music and I can remember it' (Paquette and Rieg, 2008 p. 229).

Additional References

Christiner, M. and Reiterer, S. (2013). 'Song and speech: examining the link between singing talent and speech imitation ability.' *Frontiers in psychology*, 4 (874).

Cummins, J. (2000). *Language, Power and Pedagogy: Bilingual Children in the Crossfire*. Clevedon: Multilingual Matters

DCSF. (2007). *Primary national strategy: supporting children learning English as an additional language: guidance for practitioners in the EYFS*. Norwich: DCSF Publications

DfES. (2006). *Excellence and enjoyment: learning and teaching for bilingual children in the primary years. Unit 3: Creating an inclusive learning culture*. Norwich: DfES Publications

DfE. (2013). *Schools, pupils and their characteristics: January 2013*. [Online]. (Government document). Available at: https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2013 [Last accessed 02/08/17].

DfE. (2016). *Schools, pupils and their characteristics: January 2016*. [Online]. (Government document). Available at: https://www.gov.uk/government/statistics/schools-pupils-and-their-characteristics-january-2016 [Last accessed 02/08/17].

Gibbons, P. (1991*). Learning to learn in a second language*. Newtown: Primary English Teachers Association

Langston, A. (2014). *Facilitating Children's Learning in the EYFS*. Maidenhead: Open University Press

Mehmedbegovic, D. (2008*). 'Miss, who needs the languages of immigrants?': A study in attitudes and values attached to bilingualism in England and Wales.* EdD thesis. Institute of Education, University of London.

Mistry, M. and Sood, K. (2015). *English as an Additional Language in the Early Years: Linking Theory to Practice.* London: Routledge

Paquette, K. and Rieg, S. (2008). 'Using Music to Support the Literacy Development of Young English Language Learners'. *Early Childhood Education* 36, 227–232.

Schön, D., Boyer, M., Moreno, S., Besson, M., Peretz, I. and Kolinsky, R. (2008). 'Songs as an aid for language acquisition'. *Cognition*, 106, 975–983.

Siraj-Blatchford, I. and Clarke, P. (2000). *Supporting Identity, Diversity and Language in the Early Years.* Maidenhead: Open University Press

Whitehead, M. (2007). *Developing Language and Literacy with Young Children*. (3rd ed.) London: Sage

Appendix 4 Play

The nature of play is complex (Bergen, 2014; Sheridan et al., 2002) and down the centuries there have been many theories offered about that nature and what play offers, from the ancient belief that the most effective medium for learning was play, to one of the most modern views, which is that since ancient times, the humans who have been able to adapt in order to survive the many vicissitudes of life are the ones who are the most playful (Bergen, 2014). As Whitebread (2003) explains, through play, one develops flexibility of thought and positive attitudes to problem solving.

Many different types of play are described (Sheridan et al. 2002; Whitebread, 2012; DCFS, 2009b). Amongst others, physical play, play with objects, social and emotional play, pretence (symbolic play) and role play and games with rules are explored (ibid). In physical play, children develop their gross and fine motor skills; physical play might include exercise, action songs and moving to music (Pound, 2010), whilst play with objects might involve exploring a musical instrument to find out what different sounds it makes; children often use music for self-regulation, and this would be classed as social and emotional play (Whitebread, 2012). Early on children learn how to imitate and how to pretend (symbolic play), where an object might stand for something else (a cardboard box becomes a fox's home) (ibid). This then develops into role play and games with rules (DCFS, 2009b; Whitebread, 2012). The link between these last two may seem tenuous, but Vygotsky argues that organised games such as those found in sports are themselves imaginary situations which are entered into by all players (Vygotsky, 1978) who understand and agree to the aims, the instruments and the parameters of the game. Kravtsova (2014) expands on this idea. In games with rules, she says, the rules dictate how things are done in reality, but 'comprehension of the rule is made in the child's imagination' (Kravtsova, 2014 p. 29) – so disbelief is suspended for the purposes of the game. In this chapter Kravtsova goes on to describe a study in which children were taught functional thinking through play with rules, and went on to exceed others' attainment in using mathematical concepts in their daily functions, suggesting that they developed flexibility of thought and a positive attitude to problem solving through play (Whitebread, 2003). In play with rules, the rules may be changed to accommodate different players, and to make the game more enjoyable or challenging (Bergen, 2014). Finally, in games with rules, children can learn important social skills, like sharing and taking turns (Whitebread, 2012).

Vygotsky argues that in play, children subordinate themselves to the rules of the game, thereby renouncing what they want for the sake of prolonging the play. For instance, in real life if a snack is offered, the child might naturally help herself without hesitation. If that child is in role as mother, she will make sure everyone in the 'family' is served before herself. Therefore, the child is at her most self-controlled in play: 'In play a child always behaves beyond his average age; in play it is as though he were a head taller than himself' (Vygotsky, 1978 p. 102). The National Strategies document echoes this, and suggests that the child's innate joy in play means that he is able to concentrate deeply and for sustained periods of time (DCFS, 2009b). Through play, children can imagine life to be other than what it is, and this is the beginning of abstract thought (Vygotsky, 1978) – as Whitehead (2010 p. 85) puts it, pushing 'a 'what if' question to the limits'. They may also be able to lead themselves through the Zone of Proximal Development (ibid.) by practising and rehearsing skills through spontaneous and child led play, which is non-threatening, leaving their self-esteem and self-image undamaged (Moyles 2010a; Moyles, 2010b). Through play, they learn to co-operate with each other (Pound, 2010).

Whitehead contends that play can be subversive, and very much about who is in charge: control must stay with the players. In other words, it is crucial that children are allowed to take the lead (Whitehead, 2010). The feeling of empowerment is fundamental to children being able to develop positive attitudes to learning, and about themselves as learners (Whitebread, 2003). Although Vygotsky insists that it is inaccurate to define play as something that gives pleasure (Vygotsky, 1978), nevertheless, an element of fun can 'lighten the imposed nature of activities (and) introduce the possibility of subverting a tight structure' (Whitehead, 2010 p. 90). She describes ways in which children can have fun with language, such as making up new rhymes for existing songs and poems. When I was a full time primary school teacher, I used this device frequently. One song the children loved was 'She'll be coming round the mountain when she comes'. We would make up verses by thinking up new things 'she' could be doing when she came. I was careful to accept all suggestions; some were easy to sing, e.g. 'She'll be drinking coca-cola' because the words fitted with the rhythm; others were more challenging, e.g. 'She'll be playing on her playstation'. What I always noticed was that the children had a definite preference for the 'fitting' phrases, and all learned to match the phrase to the music. This may be an indication of developing phonological awareness.

Bergen (2014) offers another definition of play, and suggests that play can be epistemic or explorative, and ludic or playful. Through epistemic play the child can explore the characteristics of physical objects and through ludic play she discovers what she can do with them. This is a useful lens through which to examine musical play. Musical play can be explorative – what sounds will my instrument make? – and ludic – how can I use my instrument to invoke a certain mood? Pound (2010) makes the point that in no other subject would the word 'play' be used to describe activity in that subject: for instance no-one would talk about 'playing' painting or mathematics but we do 'play' instruments. She goes on to argue that music and play share features in common – both offer the opportunity to learn through action and exploration, and to learn to negotiate and co-operate with others. Interestingly, her suggestion for play in music is similar to that of Whitehead in literacy – that children have time and space for improvisation alone and with others both in instrumental music and in song (ibid).

Additional references

Bergen, D. (2014). 'Foundations of Play Theory'. In L. Brooker, M. Blaise and S. Edwards (Eds.), The *Sage Handbook of Play and Learning in Early Childhood.* London: Sage

Kravtsova, E. (2014). 'Play in the non-Classical Psychology of L.S. Vygotsky' In L. Brooker, M. Blaise and S. Edwards (Eds.), The *Sage Handbook of Play and Learning in Early Childhood.* London: Sage

Pound, L. (2010). 'Playing Music' in J. Moyles (Ed.), *The Excellence of Play*. Maidenhead: Open University Press.

Appendix 5 Reflective Diary 2nd July 2015

When I arrived at school, I found that Philippa (pseudonym for CT1) had been spending the morning visiting five different nursery schools all over the city, and she really needed some time out that afternoon for other tasks that she hadn't had time for. So she proposed that I carried on with the session with Lauren (pseudonym), the teaching assistant. I was a bit dismayed by this, because it's important that Philippa observes/takes part in the sessions, so that I can get feedback from her afterwards. I did say this, but it was clear that although she would have stayed if I'd pressed her to, it would have made her life that bit more difficult (although I'm not sure what she would have done if I hadn't been there – perhaps Lauren would have run the class on her own while Philippa had some time). So I proposed that I go back for a third time, and that this time she remained present in the class. I don't know whether this will work because it takes us into the last week of school which is always a bit disrupted by things like leavers assemblies and so-on. I also discovered just before I started that the children were having a singing session with someone else, which was a bit exasperating – I would have gone in on a different day if I'd known.

Philippa had asked me to do exactly the same lesson as last week, so I did, more or less (see the lesson plan). I didn't have time to talk to Lauren about what I wanted her to do, so she wasn't as involved as Philippa had been. Almost as soon as I started to work with the children (and especially when we were singing), she got out an iPad and video-recorded what was going on, which I found really disconcerting! The first part of the lesson went well – the video put me off my stroke when it came to the first two activities so I made a bit of a mess of 'Switch' and forgot the words to 'Daddy's taking us to the Zoo' – however it didn't seem to affect the children too much. They weren't as successful at 'Switch 2' this week but I put that down partly to me not being as positive. Each rhythmic element went on too long as I tried to collect my thoughts. I think I'll need to rehearse this more thoroughly in future before I do it (not like the old days when I could just do it off the top of my head!). 'Zoo' – the children remembered the actions and enjoyed joining in the chorus but are not singing the verses yet – need more familiarity with this. Hot potato was much better, much pacier with the clapping and not with the instruments. At the beginning I stopped and asked the children, had the child clapping copied mine, or made up their own? The children could quickly distinguish between the two. All wanted to copy – I think they felt that was the cleverer option. So I asked

Lauren to join in and she obliged by making up her own! This went really well – children engaged in every way and could copy my simple rhythms (chips, chips, chicken, chips and so-on). They absolutely love Stand up sit down – think it's a huge hoot – but it's much more successful when two adults are playing, and actually when instrument is being played behind the screen of course. I wonder if 'Drop Out' would be a good game to play – especially in small groups.

The small group work was much, much more challenging. I had eight children, and I think they had frankly had enough of sitting being told what to do – my own session had been too long yet again – I think I'm going to have to keep it down to four elements not five in future. They were still enthusiastic but they all wanted to be playing, and some had very definite ideas of what they wanted to do (e.g. Maisie). I was conscious that a) they'd had a bellyful of music that afternoon, and b) I'd already kept them too long to begin with so I wasn't as positive in my behaviour management as I should have been. Also, I had conflict going on in my own mind about child led and adult led learning in the small group, which undermined my confidence with behaviour management. We played 'stand up sit down' again because they were so eager to have a go with the instruments, but M and R found turn taking extremely challenging, which was difficult to manage (also we were not doing this lesson in an enclosed private space). We learned 'who's got the penny' and I discovered that E, M and W all sing beautifully in tune. The children couldn't cope with the second part of the game where we have to recognise people's voices just by listening – this needed a quieter space and possibly greater maturity on the part of the children. M wanted us to play instruments for 'She'll be coming round the mountain', so between us we made up a game where if I sang 'She'll be playing a tambourine when she comes', the child with the tambourine would play. It was interesting to note how the children played their instruments during the singing – some could naturally play a steady pulse. There was one point when one of the children accidentally hit M on the head with an instrument (not hard – but she was a bit histrionic by this stage). I felt like such a rookie.

After the session, Philippa asked me how it had gone. When I told her about the small group session, she was very quick to respond, which made me think she'd thought that about last week's session but hadn't said anything (either that or she'd seen part of this week's or someone had told her about it). She was very clear that being 'nicely firm' with the children was of paramount importance – and of course she was right. She made the point that it's tempting to want the children to like you (yes it is unfortunately) and that if you haven't been in the classroom for a while you

lose some of that edge to begin with (that's true too). I talked about the sustained shared thinking thing, and she said well when you're an adult in the group it should be adult led. She felt that if we wanted a child led group, we would set up a corner with instruments (and activities?) for them to explore. I felt really deflated at this point – I'm too old to be making these elementary mistakes. However, I shall avoid all the other undesirable elements as much as possible next time, e.g. music following music, my whole group session too long etc. And I guess I need not to worry about the small group being 'adult led', though I would like an element of the children having some say – otherwise I wouldn't have got the game we made up with the mountain song. When the students do this, it will be really important for me to keep any whole group session as short as possible. And I will need to build in some BM strategies like stickers, class dojos, and 'peaceful hands'. When I'm training the students, I will need to warn them that the children will be desperate to play with the instruments and won't be able to keep their hands off them, so part of the lesson is establishing protocols with them. Philippa suggested that we all play really loudly then we all play really softly etc so that we begin to get the 'itchy fingers' out of our system.

Lauren was lovely – when Philippa asked how it had gone, she said 'you had them eating out of your hand.' When she was video-ing them apparently she was doing it for Philippa because she wanted to sing the songs again but couldn't remember how they all went. 'You couldn't see what I was seeing,' Lauren said, as she mimed how the children were 'hanging on my words'. She felt that it had gone on rather long, but when I said I should cut some things out, she said, 'But no, because they were all enjoying it so much'.

Philippa and I went across to Bright Stars to see Janet. We agreed a new song to sing – 'When Goldilocks went to the house of the bears' – and Janet is going to get some props for us to use. We'll also do some nursery rhymes – Old Macdonald, Twinkle twinkle and Baa baa black sheep are firm favourites apparently. I need to find a game – will look in Music Express for that. I think Philippa is quite apprehensive about the visit – I've a feeling she's glad I'm going too – she's not used to the very little ones. We chatted about the project next term. I think it would be good if I were to do some visits before I bring the students. She said 'Yes, you should definitely come, I need you!' which was really affirming.

Appendix 6 Preparation for the school-based programme.

As mentioned earlier, in the summer term before the first cycle took place, I paid three visits to the partnership school. I did this for four reasons. One was so that I could meet and develop a relationship with the class teacher, and to begin to involve her in the project as co-researcher. The second was so that I could try out a selection of the activities with the reception and nursery classes to ensure that they were engaging and correctly pitched for the age and ability group. The third was to enable me to get to know some of the children who will be going into the reception class a little before the project started, and to identify any potential problems. The fourth was so that the class teacher and I could, through discussion, decide on the practicalities of the programme – how big the groups should be, how the music lessons would be designed and so-on. For each lesson I wrote a detailed lesson plan on the university's template because I thought it would be useful to model this aspect also for the trainees. I wrote an account of each visit in my reflective diary.

This groundwork was useful for a number of reasons. First of all, it was crucial in helping to design the lesson format. The first time I went in, the intention was that I would teach the class as a whole group for twenty minutes, modelling all the activities we would do that day, and would follow this with small group work where each individual would have a 'turn' in all of the games. This was something that initially I found difficult to manage: the whole class input went on for over 40 minutes, and although the children were engaged (the teaching assistant remarked that 'the children were eating out of your hand'- RD 02.07.15), nevertheless, when it came to the small group work, the children were difficult to manage because, I suspect, they had had enough of adult-led work and wanted to be autonomous. This was something that I discussed both with the class teacher and with my supervisor. My supervisor (GW) suggested that it was also to do with group dynamics – in the larger group the children act as a restraint on each other, but in the smaller group individual personalities tend to dominate. The CT felt that the children needed firmer handling by me and I acknowledged that in my confusion about child-led and adult-led activities, and my consciousness that I'd had them sitting too long, I allowed my authority to become undermined. However, by the time of my third visit – this time to the nursery – I had managed to adapt the lesson plan so that we started with just 10-15 minutes of singing, and then went straight into the small group activities,

rather than modelling everything in the whole class input. This worked much better, in that the children were easier to manage, and were more able, for instance, to take turns. When the CT and I discussed how we would organise the sessions for the STs, I suggested that we have groups no smaller than ten children, as GW had recommended, arguing that the smaller groups would be just as difficult for the trainees to manage as for me. With each of those larger groups, there would be three or four STs depending on how many volunteered. The CT was unhappy with this idea mainly because she felt that the whole value of the small group is that the children have lots of 'turns' and that this would be lost in a larger group situation. I came round to this way of thinking more readily after the success of the third visit. (The CT also stressed the importance of repeating the lessons, so that the children became familiar with the materials, and developed their confidence to participate. This was highlighted for us both when we taught in the nursery, as the second of the two groups was much more engaged than the first had been, simply because that group had been in the room listening, while they played elsewhere, to the first group's songs and activities.)

Not only was I able to experiment with and adapt the lesson format, but also the activities themselves. For instance, the first time we played 'Hot Potato', the children used instruments to tap out rhythms in answer to my clapping. The second time, I asked them to clap the rhythms back to me. The effect of this was that the children were more successful in tapping out rhythms – the problem with using instruments had been that they were physically more difficult to control – and the activity had more pace as the flow was uninterrupted by the child taking time to choose and pick up the instrument. The CT pointed out that the activities that we had done with the Reception class in June would need to be adapted further for a Reception class in November, as six or seven months is a long time in the life of such a young child. I noted that the children in the Reception class were on the whole very adept at copying rhythmic patterns, that some could sustain the tapping of one rhythm whilst listening to another (Switch 2 – See Resource Pack, Appendix 22), and that many were able to supply new words to the song that were appropriate, both in terms of content and metre.

What was really encouraging for me was the CT's enthusiasm for what we (myself and the STs) were doing. She could see how valuable the activities were in terms of developing the children's listening skills, and spontaneously remarked that she would be continuing to use them with the children in the coming days. Again, when we went to the Nursery, she commented that the activities were 'so simple but

so effective'. This was an affirmation for me that the activities themselves were accessible to the generalist Primary school teacher, one of my main aims for the resource pack.

I felt, after the first cycle, that this was a successful model, and so I repeated this preparatory process in essence in preparation for the second cycle in the different school.

Appendix 7 Early Learning Goals

Section 6. Early learning goals

The ELGs are listed below. A child can use their established or preferred mode of communication for all the ELGs except Speaking. In this case practitioners should give additional detail about the child's understanding and preferred means of communication in their EYFS profile record.

6.1 Prime areas of learning and their associated ELGs

Communication and language development

This involves giving children opportunities to speak and listen in a range of situations and to develop their confidence and skills in expressing themselves.

ELG 01 Listening and attention:

- Children listen attentively in a range of situations.
- They listen to stories, accurately anticipating key events and respond to what they hear with relevant comments, questions or actions.
- They give their attention to what others say and respond appropriately, while engaged in another activity.

ELG 02 Understanding:

- Children follow instructions involving several ideas or actions.
- They answer 'how' and 'why' questions about their experiences and in response to stories or events.

ELG 03 Speaking:

- Children express themselves effectively, showing awareness of listeners' needs.
- They use past, present and future forms accurately when talking about events that have happened or are to happen in the future.
- They develop their own narratives and explanations by connecting ideas or events.

Physical development

This involves providing opportunities for children to be active and interactive, and to develop their co-ordination, control, and movement. Children must also be

helped to understand the importance of physical activity, and to make healthy choices in relation to food.

ELG 04 Moving and handling:

- Children show good control and co-ordination in large and small movements.
- They move confidently in a range of ways, safely negotiating space.
- They handle equipment and tools effectively, including pencils for writing.

ELG 05 Health and self-care:

- Children know the importance for good health of physical exercise, and a healthy diet, and talk about ways to keep healthy and safe.
- They manage their own basic hygiene and personal needs successfully, including dressing and going to the toilet independently.

Personal, social and emotional development

This involves helping children to:

- develop a positive sense of themselves and others
- form positive relationships and develop respect for others
- develop social skills and learn how to manage their feelings
- understand appropriate behaviour in groups
- have confidence in their own abilities

ELG 06 Self-confidence and self-awareness:

- Children are confident about trying new activities, and say why they like some activities more than others.
- They are confident speaking in a familiar group, will talk about their ideas, and will choose the resources they need for their chosen activities.
- They say when they do or don't need help.

ELG 07 Managing feelings and behaviour:

- Children talk about how they and others show feelings, talk about their own and others' behaviour, and its consequences, and know that some behaviour is unacceptable.
- They work as part of a group or class, and understand and follow the rules.
- They adjust their behaviour to different situations, and take changes of routine in their stride.
-

ELG 08 Making relationships:

- Children play co-operatively, taking turns with others.

- They take account of one another's ideas about how to organise their activity.
- They show sensitivity to others' needs and feelings, and form positive relationships with adults and other children.

6.2 Specific areas of learning and their associated ELGs

Literacy

This involves encouraging children to read and write, both through listening to others reading, and being encouraged to begin to read and write themselves. Children must be given access to a wide range of reading materials such as books, poems, and other written materials to ignite their interest.

ELG 09 Reading:

- Children read and understand simple sentences.
- They use phonic knowledge to decode regular words and read them aloud accurately.
- They also read some common irregular words.
- They demonstrate understanding when talking with others about what they have read.

ELG 10 Writing:

- Children use their phonic knowledge to write words in ways which match their spoken sounds.
- They also write some irregular common words.
- They write simple sentences which can be read by themselves and others. Some words are spelt correctly and others are phonetically plausible.

Mathematics

This involves providing children with opportunities to:

- practise and improve their skills in counting numbers, calculating simple addition and subtraction problems
- describe shapes, spaces, and measures

ELG 11 Numbers:

- Children count reliably with numbers from 1 to 20, place them in order and say which number is one more or one less than a given number.

- Using quantities and objects, they add and subtract 2 single-digit numbers and count on or back to find the answer.
- They solve problems, including doubling, halving and sharing.

ELG 12 Shape, space and measures:

- Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.
- They recognise, create and describe patterns.
- They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

Understanding of the world

This involves guiding children to make sense of their physical world and their community through opportunities to explore, observe and find out about people, places, technology and the environment.

ELG 13 People and communities:

- Children talk about past and present events in their own lives and in the lives of family members.
- They know that other children don't always enjoy the same things, and are sensitive to this.
- They know about similarities and differences between themselves and others, and among families, communities and traditions.

ELG 14 The world:

- Children know about similarities and differences in relation to places, objects, materials and living things.
- They talk about the features of their own immediate environment and how environments might vary from one another.
- They make observations of animals and plants and explain why some things occur, and talk about changes.

ELG 15 Technology:

- Children recognise that a range of technology is used in places such as homes and schools.
- They select and use technology for particular purposes.

Expressive arts and design

This involves supporting children to explore and play with a wide range of media and materials. It involves providing children with opportunities and encouragement for sharing their thoughts, ideas and feelings through a variety of activities in art, music, movement, dance, role play, and design and technology.

ELG 16 Exploring and using media and materials:

- Children sing songs, make music and dance, and experiment with ways of changing them.
- They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

ELG 17 Being imaginative:

- Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.

  They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role-play and stories

Appendix 8 Lesson plan example

<table>
<tr><td rowspan="3">Context</td><td colspan="8">Personal Professional Teaching Target (Linked to Teachers' Standards):
Based on previous feedback and reflection, what are you going to focus on in this lesson in order to develop your teaching?</td></tr>
<tr><td>Year:
Reception</td><td>Class:</td><td>Set:</td><td>No. Pupils:
30</td><td>Time:
1 pm</td><td>Duration:
15 minutes whole class
15 minutes group</td><td>Date:
11.11.15</td><td>Subject:
Music</td></tr>
<tr><td colspan="4">Prior Pupil Attainment & Progression from prior learning:
The children have had two music lessons with me this term. They have learned 'Switch', 'Dr Knickerbocker' and 'Hot Potato'. Many of the children can clap back simple rhythms, and many can identify when the clapped back rhythm is the same and when it is different. Many have played 'What am I playing?' and can correctly identify the hidden instrument from the sound it makes.</td><td colspan="4">Additional Adults and their roles:
CT
Student teachers
Join in with activities; note the children's responses for assessment purposes (informally); take small groups of children for further work if feeling confident to do so</td></tr>
<tr><td>Key Learning</td><td colspan="4">Learning Outcomes:
Build a repertoire of songs
Tap out simple rhythms (some repeated)
Respond to musical 'instruction'
Improvise and rhythms</td><td colspan="4">Success Criteria: How will you know/ the children know if they are successful?
Children can copy the actions and switch on signal
Children will be able to join in the repeated phrases in the songs and learn a short jingle.
They will be able to respond to a clapped rhythm with one of their own
They will be able to identify instruments by their sounds.
They will be able to sing short phrases on their own and recognise the singing voices of their classmates.</td></tr>
<tr><td>Whole Class Input</td><td colspan="8">Introduction / Starter (Timing):
Introduce self
Give out name labels for children to stick to jumpers
Play 'Switch' (simple version) to get everyone concentrating and listening – tap/clap out slow beats and fast beats/slow rhythms and fast rhythms. (E.g. clap (1 beat)/pat head/rub</td></tr>
</table>

	tummy/build tower with fists(two beats)/clap and tap knees/tap forefingers really quickly(quavers)/build tower with flat hands/tap legs (four beats) If this is successful, try the complex version where we copy the action, but continue it when the leader changes – then we switch only when the leader says 'switch'. *Look for: children being able to copy the actions and switch on signal*
	Directed Teaching: (Timing) *How will you model and demonstrate key learning? What are your stimuli? Identify key and differentiated questions and learning points/steps towards the objectives* 1. Revise 'Dr Knickerbocker'. What did we count to? Can we remember the rhythm of the number 9? What actions did we have to do in the song? (hands, feet, hips, lips, head) Sing the song – sing with or without CD. *Look for: engagement, joining in with repeated phrases, copying actions* 2. Play 'Hot Potato'. Remind the children of the song, and then how to pass the bean bag/potato while we sing. When we stop singing (so on 'potato') the person holding the bean bag listens while the teacher claps a little riff. They then clap a riff back (they can either copy or make up one of their own). 'We are having a little conversation'. Do a couple, then instead of clapping, play a rhythm on a percussion instrument. Child chooses an instrument to play back. *Look for: children being able to sing while passing on the bean bag. Can the children make up a short clapped rhythm? Can they copy mine?* 3. Sing 'In a cottage in a wood' with actions. Repeat, inviting the children to join in with the actions. *Look for: engagement, joining in with the actions, joining in with repeated phrases*

L earning	**Differentiated Group Activities -where appropriate** *What will they learn and how?* **(Timing)**	**Assessment Opportunities** *How will pupil progress be identified against the objectives and success criteria? e.g. mini plenaries, self/peer assessment & marking*

	Group work 1. Play 'Matching sounds' Give each child an instrument to play. Practise picking up the instruments and putting them down on a signal, then playing and stopping on a signal. Tell the children that musicians in an orchestra have to learn to do this so that everyone plays at the same time. Once the children have enjoyed playing their instrument play the game. Teacher plays a short rhythm on one instrument and passes it round. Each child must use it to make the same pattern of sounds as leader. Play again with slightly more complex pattern. Play again, this time with a child as the leader. 2. Play 'Singing names'. Teacher sings her name – the children sing it back. 'Put up your hand if you would like me to sing your name'. Sing a child's name and encourage him to sing it back (I may model this with the trainees). Go on to ask questions, the answer is always 'no I don't' or 'yes I do'. 'Do you like ice-cream?' AAEAA. Again, ask trainees to join in to model. 3. Play 'You Can't See'. Teach ditty. Ask for a child/adult to volunteer to be the 'guesser'. They are blindfolded. We all sing the ditty then the teacher points to a child and sings e.g. 'Do you like chocolate?' The child answers and the guesser has to say who it was singing. 4. If time, play 'Drop Out' with two instruments. Child A and Child B each choose an instrument. They play them and march round behind the screen at the same time. They stop. They start to play again, but this time an adult points to one of them to stop playing but the other carries on. The children call out the name of the instrument/show the card of the instrument that stopped. If they manage this try three instruments.	How do the children respond to the opportunity to play an instrument freely in the warm up section of this activity? Observation – look for children being able to replicate rhythms/patterns How do the children respond? Do they sing their names back? Can they pitch successfully? Do the children sing confidently on their own? Can they tell the direction from which the voice is coming? Can they recognise each other's voices? Can the children correctly identify the instrument that 'drops out'?
	Plenary: *How will the lesson end? What key points and questions do you want to ask to consolidate / extend /progress children's learning?*	

<table>
<tr><td rowspan="2">Organisation</td><td>Resources and Materials Required:

Selection of untuned percussion instruments

Sheet for screen

Potato/bean bag

Sticky labels for names

Singing Sherlock CD

Scarf

Instrument cards</td><td>Organisation & Transitions:

How will you organise the children at different points during the lesson? Consider strategies to manage behaviour and safety.</td></tr>
<tr><td rowspan="2">Evaluation</td><td colspan="2">Pupil Progress:

What impact has your lesson had on children's learning? What evidence have you got regarding pupil progress? How effective was your deployment of other adults in supporting pupil progress? Reflect on what went well and what aspects of the lesson need further development.</td></tr>
<tr><td colspan="2">Future Planning:

Your evaluation must clearly inform the next steps in learning and feed forward into future planned learning. Having reflected on the evidence of learning in this lesson, what are the implications for future planning and teaching? How will your assessment inform future planning? How will information you have gained about misconceptions inform the next steps of learning? How will you take the learning of different ability groups forward? How did you perform against your target?</td></tr>
</table>

Appendix 9 Initial questionnaire

Name:

What musical experience do you have?

On a scale of 1 – 5 where 1 = least confident and 5 = most confident:

How confident do you feel about teaching music in the early years?

1 2 3 4 5

How confident do you feel about teaching music in Key Stage 1?

1 2 3 4 5

How confident do you feel about singing in the classroom?

1 2 3 4 5

Have you taught phonics in school, either on PPL or at another time?

Did you use music in your phonics lesson?

Have you seen any music being taught in school?

Why were you attracted by this project?

What do you hope to gain from being involved in this project?

Appendix 10 Interview Schedule

Setting the scene:

I'm interested in a) what you think of the model of teaching that we used, i.e. rehearse, watch, do; and b) what you yourself feel that you learned.

1. River of Experience question – Tell me about your experiences in music (in school)

2. What did you feel that you learned in the training session/from watching another teacher teach/from doing it yourself?

3. What did you notice about the responses of the children?

4. Did you learn what you expected to learn?

5. What would you like more of? Were there any barriers to your learning? Did you prefer the activities with instruments or with singing or did you like them equally?

6. Were you able to make connections between what we were doing and children's reading

7. Will you use this in your own teaching? Are there any barriers that you can see to your using it?

Added to the year 3 qs question about the reflection time afterwards because we had longer.

Appendix 11 UCL Research Ethics Clearance Form - extracts

Ethics Application Form: Student Research

All research activity conducted under the auspices of the Institute by staff, students or visitors, where the research involves human participants or the use of data collected from human participants are required to gain ethical approval before starting. *This includes preliminary and pilot studies.* Please answer all relevant questions responses in terms that can be understood by a lay person and note your form may be returned if incomplete.

For further support and guidance please see accompanying guidelines and the Ethics Review Procedures for Student Research http://www.ioe.ac.uk/studentethics/ or contact your supervisor or researchethics@ioe.ac.uk.

Before completing this form you will need to discuss your proposal fully with your supervisor(s).

Please attach all supporting documents and letters.

For all Psychology students, this form should be completed with reference to the British Psychological Society (BPS) Code of Human Research Ethics and Code of Ethics and Conduct.

Section 1 Project details		
a.	Project title	Exploring music's role in supporting phonological development: the Early Years
b.	Student name and ID number (e.g. ABC12345678)	Veronica Poulter iespo004e
c.	Supervisor/Personal Tutor	Professor Graham Welch
d.	Department	CCM

e.	Course category (Tick one)	PhD/MPhil ☐	EdD ☒
		MRes ☐	DEdPsy ☐
		MTeach ☐	MA/MSc ☐
		ITE ☐	
		Diploma (state which) ☐	
		Other (state which) ☐	

f.	Course/module title	REDTHE_NEW_2014 Thesis Workshops
g.	**If applicable,** state who the funder is and if funding has been confirmed.	
h.	Intended research start date	October 2015
i.	Intended research end date	December 2016
j.	Country fieldwork will be conducted in *If research to be conducted abroad please check www.fco.gov.uk and submit a completed travel insurance form to in UCL Finance (see guidelines). This form can be found here (you will need your UCL login details available): https://www.ucl.ac.uk/finance/secure/fin_acc/insurance.htm*	UK

k.	Has this project been considered by another (external) Research Ethics Committee?	
	Yes ☐	External Committee Name:
	No ☒ ⇨ *go to Section 2*	Date of Approval:

If yes:

- Submit a copy of the approval letter with this application.
- Proceed to Section 10 Attachments**.**

Note: Ensure that you check the guidelines carefully as research with some participants will require ethical approval from a different ethics committee such as the National Research Ethics Service (NRES) or Social Care Research Ethics Committee (SCREC). In addition, if your research is based in another institution then you may be required to apply to their research ethics committee.

Section 2 Project summary

Research methods (tick all that apply)

Please attach questionnaires, visual methods and schedules for interviews (even in draft form).

- ☒ Interviews
- ☐ Focus groups
- ☐ Questionnaires
- ☒ Action research
- ☐ Observation
- ☐ Literature review
- ☐ Controlled trial/other intervention study
- ☐ Use of personal records
- ☐ Systematic review ⇨ ***if only method used go to Section 5.***
- ☐ Secondary data analysis ⇨ ***if secondary analysis used go to Section 6.***
- ☐ Advisory/consultation/collaborative groups
- ☐ Other, give details:

Please provide an overview of your research. This should include some or all of the following: purpose of the research, aims, main research questions, research design, participants, sampling, your method of data collection (e.g., observations, interviews, questionnaires, etc.) and kind of questions that will be asked, reporting and dissemination (typically 300-500 words).

I am a lecturer at North Western University in the Education Faculty where I teach Primary curriculum English on both the BA (QTS) and the PGCE programmes. I believe that our teaching of phonics suffers through not addressing what the 'Letters and Sounds' phonics programme would call 'Phase 1' which focuses on developing children's phonological awareness. Music has an important role to play in this.

As a result of the research carried out in MOE2 and the IFS, I believe that many of our trainees do not have the opportunity to teach music when they are in school on placement.

The research questions are:

How may children be met musically in the early years classroom?

How may children's phonological awareness be supported through music?

How may we meet trainee teachers musically in the early years classroom?

I plan firstly to work in an early years setting to establish what musical activities may be used with young children that help to develop phonological awareness (part 1). I will then work with a group of volunteer trainee teachers in their second year on a BA QTS course, and specialising in Early Childhood Studies at my university. Together we will engage in a 'cycle of enactment' (Lampert et al. 2013). The students will observe me teaching musical activities, and then they will collectively analyse, prepare and rehearse those activities, finally teaching them themselves to small groups of children and evaluating the outcomes. They will then reflect critically on those experiences in the light of the available data (part 2). My hope is that having actual experience of teaching activities using music that research suggests aid the development of phonological awareness, the trainees will interrogate and begin to build critically their own personal theories of pedagogy.

This will be an action research project, in which I will carry out semi-structured interviews with the early years class teacher (part 1) and a randomised stratified sample of year 2 BA (QTS) students specialising in Early Childhood Studies to evaluate the intervention (part 2). I will analyse the data thematically, and write up the findings in my thesis.

Section 3 Participants

Please answer the following questions giving full details where necessary. Text boxes will expand for your responses.

a.	Will your research involve human participants?	Yes ☒	No ☐ ⇨ *go to Section 4*
b.	Who are the participants (i.e. what sorts of people will be involved)? Tick all that apply.		
	☐ Early years/pre-school ☐ Ages 5-11 ☐ Ages 12-16 ☐ Young people aged 17-18	☐ Unknown – specify below ☒ Adults *please specify below* ☐ Other – specify below	
	NB: Ensure that you check the **guidelines** (Section 1) carefully as research with some participants will require ethical approval from a different ethics committee such as the National Research Ethics Service (NRES).		

c.	If participants are under the responsibility of others (such as parents, teachers or medical staff) how do you intend to obtain permission to approach the participants to take part in the study? **(Please attach approach letters or details of permission procedures – see Section 9 Attachments.)**
d.	How will participants be recruited (identified and approached)? Trainee teachers will be invited to participate in the project via university email. The cohort I will be drawing from will be in their second year of a four year BA QTS course.
e.	Describe the process you will use to inform participants about what you are doing. I will speak to them as a group, and explain the purpose of the study.
f.	How will you obtain the consent of participants? Will this be written? How will it be made clear to participants that they may withdraw consent to participate at any time? *See the guidelines for information on opt-in and opt-out procedures. Please note that the method of consent should be appropriate to the research and fully explained.* I will give each participant a letter outlining the aims and objectives of the project and what involvement in it will mean for them (the teacher and the trainees). I will make it clear in the letter that involvement is entirely optional and they may withdraw at any time. The participants will complete a consent form signed both by them and by me. This form will make it explicit that they are free to withdraw from the project at any time.
g.	**Studies involving questionnaires:** Will participants be given the option of omitting questions they do not wish to answer? Yes ☐ No ☐
	If **NO** please explain why below and ensure that you cover any ethical issues arising from this in section 8.
h.	**Studies involving observation:** Confirm whether participants will be asked for their informed consent to be observed. Yes ☐ No ☐
	If **NO** read the guidelines (Ethical Issues section) and explain why below and ensure that you cover any ethical issues arising from this in section 8.

i.	Might participants experience anxiety, discomfort or embarrassment as a result of your study? Yes ☒ No ☐
	If **yes** what steps will you take to explain and minimise this? They may find the teaching of music challenging. I will take every step to support them so that they feel as little anxiety as possible. We will, for much of the time, be team teaching, so it is my job as tutor not to expect more of each trainee than is reasonable. If **not**, explain how you can be sure that no discomfort or embarrassment will arise?
j.	Will your project involve deliberately misleading participants (deception) in any way? Yes ☐ No ☒
	If **YES** please provide further details below and ensure that you cover any ethical issues arising from this in section 8.
k.	Will you debrief participants at the end of their participation (i.e. give them a brief explanation of the study)? Yes ☒ No ☐
	If **NO** please explain why below and ensure that you cover any ethical issues arising from this in section 8.
l.	Will participants be given information about the findings of your study? (This could be a brief summary of your findings in general; it is not the same as an individual debriefing.) Yes ☒ No ☐
	If **no**, why not?

Section 7 Data Storage and Security

Please ensure that you include all hard and electronic data when completing this section.

a.	Confirm that all personal data will be stored and processed in compliance with the Data Protection Act 1998 (DPA 1998). *(See the Guidelines and the Institute's Data Protection & Records Management Policy for more detail.)*		Yes ☒
b.	Will personal data be processed or be sent outside the European Economic Area?	Yes ☐ *	No ☒

*** If yes,** please confirm that there are adequate levels of protections in compliance with the DPA 1998 and state what these arrangements are below.

c.	Who will have access to the data and personal information, including advisory/consultation groups and during transcription? Only the researcher and the supervisor

During the research

d.	Where will the data be stored? Data will be stored on local researchers' machines.
e.	Will mobile devices such as USB storage and laptops be used? Yes ☒ * No ☐ *** If yes,** state what mobile devices: laptops *** If yes,** will they be encrypted?: yes

After the research

f.	Where will the data be stored? On the researcher's local machines
g.	How long will the data and records by kept for and in what format? Recordings will be deleted after the research is complete. Written transcriptions will be kept for seven years after completion of the study.
h.	Will data be archived for use by other researchers? Yes ☐ * No ☒ *** If yes,** please provide details.

Section 10 Attachments Please attach the following items to this form, or explain if not attached			
a	Information sheets and other materials to be used to inform potential participants about the research, including approach letters	Yes ☒	No ☐
b	Consent form	Yes ☒	No ☐
	If applicable:		
c	The proposal for the project	Yes ☐	No ☐
d	Approval letter from external Research Ethics Committee	Yes ☐	No ☐
e	Full risk assessment	Yes ☐	No ☐

Section 11 Declaration

Yes **No**

I have read, understood and will abide by the following set of guidelines. ☒ ☐

☐ BPS	☒ BERA	BSA ☐ Other (please state) ☐

I have discussed the ethical issues relating to my research with my supervisor. ☒ ☐

I have attended the appropriate ethics training provided by my course. ☒ ☐

I confirm that to the best of my knowledge:

The above information is correct and that this is a full description of the ethics issues that may arise in the course of this project.

Name	
Date	30th June 2016

Please submit your completed ethics forms to your supervisor.

Departmental use

If a project raises particularly challenging ethics issues, or a more detailed review would be appropriate, you may refer the application to the Research Ethics and Governance Administrator (via researchethics@ioe.ac.uk) so that it can be submitted to the Research Ethics Committee for consideration. A Research Ethics Committee Chair, ethics representatives in your department and the research ethics coordinator can advise you, either to support your review process, or help decide whether an application should be referred to the Research Ethics Committee.

Also see' when to pass a student ethics review up to the Research Ethics Committee':

http://www.ioe.ac.uk/about/policiesProcedures/42253.html

Reviewer 1	
Supervisor name	Professor Graham Welch
Supervisor comments	Approved
Supervisor signature	
Reviewer 2	
Advisory committee/course team member name	Dr Evangelos Himonides
Advisory committee/course team member comments	Approved
Advisory committee/course team member signature	
Decision	
Date decision was made	1 August 2015

Decision	Approved	☐
	Referred back to applicant and supervisor	☐
	Referred to REC for review	☐
Recording	Recorded in the student information system	☐

Appendix 12 Invitation letter and participant consent form

North Western University
Faculty of Education

June 2015

Dear Student

As part of my work at North Western University, I am studying for a Doctorate in Education at the Institute of Education (University of London). As part of my study, I am carrying out a piece of research that relates directly to my role as lecturer in Primary Curriculum English. We in the English Department wish to enhance our teaching of the teaching of phonics to students. I believe that we need to renew our focus on the 'Letters and Sounds' 'Phase 1' activities which focus on developing children's phonological awareness.

Research shows that there is a correlation between phonological awareness and success in learning to read. It also shows that music has a role to play in developing phonological awareness in young children. I have therefore designed a project whereby I would work with a group of volunteer year 2 trainee teachers. The trainees would observe me teaching musical activities to children in a partnership school. Then together they would collectively analyse, prepare and rehearse those activities, finally teaching them themselves to small groups of children, and evaluating the outcomes.

I am therefore asking if you would be willing to participate in my study. After the project, I would need to carry out a semi-structured interview with each trainee, which I would record on an audio recorder and later transcribe. The interview will take place at a time and in a place mutually convenient to us, and will last for up to an hour. The recordings and notes taken by me will be kept in a secure locked file at the university, and only removed for the purposes of the study. Only the researcher (me) and the trainee (you) will see these. The transcripts will be analysed to inform future decision making processes and short extracts may be used in the final research study. These, however, will anonymised. Your name will be kept separate from any notes made and from the recording in order to maintain confidentiality.

The typed up discussion between the researcher and the student will only be seen by the researcher, the student and the researcher's supervisor at the Institute of Education.

Your participation is entirely voluntary, and you may withdraw at any time if you so wish.

Thank you very much.

Yours sincerely

Veronica Poulter

Exploring music's role in supporting phonological development: the Early Years

Participant Consent Form *Please put a √ for each statement in the boxes*

1. The procedures required for the project and the time involved have been explained to me and any questions I have about the project have been answered to my satisfaction.	
2. I have read the information letter and have been given the opportunity to discuss the information and my involvement in the project with the researcher.	
3. I understand that I can withdraw from the study at any time.	
4. I understand that my involvement is strictly confidential and no information about me will be used in any way that reveals my identity other than to the researcher.	
5. I understand that the interview will be audio-taped and I am aware of and consent to your use of these recordings to inform future teaching at North Western University.	
6. I understand that short sections of the interview might be transcribed and quoted within the study, however my anonymity will be preserved at all times.	
7. I understand that I can stop the interview at any time and that the recordings will be erased and the information provided will not be included in the study.	
8. I understand that the audio tapes and my case notes will be treated as strictly confidential. They will be destroyed at the end of the study.	
9. I know that if I have future concerns about my part in this research we can return to the consent.	

Participant Consent

....
.....

Name of Participant Signature
Date

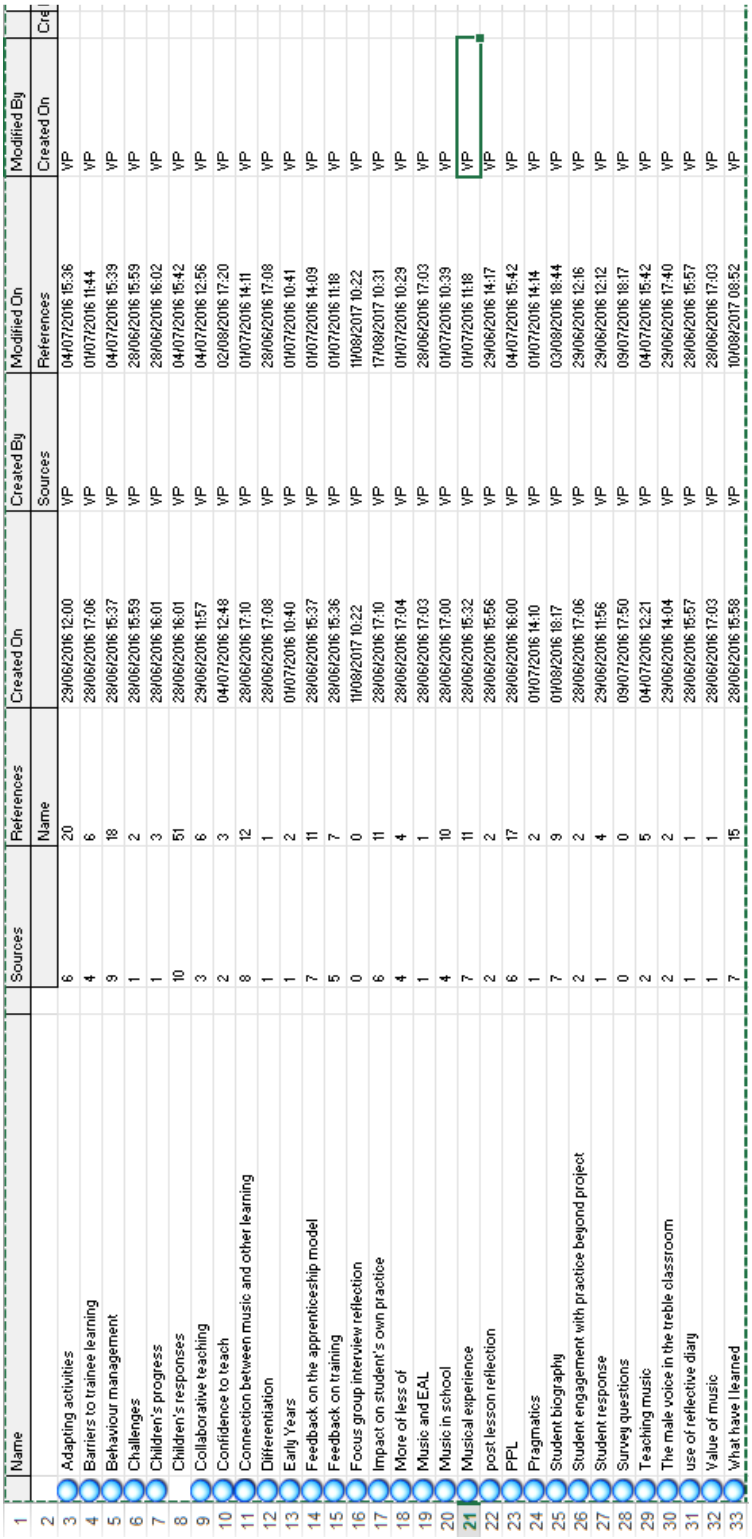
Researcher's Statement

I, ..., confirm that I have explained the purpose of the study to the participant.

....

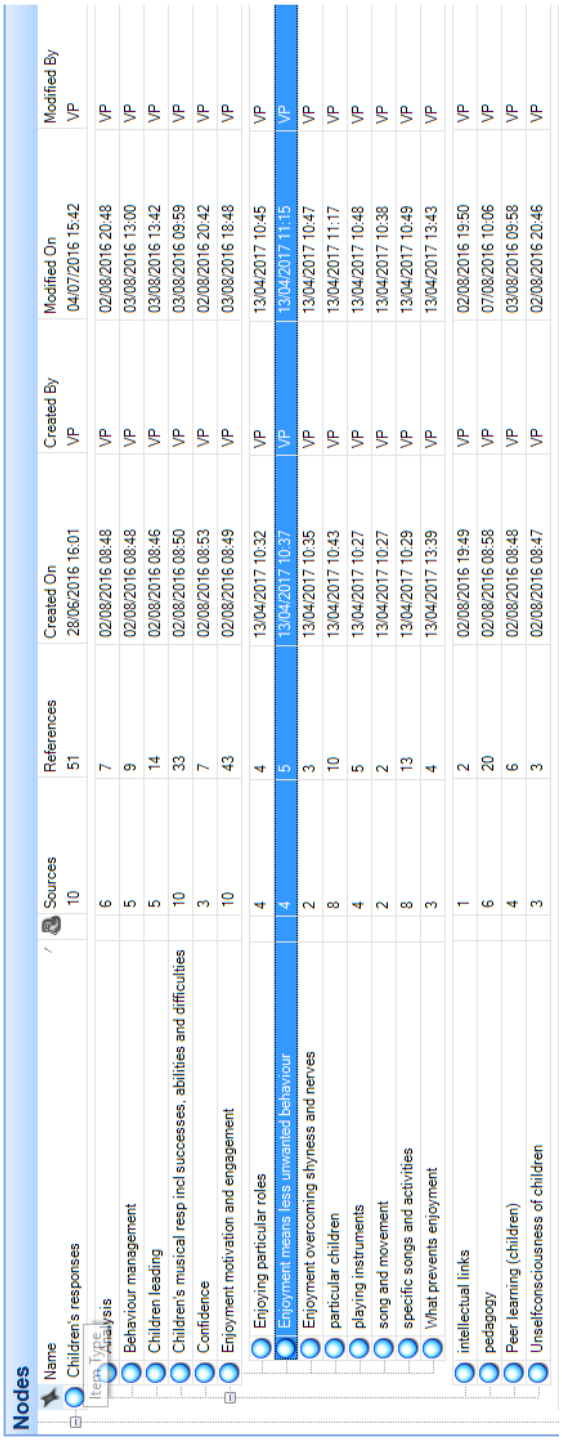
Signature Date

Appendix 13 Initial and further codes



	Name	Sources	References	Created On	Created By	Modified On	Modified By	
			Name		Sources	References	Created On	Cre
3	Adapting activities	6	20	29/06/2016 12:00	VP	04/07/2016 15:36	VP	
4	Barriers to trainee learning	4	6	28/06/2016 17:06	VP	01/07/2016 11:44	VP	
5	Behaviour management	9	18	28/06/2016 15:37	VP	04/07/2016 15:39	VP	
6	Challenges	1	2	28/06/2016 15:59	VP	28/06/2016 15:59	VP	
7	Children's progress	1	3	28/06/2016 16:01	VP	28/06/2016 16:02	VP	
8	Children's responses	10	51	28/06/2016 16:01	VP	04/07/2016 15:42	VP	
9	Collaborative teaching	3	6	29/06/2016 11:57	VP	04/07/2016 12:56	VP	
10	Confidence to teach	2	3	04/07/2016 12:48	VP	02/08/2016 17:20	VP	
11	Connection between music and other learning	8	12	28/06/2016 17:10	VP	01/07/2016 14:11	VP	
12	Differentiation	1	1	28/06/2016 17:08	VP	28/06/2016 17:08	VP	
13	Early Years	1	2	01/07/2016 10:40	VP	01/07/2016 10:41	VP	
14	Feedback on the apprenticeship model	7	11	28/06/2016 15:37	VP	01/07/2016 14:09	VP	
15	Feedback on training	5	7	28/06/2016 15:36	VP	01/07/2016 11:18	VP	
16	Focus group interview reflection	0	0	11/08/2017 10:22	VP	11/08/2017 10:22	VP	
17	Impact on student's own practice	6	11	28/06/2016 17:10	VP	17/08/2017 10:31	VP	
18	More of less of	4	4	28/06/2016 17:04	VP	01/07/2016 10:29	VP	
19	Music and EAL	1	1	28/06/2016 17:03	VP	28/06/2016 17:03	VP	
20	Music in school	4	10	28/06/2016 17:00	VP	01/07/2016 10:39	VP	
21	Musical experience	7	11	28/06/2016 15:32	VP	01/07/2016 11:18	VP	
22	post lesson reflection	2	2	28/06/2016 15:56	VP	29/06/2016 14:17	VP	
23	PPL	6	17	28/06/2016 16:00	VP	04/07/2016 15:42	VP	
24	Pragmatics	1	2	01/07/2016 14:10	VP	01/07/2016 14:14	VP	
25	Student biography	7	9	01/08/2016 18:17	VP	03/08/2016 18:44	VP	
26	Student engagement with practice beyond project	2	2	28/06/2016 17:06	VP	29/06/2016 12:16	VP	
27	Student response	1	4	29/06/2016 11:56	VP	29/06/2016 12:12	VP	
28	Survey questions	0	0	03/07/2016 17:50	VP	03/07/2016 18:17	VP	
29	Teaching music	2	5	04/07/2016 12:21	VP	04/07/2016 15:42	VP	
30	The male voice in the treble classroom	2	2	29/06/2016 14:04	VP	29/06/2016 17:40	VP	
31	use of reflective diary	1	1	28/06/2016 15:57	VP	28/06/2016 15:57	VP	
32	Value of music	1	1	28/06/2016 17:03	VP	28/06/2016 17:03	VP	
33	What have I learned	7	15	28/06/2016 15:58	VP	10/08/2017 08:52	VP	

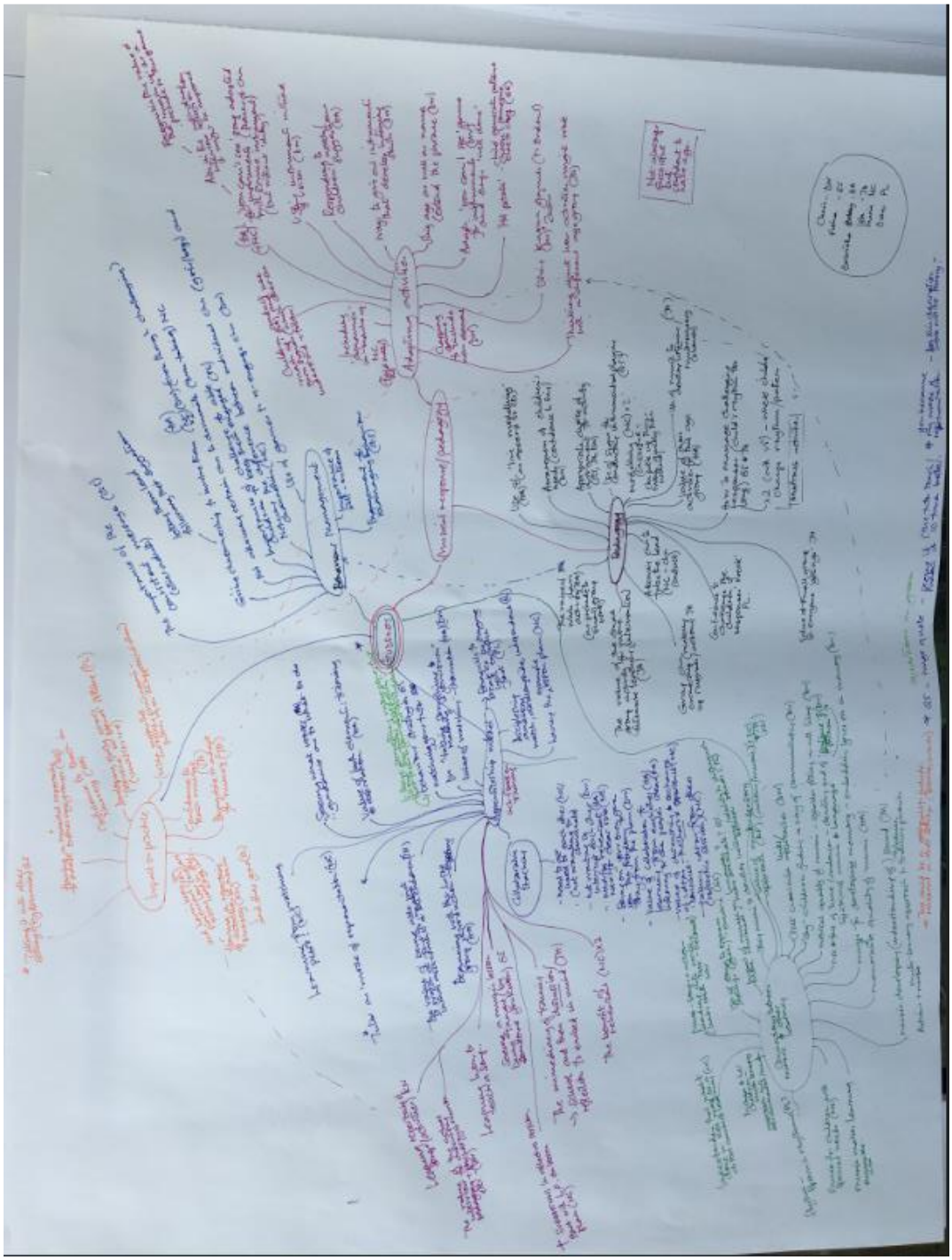
Appendix 14 Examples of sub-codes



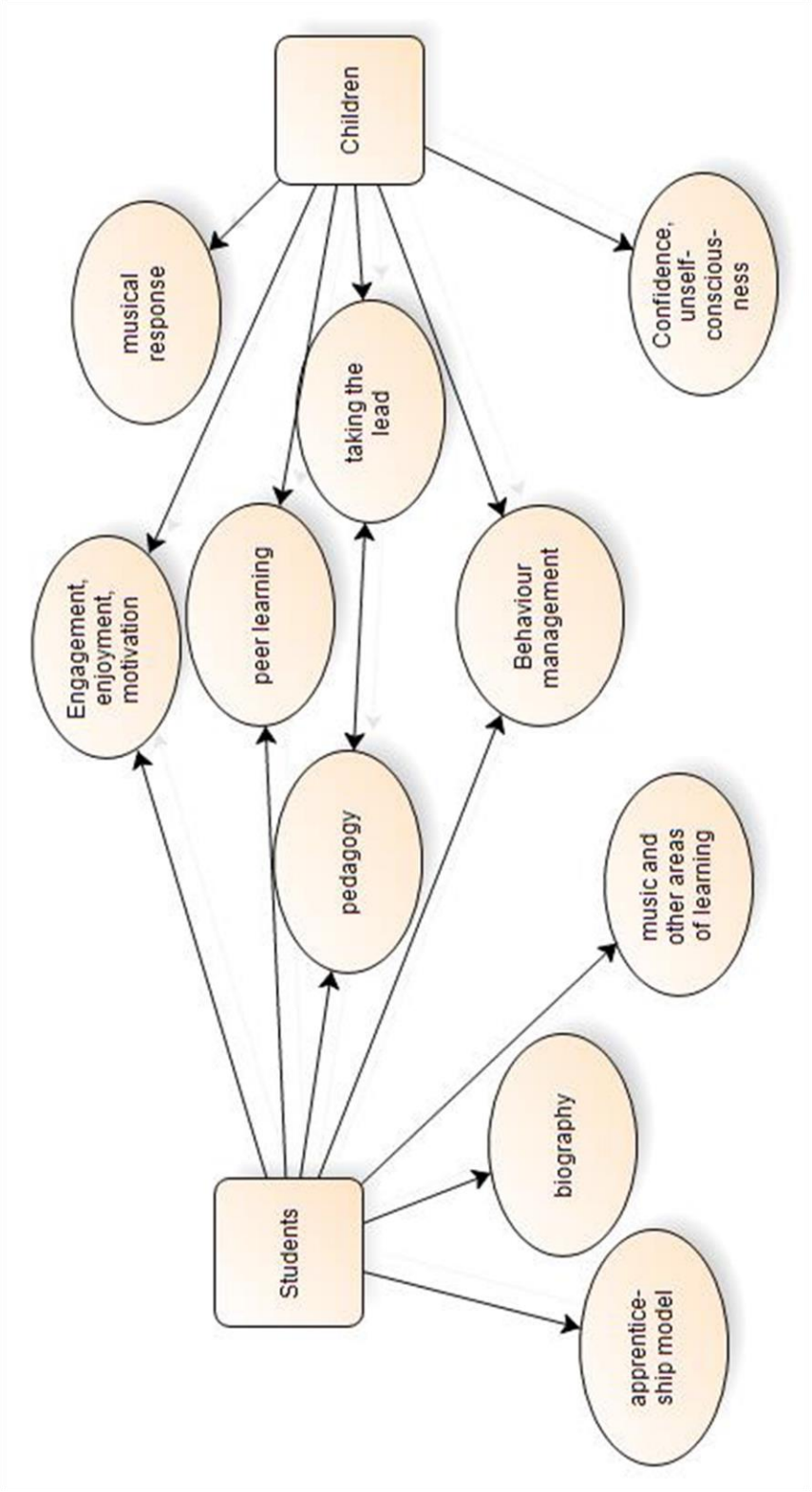
Nodes

Name	Sources	References	Created On	Created By	Modified On	Modified By
Children's responses	10	51	28/06/2016 16:01	VP	04/07/2016 15:42	VP
Analysis	6	7	02/08/2016 08:48	VP	02/08/2016 20:48	VP
Behaviour management	5	9	02/08/2016 08:48	VP	03/08/2016 13:00	VP
Children leading	5	14	02/08/2016 08:46	VP	03/08/2016 13:42	VP
Children's musical resp incl successes, abilities and difficulties	10	33	02/08/2016 08:50	VP	03/08/2016 09:59	VP
Confidence	3	7	02/08/2016 08:53	VP	02/08/2016 20:42	VP
Enjoyment motivation and engagement	10	43	02/08/2016 08:49	VP	03/08/2016 18:48	VP
Enjoying particular roles	4	4	13/04/2017 10:32	VP	13/04/2017 10:45	VP
Enjoyment means less unwanted behaviour	4	5	13/04/2017 10:37	VP	13/04/2017 11:15	VP
Enjoyment overcoming shyness and nerves	2	3	13/04/2017 10:35	VP	13/04/2017 10:47	VP
particular children	8	10	13/04/2017 10:43	VP	13/04/2017 11:17	VP
playing instruments	4	5	13/04/2017 10:27	VP	13/04/2017 10:48	VP
song and movement	2	2	13/04/2017 10:27	VP	13/04/2017 10:38	VP
specific songs and activities	8	13	13/04/2017 10:29	VP	13/04/2017 10:49	VP
What prevents enjoyment	3	4	13/04/2017 13:39	VP	13/04/2017 13:43	VP
intellectual links	1	2	02/08/2016 19:49	VP	02/08/2016 19:50	VP
pedagogy	6	20	02/08/2016 08:58	VP	07/08/2016 10:06	VP
Peer learning (children)	4	6	02/08/2016 08:48	VP	03/08/2016 09:58	VP
Unselfconsciousness of children	3	3	02/08/2016 08:47	VP	02/08/2016 20:46	VP

Appendix 15 Initial mind map



Appendix 16 Combined mind maps (Nvivo)



Appendix 17 Music in School findings – further detail

Only two of the twelve had not seen any music teaching at all. This was not one of the specific interview questions, but six of the twelve gave further details of their experiences during the interview. Sally, for instance, who said on the survey that she had seen music being taught in school, reported that her most recent placement, this had not been the case.

Jane, one of the music specialists, reported that her CT on her second year placement had not felt 'comfortable teaching music' and had asked if Jane would do it. Emma found that while she was on the first part of her third year placement, she 'didn't see it at all. And then I saw it three times this time because it's coming to the end of the year and [the CT] was like 'we haven't done hardly any music' and we need to tick that we've done it. So at the end of the term she did loads because she was stressing out but I don't know I don't think I would push music out, because like you said, it's one that they enjoy and they're engaged.' (Emma)

Alexandra, Bernice and Juliet, on the other hand, described their experiences of observing specialist music teachers' lessons. For Juliet, this had been a good experience:

> 'I think I felt a little bit better because I wasn't sure entirely what music in the early years involved, that was my first experience of that and she – when they had the hall they were able to do much more physical things with the music which I hadn't really considered as a thing – making music more physical – for talking about dynamics and things like that. Like stamping their feet or tiptoeing – that physical association with the musical definitions.' (Juliet)

Alexandra, however, felt that behaviour management had been an issue in the lessons she saw, and she commented on the way learning for the children seemed to have been organised around PPA time for the teacher, i.e. that half an hour's music was followed by half an hour's PSHE: 'but I was a bit like, ooh that's a bit of a mish mash.' Furthermore, there had not been very much use of classroom instruments: the one time she had seem being used was during a Chinese New Year celebration. Bernice was more positive, but as a result of our project she was beginning to see that music taught by the CT could be much more cross-curricular: 'And it was nice to see… and the way we talked about it, now they correspond, how

music… it goes into maths, it goes into English, it goes into science. You know it is a way of like discovering the world I suppose.' (Bernice)

Jemima, on the other hand, noted that in the Early Years classroom she was about to complete her placement in, music had been used effectively to manage transitions; she felt that the singing of a song gave children an element of choice and indeed the motivation to join in with whole class: 'Everybody joins in so it's kind of like something that they're a bit in control of so they just want to come and sit instead of being told off because they just ignore you if you tell them.'

In Emma's placement school, the online Charanga scheme was used (https://charanga.com/site/), and although she could see the benefits of it, she felt that a more practical, hands-on approach was more engaging and led to better learning: 'it was good but they didn't get to do anything practical, it was more – the song would come up on the board and they'd have to get up and there'd be actions on the board and they'd follow it.... It was just following. It was good but they didn't have time to touch instruments or… I preferred it teaching here where they actually get to touch instruments and they're actually seeing music in real life aren't they?'

Becca, Sally and Alexandra all commented on the use of CDs in music lessons or in the classroom. After the project, Becca could see that live singing was a better model than listening to a CD: 'That would have been a lot more beneficial to actually have had someone singing it instead of a CD that you couldn't slow down and anything like that you'd just have to try and pick it up. I think that wasn't very stimulating really just listening to a CD I think it's a lot better how you were doing it just you singing instead of having a CD.' Alexandra told of a child from Romania who had no English and was isolated from the other children until one day in the home corner she started to sing along to the CD of 'Frozen', and was joined by a group of the other girls. 'Oh it was brilliant, it was just lovely to see, that she was actually doing something other than sitting on her own drawing, like she was actually with other people.' (Alexandra)

Jane was the only ST who had actually taught any music whilst on placement. She had done this twice – the first time jointly composing a class song with her year 5 children, and then being in charge of teaching a Key Stage 1 group of children songs for their Nativity, and including classroom percussion with this.

Appendix 18 Selections from the Master's essay

Developing Phonological awareness through Music

Now I turn my attention to an interest in how music helps children's phonological awareness as it is commonly known to share three primary learning skills of reading, listening and communicating. Researchers have found that music can have a significant part to play in the development of phonological awareness. In addition, it provides a complimentary strategy to implement the learning skills. Hall and Robinson (2012) found phonological awareness refers to the ability to identify and distinguish sounds and through training in music, children identify and understand meaning through visual representation. As previously indicated by Rose, Watts and Gardner and the Government consider phonics to be the best teaching and learning strategy in reading ability it is now time to discuss the links that Hall and Robinson have developed to improve children's ability to read. Thus, Goswami and Bryant (1990) argue that phonological awareness is not only the ability to segment a word in to its smallest sound (a skill exclusive to the teaching of synthetic phonics) but syllabification and onset and rime. If phonological awareness is studied in a greater depth it also suggests that it can refined when children are aware of the features.

These methods mentioned above are all interlinked between phonological awareness and music. Butzlaff (2000) quoted that,

> Music activities that involve sounds discrimination (i.e. pitch, timbre, duration, form) can assist in refining phonetic awareness skills in young children and increase the ability to discriminate phonological sounds (sounds, syllables and rhymes).

These experiences happen often both within the classroom and outside which leads to fluency within reading, if the children can understand the text they will be able to use meaning and expression which creates meaningful learning. According to Bruner (1966), developing children form concepts through active experience they develop images. From the research above a link is clearly stated between music and phonics, however, the central question underlying this is whether the engagement in musical activity can enhance phonological awareness before the formal reading begins. A hypothesis that Mortiz (2007) presented was that music and reading acquisition are connected is through links between rhythm and phonological awareness. This suggests that if there is an emphasis on this before children begin to read it should have an impact on the time taken to develop these skills. In the

following sections, I will present principle findings of the current investigation of segmentation, syllabification and onset and rime.

As indicated above segmentation is an aural skill exclusive to teaching synthetic phonics and one interesting find from Verney (2013) was that his early research suggests that children find the syllabification quite easy but the segmentation into phonemes more difficult. This is can be demonstrated by a word 'train' – undeniably one syllable but comprised of four phonemes which can create some confusion between how to divide a word for young children. In schools, there tends to be a focus placed upon reading from an early stage but the teaching of phonics is split into six phases which can be taught from reception until year four. Although, from the discussion above from the Rose Report there is a focus on reading frequently before the children can come to terms with the sounds of the language. Interestingly, Hall and Robinson (2012) found children experience language through sounds and visual representation through musical activities. Activities can encourage children to listen attentively the sounds in words in a similar way to music training.

To enhance my experience of the benefits of music and phonological awareness, as mentioned previously I volunteered for the Hope Project. In terms of segmentation, we understood from Veronica's research that children benefitted from the practice of listening carefully to different sounds and from this we thought it would be favourable to enhance their skills to the identification of sounds. 'What am I playing' (appendix 1) was an activity performed with a small group of children where distinguishable percussive instruments were played behind a screen and the children had to guess the instrument correctly. At first, the children struggled with this task as they were unaware of the sounds although by the end of the third session the children's skills had progressed significantly we therefore altered the task to make it more challenging. One drawback from this experience was time constraints, our results further supported the idea of music increasing awareness of segmentation but we didn't have time to fully investigate this. Yet these findings raise intriguing questions regarding the nature and extent of listening skills in syllabification.

Furthermore, my experience from Willow Primary focused heavily on segmentation. Most mornings we had a 20-minute phonic session where the children had to chop up words into their phonemes. To support the children, they followed chopping actions on their hands and read from an interactive white board, these sessions were chanted quickly and repetitively. If rhythmic processing skills could be

enhanced at the beginning the developmental process, this could have positive effects on the developmental trajectories for literacy (Goswami, 2012 cited in Rebuschat et al 212). Despite the task, I found the children who struggled quite unresponsive as they could not hear the word. If only the time frame allowed me to observe Veronica's research, I feel the children could have benefitted from developing their listening skills.

Syllabification is a major area of interest within the field of phonological awareness according to Goswami's research as stated above and Mortiz' (2007) research related to the skill of segmenting words and syllables into individual phonemes and they discovered that in phonological segmentation tasks, there is an elongated time interval between words. Simply this is a fundamental skill of music and it can be shown when children are asked to tap their feet, the elongated time frame is when the floor is being lifted off the ground which provides a thinking time whilst speaking syllabically. Composers often align linguistically strong syllables with musically strong beats (Verney, 2013). Moreover, Palmer and Kelly (1992) stated that the alignment of strong syllables with musically strong beats is thought to aid memorization which supports Bald's theory as mentioned previously in the Literature Review of Phonics of synthetic phonics being associated with sight memory. In other words, it would be expected that the strong syllables in music are stressed which would aid phonological awareness thus giving a clear indication for young children to have access to music.

From my experience with the Hope Challenge this encouraged the children to repeat words rhythmically by carefully listening to individual beats whilst singing their name (appendix 2), this was modelled in falling thirds by repetition. A representation to show this would be 'so-mi' in a regular scale. Children could clearly hear the syllables in them name and then they progressed to their favourite food which provided challenge. From the teacher's assessment sheets for the children's grouping in class it was obvious to see which children would struggle. In my group, I had two children with little phonological awareness. After the six sessions, I had noted that those children had engaged with the activity at a confident and high level however, selection bias is another potential concern because the findings might not be as positive for all small groups due to uncontrollable factors. Moreover, these results must be taken with caution as it may have been all the aspects of music sessions as mentioned above that progressed the children's learning rather than just syllabication alone. A more comprehensive study would be limited to this skill of

teaching to receive accurate results. In addition to this in Willow Primary syllabification was frequently practiced in the afternoon with small games.

One game stood out for focusing on this aspect- 'Hot Potato' (appendix 3). The benefits were evident as every syllable had a new note emphasising the change for the children to notice and then progressed with replacing words so the children were challenged to find a replacement. Also, the use of an object created slight pauses to allow thinking time. Gregory (1993) concluded that phonemic awareness correlated with simple reading ability and that pitch discrimination had a significant correlation with phonemic awareness. Having a melody benefited this aspect of phonics considerably as it increased their ability to discriminate the phonological sounds.

Another significant aspect to consider is onset and rime. Dowker (1989) conclusions suggested that children have an ability to rhyme before syllable segmentation. The onset is the initial phonological unit of any word and the term rime refers to letters that follow. Goswami and Bryant (1990) highlight the danger of the emphasis of syllabification and segmentation only. They claim that if children are aware of these aspects, they must be making connections between sounds and whole sequences of letters. This can show us that the children make meaningful connections to family of words and awareness of this may progress in learning to read. Wood (1999) found that a subgroup of participants with a mean age of 5:8 who performed poorly on a rhyme detection task, also performed poorly on a phoneme detection task. This clearly identifies the strong link between these two aspects as it may help the children associated a sound with a group of words aiding their memory. Young children who are beginning to read can break up syllables into onset and rimes with ease (Goswami and Bryant 1990) demonstrating that this form of phonological awareness can develop naturally to detect phonemes when the onset is changed.

Research carried out by Moritz (2007) suggest that activities involving production of rhythm patterns or songs with rhyming lyrics could be used to bolster phonological awareness skills. In Willow Primary, my teacher introduced me to songs that help teach and practice the onset and rime skills for the children as we were introducing family of words scaffolding the learning. The first song introduced was by Jack Harmann's Family of Words (appendix 4) which gave the children the rhyme to repeat and the onset changed each time, these songs also drew upon the skill to blend phonemes. I found this activity engaging and successful for the children's

awareness however Ofsted (2011) fail to acknowledge the significance of onset and rime when delivering 'outstanding' phonic sessions. These findings therefore need to be interpreted with caution as there is a discrepancy that may need explored further. Another activity of Harmann's I found successful on delivering lessons on changing the rime was 'exercise as we rhyme' (appendix 5) were the children were assessed on their knowledge of rhyming. I found that these songs were energetic which suited theory by Flemming (2001) on different style of learning in the VAK learning system. If children are not directly taught to use rhyme, they will develop the strategy naturally (but slowly) for themselves (Goswami, 2005). After these activities were carried out, a significant improvement was noted in their reading with their synthetic books that focused on phoneme rime.

The Healing power of Music was an interesting piece of research that supports the theory music developing phonological awareness. Forde and Schlaug (2015) wrote an article about melodic intonation therapy in which singing is a central element for speech therapy after an accident. During a typical session, patients sing short phrases to a simple melody (usually two notes that fall by a minor third – Listen to first two notes of Hey Jude by The Beatles for an example) whilst tapping out each syllable with their left hand. They discovered that the clear changes in the pitch of the voice engages areas associated with perception in the right hemisphere. Also, the rhythmic tapping with the left hand in turn, invokes a network in the right hemisphere. Therefore, these results confirm the benefits of melodic intonation and rhythm were clear in developing improvements with speech fluency after only a few sessions. This supports the activities previously mentioned for developing segmentation and syllabification.

In an interview on 6th December 2016 (Appendix 6), Veronica Poulter stated that the focus of her study found that it impacts dyslexic children, children in early years, Marion Long works with Key Stage 2 children and a study carried out in America with remedial readers. Veronica discovered that music and phonological awareness was very inclusive. Also, bearing in mind that Hempenstall (2009) quoted that 'most children' learn to read effectively, this research between music and phonics may shed new light on children's learning. Furthermore, Veronica states that the research in to this topic is relatively new and from her reading she agreed with what Goswami and Bryant (1990) had to say regarding education needing a neuro-scientist who will make the link between music and the brain as primary teachers would desire to know.

The second aim of this review was to explore the effects on music and phonological awareness. From a wide range of literature, the results of this review indicate the benefits of this teaching and learning strategy when combined with music. The suggested literature promotes the link between these two aspects however, it is beyond the scope of this study to examine how phonics might have been much more successful if the Government had considered and adopted this link into the style of delivery lessons. What is now needed is further research and statutory guidance to promote music in phonological awareness.

Evaluation

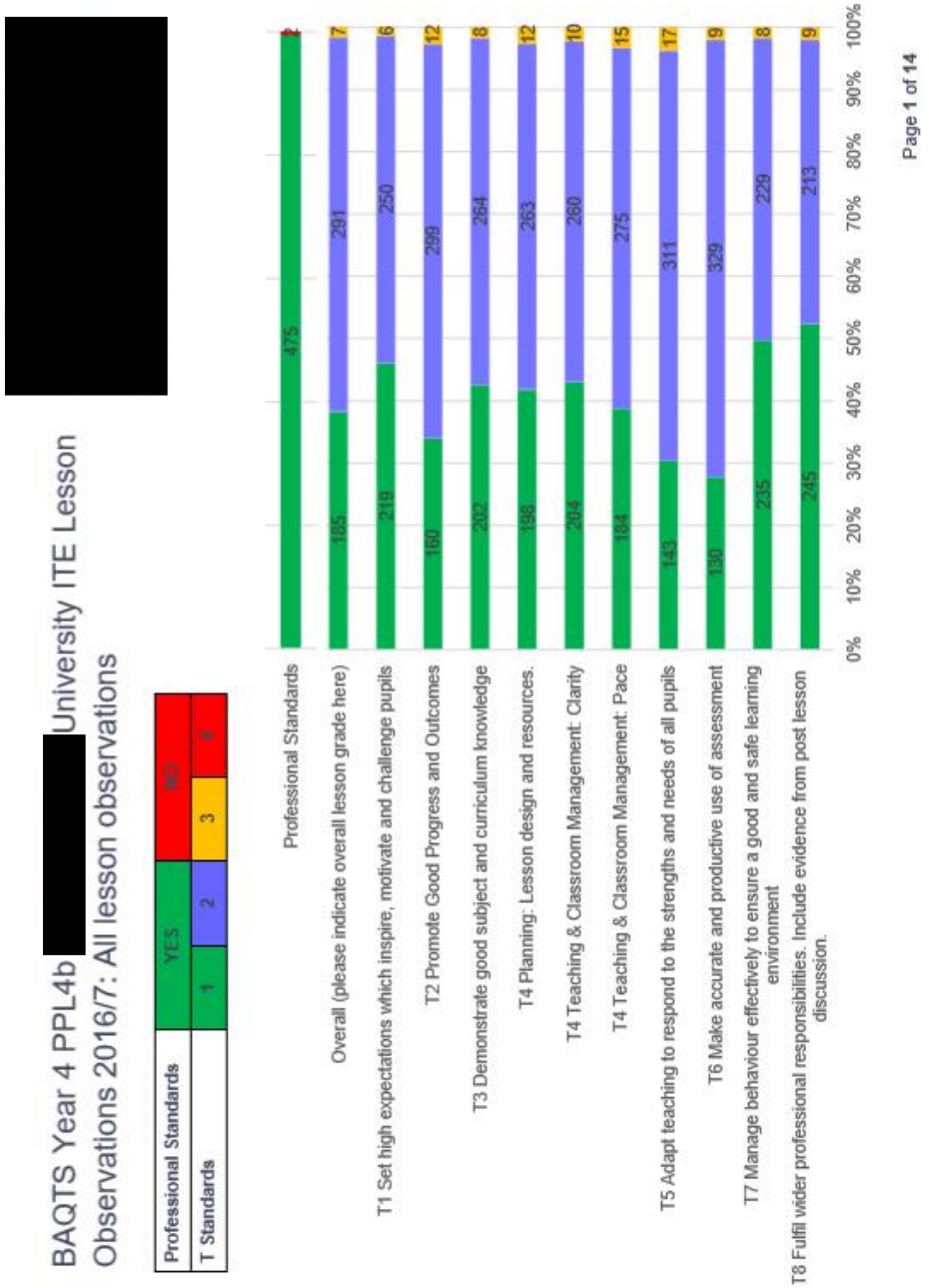
This essay initially set out to explore the importance of synthetic phonics and how phonological awareness can be developed through music. I can clearly see that phonics is a successful method for learning how to read and write and as a consequence of this research I now feel that phonics is the most successful way to read and write. Whilst researching, I have made judgements on this aspect although I do feel that further investigations should be carried out to develop this strategy further as some researchers have found flaws, particularly, the irregularity stated by Brooks. I feel that although synthetic phonics is a successful teaching and learning strategy it could still be developed with a different type of phonics as Clay (1991) found that synthetic phonics was rarely applied when reading. A full discussion of these different types of phonics teaching is beyond the scope of this current study.

Currently there is limited published Government data on the association of phonological awareness and music. Upon experience and literature, I could not gather any negative opinions on this topic it is relatively recent. Goswami and Verney present strong arguments for the benefits between the two aspects however this study is unable to encompass the entire literature behind the association. Due to practical constraints, I could not provide a comprehensive review of music benefitting all learners, however, from my interview with Veronica (2016) she clearly states that this approach is very inclusive and it may shed new light on the way phonics is taught effectively. I understand that my experience has limitations due to the number of years I have been teaching although, I think that music plays a pivotal role in regards to successful phonics teaching and that this is something I want to continue to explore if I am to teach phonics in the future.

Conclusion

In this exploration, the aim was to critically evaluate phonics in terms of relevant theory with support from observations and experience. The results that I have found on this exploration demonstrate that phonics is a successful teaching and learning strategy in place to support child development and that it is beneficial in children's educational journeys. The current findings add to a growing body of literature that is awaiting to be discovered in terms of music connections with sharing of key skills and learning through experiences. Additionally, the uncontrollable discrepancy as mentioned above could be a barrier for learning. Yet, we can still be shown methods to overcome this through the medium of music. Relevant theory and practice has identified the benefits of this aspect then again there is further research to be undertaken by neuro-scientists who could make the link between music and the brain. For that reason, the issue of phonological awareness and music is intriguing as it could be useful for the Primary Teacher if further researched.

Appendix 19 North Western University lesson observations – Teachers' Standards breakdown



Appendix 20 Phonics feedback example

Veronica Poulter <poultev@...ac.uk> 11 June 2018 at 18:21 To: 'X'

Dear X I'm writing to you because in analysing our data, we note that you evaluated some of the areas for Phonics as 'satisfactory'. We are very keen to develop our Phonics sessions so that we fully meet your needs, particularly as you move into your final year. We would therefore really appreciate some further feedback. Please would you let me know what you would like to have had included in these workshops? Best wishes Veronica

-- Veronica Poulter Primary English Coordinator and Lecturer in Teacher Education North Western University

'X' 12 June 2018 at 10:09 To: Veronica Poulter <poultev@...ac.uk>

Hi Veronica,

I put satisfactory as I never taught phonics in school as I've been in KS2 in both placements. I was hoping that in year 3 there would be some sessions based on just phonics as I'm a bit nervous as to how to teach it and approach it!

I didn't mean that your workshops were satisfactory because they definitely weren't and I found them very useful it was a reflection on my part as well - maybe I misread the question.

I hope you're doing well. See you soon!

'X' [Quoted text hidden]

Veronica Poulter <poultev@...ac.uk> 12 June 2018 at 16:35 To: 'X'

Thanks for your prompt reply, X, I really appreciate it. Definitely we'll be doing some more phonics in year 3 so don't worry! And you'll get some opportunities to teach as well - we're building all that in. Have a lovely summer. Best wishes Veronica

Appendix 21 Primary Latin Impact Study

Teaching Latin to Primary School Children at North Western University:

An Impact Study

This case study will describe a project undertaken with 2nd year students on a three year BA QTS course to learn and then teach elementary Latin in Key Stage 2. There were 22 students, eleven of whom are studying modern foreign languages (MfL) as their specialism, and the other eleven, English. The inspiration for this came from a Primary Latin Taster Day for Liverpool teachers run by the Liverpool Classics Hub in February 2017, and we would like to thank Alice Case and Sue Balmer amongst others for many of the ideas that we used.

Context

According to the 'Unlocking Talent, Fulfilling Potential' document (DfE 2017), more disadvantaged children are on average 18 months behind their more affluent peers in their language development by the age of three, 'and around two fifths of disadvantaged five-year-olds are not meeting the expected literacy standard for their age' (op cit p. 11). Vocabulary is a key predictor of whether a child is likely to succeed at school, 'and yet on average, by this age, disadvantaged children are significantly further behind in vocabulary than in any other area of cognitive development' (op cit p.12). The document expresses the DfE's belief that key to bucking this trend is the provision of 'language rich environments'.

Learning Latin has been shown to have had a positive impact on children's literacy. In one London school where the children started to learn Latin, predicted literacy attainment was exceeded by 60% after one year, 75% after

two, and 86% after three years (Holmes-Henderson, 2015). Research also shows that learning Latin is even more useful for children on pupil premium and lower achieving groups than for the higher attainers. Many of our 'two tier' words - words that characterize written text but are not so common in everyday conversation (Beck, McKeown and Kucan, 2008) - have their roots in Latin; therefore Latin can explicitly teach the children English vocabulary which is so crucial for reading comprehension.

For this reason, we wanted our MfL and English specialist students to be introduced to elementary Latin through the 'Minimus' scheme (Bell, 1999), which makes the language accessible and straightforward to teach.

Implementation

We ran two three-hour workshops on consecutive weeks in which the university students were taught some elementary Latin by the Primary English Lead (who has a background in Latin), supported by the MfL lead tutor. We drew on four chapters in 'Minimus: Starting out in Latin' (Bell, 1999). The students learned how to give and obey simple commands as soldiers, the names of animals and adjectives to describe them, simple greetings, numbers, and three songs. They also composed their own 'battle cry' using mottos of various football teams (e.g. Superbia in proelio – pride in battle – which is the motto of Manchester City). The students worked in pairs to plan activities to teach to small groups of year 5 children in one of our partnership schools. There were 22 students and 50 children, and they worked together for a whole morning.

At the beginning of the morning in school, the children were briefly reminded about who the Romans were, what weaponry a Roman soldier had at his disposal, and why Hadrian's Wall was built. They were asked to imagine that they were a cohort of Roman soldiers who were stationed in Vindolanda, an auxiliary fort just south of the wall. The governor of Britannia, Ulpius Maximus, was going to be visiting the fort later that morning. He would expect to be entertained, and he would want to see that his soldiers were disciplined yet fearsome in battle. The children were organised in groups of 5 or 6. In addition to learning Latin songs, vocabulary and commands, they

learned their battle cry and made their own standard using a predatory animal as their mascot, e.g. bears, wolves and sharks. Just before lunchtime, the governor arrived (a student acting in role), and they performed their songs, their drill and their battle cries. We felt that this performance element gave the learning added focus.

(Photographs redacted)

Impact

The feedback from the children was very positive. We were struck with how many of them stated that they had enjoyed every aspect of the morning:

‘I really liked today because I liked we got to perform to master of the troops and all the Latin games and design our posters.’

‘Today I enjoyed learning Latin and meeting new teachers, I enjoyed playing with our group's mascot penguin, I loved creating our Standard and learning new songs, but I really enjoyed it all.’

‘I enjoyed the Games we played to memorise the Latin language, the songs and the chanting, making banners and our mascot.’

‘I enjoyed learning a new language - Latin- I also enjoyed seeing the Head of the Romans, I enjoyed making banners.’

The students were also very positive. Many commented on the immersion in the language through role play, and how beneficial that was. They also felt that they would be more confident to teach a foreign language that they themselves were relative beginners in. One in particular noted that the children were able to make connections between Latin and English vocabulary:

‘This has made me aware of how learning another language impacts upon the children’s knowledge of the English language and their breadth of vocabulary. For example, one of the children immediately connected ‘audite’

with ‘audio’; this prompted discussion as to what ‘audio’ meant. I feel that Latin is something that I may visit in the future due to this reason.’

Further comments:

‘I had naively assumed that as Latin is a ‘dead language’, that the children would not be interested in learning Latin. But in actuality, they all really threw themselves into the experience.’

‘[I enjoyed] the engaging element in the morning – immersion into Latin and the storyline building up to teaching.’

‘The group of children that Emma and myself worked with were very lively and enthusiastic about the learning of Latin. I really enjoyed the teaching of Latin and will take this away on future placements and eventually my own classroom, as the learning taking place through experience was really valuable, for myself and the children.’

‘The whole morning was extremely enjoyable. The children were very easy to work with and engaged really well with the subject. They also were extremely willing to participate and their fantastic attitudes made the morning extremely enjoyable.’

‘The structure of the morning worked extremely well and the concept created by our tutors was fantastic. Our tutors went above and beyond with the support provided to us and created a fantastic environment for us to teach in.’

Next Steps

We aim to repeat this in future years, and hope to develop it further, perhaps with different cohorts of students, e.g. PGCE. We would also like to develop links with the Liverpool Classics Hub, to explore possible collaboration in future projects.

References

Beck, I., McKeown, M. and Kucan, L. (2008). *Creating Robust Vocabulary: Frequently Asked Questions and Extended Examples*. London: The Guilford Press

Bell, B. (1999). *Minimus: Starting out in Latin*. Cambridge: Cambridge University Press

DfE. (2017). *Unlocking Talent, Fulfilling Potential*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/667690/Social_Mobility_Action_Plan_-_for_printing.pdf

Holmes-Henderson, A. (2015). 'Classics in Communities: Classical Greek and Latin in Key Stage 2'. Faculty of Classics Newsletter, Oxford University.

Appendix 22 Masters in Education (QTS) Action Plan - extract

Priority 1: Ensure an outstanding, distinctive and compliant MEd (QTS) programme is designed

OBJECTIVE	DETAIL OF ACTIONS	TARGET DATE	PERSON RESPONSIBLE	PROGRESS UPDATE
Gain an understanding of other MEd (QTS) courses and similar available	• Research which universities offer MEd (QTS) and their course content • Explore other similar programmes e.g. Researchers in Schools • Meet with other MEd (QTS) course leaders e.g. Sarah Charles from University of Derby	July 2018	EP	• School and student case studies of Researchers in Schools compiled • University of Derby - Integrated Masters in Education (MEdu) (in curriculum enhancement) with Qualified Teacher Status – programme discussion 25.6.18 with [redacted] MEdu lead • NPQML course content researched • University of Winchester – Four Year BEd (QTS) Primary Education
Ensure the MEd (QTS) programme effectively builds upon the current BA(QTS) course	• Meet with BA(QTS) year heads, PPL leads and subject leads to discuss transition • Review BA(QTS) training plan and outcomes to identify areas to build upon – e.g. Hope Teacher and Enhanced Specialist Area • Review BA(QTS) assessments including those currently in fourth year e.g. challenge/support viva	May to September 2018	EP and Year Heads	• Meeting with DV and CW 13.6.18 to consider links with BA(QTS) and how to build on Hope Teacher and ESA • Assessments, programme handbooks and training plans analysed and discussed.
Ensure the MEd (QTS) programme utilises the strengths of staff across the university	• Meet with MA Education lead and key staff across the Faculty of Education to identify ways to draw on expertise e.g. [redacted] • Ensure staff involved have access to and use the most up-to-date research to promote high levels of subject and curriculum knowledge and excellence in teaching	September 2018	EP	• NQT links explored with CW on 13.6.18 and will continue with VP in September 18

Appendix 23 Resource Pack - redacted

Developing phonological awareness through music: Resource Pack

It has been established by research that in order to learn to read successfully, children need to have well developed phonological awareness. Researchers have also found that music can have a significant part to play in the cultivation of phonological awareness.

Over the last twenty years, there has been increased Government involvement in the way reading is taught in the primary school, and in 2006, in the Independent Review of Early Reading, Rose recommended that synthetic systematic phonics (SSP) be the prime approach to the teaching of reading, believing that it offered 'the vast majority of young children the best and most direct route to becoming skilled readers and writers (Rose 2006, p.4). Thus, in English primary schools, phonics is now the prime approach to teaching reading.

Researchers agree that phonological awareness (or the awareness of the sound structure of language), along with letter knowledge, is the strongest predictor of reading ability (David et al. 2007; Johnston & Watson 2004). However, as Goswami and Bryant (1990) argue, phonemic awareness, or the ability to segment a word into its smallest units of sound (and the skill almost exclusively focused upon in the teaching of SSP), is just one aspect of phonological awareness; the other two being syllabification (in other words, breaking down words into their component syllables) and onset and rime (the ability to hear rhyme and to supply a rhyming word, or a word with a different onset but same rime, e.g. b-at; c-at; m-at). Indeed, Richardson, Thomson, Scott and Goswami (2004) claim that of these, awareness of syllables emerges first in children, followed by onset and rime, with awareness of phonemes being the being the last of these to develop. Moreover, David et al (2007) and Castles and Coltheart (2004) remind us that awareness of rhythm and rhyme are crucial not only to the beginning reader but also to the developing one as, for example, s/he encounters polysyllabic words to which stress must be assigned. (Think about this for a moment – in a three syllable word like 'happening', the stress is on the first syllable, whereas in 'beginning', it is on the second. How does the beginning reader know this?)

Thus, if as research suggests, phonological awareness and reading acquisition are inextricably bound, it is time to consider how the other two important aspects – syllabification and onset and rime – may be developed in order to improve children's ability to read.

There have been many research projects which have shown how musical activity can impact on children's phonological awareness, and thus their early reading ability. Thomson and her team (Thomson et al. 2013) for instance, used a rhythm intervention which included both speech and non-speech tasks, such as rhythm copying on djembe drums, and a rhythm synchronization game in which they used words to teach rhythm (e.g. 'hill, hill, river, hill' = I I Π I) . Overy and her colleagues had the children tapping the rhythm of a song whilst singing, because as they say, 'an interesting correlation was found between spelling ability and the skills of tapping out the rhythm of a song, which both involve the skill of syllable segmentation' (Overy et al. 2003, p.18). John Verney's music intervention was 'designed to draw specific attention to how the syllables in the words of the songs matched a note in a melody, and how rhymes were positioned at the end of each musical phrase' (Verney 2013 p.176). Schön's team used songs to teach a foreign language, arguing that 'children's songs … facilitate linguistic processing due to their simple and repetitive structure' (Schön et al. 2008 p.982), and Overy agrees with this, claiming further that traditional action songs, which are repetitive and melodically simple, help to develop speaking and listening skills that are the basis for learning to read (Overy 2000).

This resource pack has been assembled with those research projects in mind, using some of the same sorts of activities. Many of the songs included can be sung with highly rhythmical actions, such as Dr Knickerbocker and The Mountain song. There are activities also that develop children's rhythmic abilities which are both speech and non-speech based.

As you will see from the charts on page 3, 4 and 5, the activities are also highly supportive of, and in some places are drawn from, several aspects of Letters and Sounds Phonics Phase 1. As the DfE website suggests, 'In developing their phonological awareness, children will improve their ability to distinguish between sounds, and will become familiar with rhyme, rhythm and alliteration.' In Phase 1, the Letters and Sounds document recommends that children tune into, listen to and remember sounds, and to talk about them – from environmental to instrumental sounds, from body sounds to rhyme, rhythm and

alliteration. This pack will help you to develop your own repertoire of activities that will enable children to do just that.

On the following pages, the activities and songs have been listed separately in alphabetical order. Further information for each item is supplied as it relates to the learning outcomes for music in the Early Years, specific aspects of Phonics Phase 1, and how it may develop phonological awareness in the children.

Musical Activities	Early Years learning outcomes for music	Aspect of Phase 1 Letters and Sounds	Phonological development
Adjust the Volume	• Tap out patterns	2	Explore dynamics (loud and soft). Listen to partner and respond. Experience and develop awareness of sounds made with instruments and noise makers.
Clap Your Hands	• Begin to move rhythmically to music	1, 4	Rhythmic development – matching actions with words
Clapping, foot tapping, knee slapping	• Tap out simple repeated pattern	4	Develop attentiveness to sound
Drop Out	• Explore the different sounds of instruments	2	Develop attentiveness to sound and distinguish between different sounds
Echoing rhythm stick patterns	• Tap out simple repeated pattern	1, 3, 4	Develop ability to copy and create rhythmic patterns
Hot Potato	• Tap out simple repeated pattern	4	Develop ability to copy and create rhythmic patterns
Matching Sounds	• Explore and learn how sounds can be changed • Tap out simple patterns • Explores the different sounds of instruments	2	Experience and develop awareness of sounds made with instruments and noise makers.
Mrs Browning has a box	• Explores and learns how sounds can be changed	1	Distinguish between different environmental sounds and imitate them using voice and body percussion
Music Ball	• Beginning to move rhythmically • Imitates movement in response to music	4	Rhythmic development and responding to musical 'instructions'

Playing to a drone accompaniment	• Taps out simple rhythms • Creates sounds and improvises on a given untuned instrument	4	Rhythmic development – improvising rhythm to drone accompaniment
Repeated rhythm patterns	• Create and tap out simple repeated rhythm	4	Rhythmic development
Singing names	• Explores and learns how sounds can be changed	6	Develop awareness of pitch
Sound parade	• Explores and learns how sounds can be changed	6	Imitate and distinguish between different vocal sounds
Stand up sit down	• Creates sounds and improvises on a given untuned instrument	2	Respond through selective listening to the sound or silence of hidden instrument – distinguish between different sounds
Switch	• Tap out simple repeated pattern	4	Rhythmic development – copy rhythmic pattern. Sustain a rhythmic pattern against a different rhythmic pattern
What am I playing?	• Creates sounds by banging, shaking, tapping or blowing	2	Listening discrimination – identification of different sounds
Who has the penny?	• Explores and learns how sounds can be changed – voice recognition	6	Listening discrimination – identification of singer by the sound and directionality of their voice
You can't see	• Explores and learns how sounds can be changed – voice recognition	6	Listening discrimination – identification of singer by the sound and directionality of their voice

Songs	Early Years learning outcomes for music	Aspect of Phase 1 L & S	Phonological development
Daddy's taking us to the zoo	• Begin to build a repertoire of songs • Begin to move rhythmically	2	Develop awareness of sounds and rhythms
Dr Knickerbocker	• Begin to build a repertoire of songs • Joining in with ring games	3, 4	Develop awareness of sounds and rhythms
Farmer in the fog	• Begin to build a repertoire of songs	6	Improvise with voice sounds Listening discrimination – identification of singer by the sound and directionality of their voice
In a cottage in a wood	• Begin to build a repertoire of songs	3, 4	Develop an awareness of sounds and rhythm. Begin to internalise rhythm – hearing with the 'inner ear'
Mountain Song	• Begin to build a repertoire of songs • Begin to move rhythmically to music	4	Hear the difference between fast and slow rhythms
Neighbours	• Begin to build a repertoire of songs		
Sally go round the stars	• Begin to build a repertoire of songs • Begin to move rhythmically to music • Join in with ring games	3, 4	Develop awareness of sounds and rhythms
She'll be coming round the mountain	• Begin to build a repertoire of songs • Imitate movement in response to music	1	Develop awareness of sounds and rhythms
Ten fat sausages	• Begin to build a repertoire of songs • Create sound by banging, tapping etc	2, 4	Experience and appreciate rhythm and rhyme
The penguin song	• Begin to build a repertoire of songs • Begin to move rhythmically to music • Join in with ring games • Imitates movement in response to music	3, 4	Develop an awareness of sounds and rhythm

The three bears	• Begin to build a repertoire of songs • Begin to move rhythmically to music • Imitates movement in response to music	3, 4	Develop an awareness of sounds and rhythm
Who's that?	• Begin to build a repertoire of songs • Begin to move rhythmically to music • Join in with ring games	3, 4	Develop an awareness of sounds and rhythm

Letters and Sounds Phase 1 Aspects:
1 – General sound discrimination – environmental sounds
2 – General sound discrimination – instrumental sounds
3 – General sound discrimination – body percussion
4 – Rhythm and Rhyme
5 – Alliteration
6 – Voice Sounds
7 – Oral blending and segmenting

Early Learning Goals for Music

8-20 months	16 – 26 months	22 – 36 months	30 – 50 months	40 – 60 months
• Move whole body to sounds they enjoy, such as music or a regular beat • Imitate and improvise actions they have observed, e.g. clapping or waving	• Begin to move to music, listen to or join in rhymes or songs	• Joins in singing favourite songs • Creates sounds by banging, shaking, tapping or blowing	• Enjoys joining in with dancing and ring games • Sings a few familiar songs • Beginning to move rhythmically • Imitates movement in response to music • Taps out simple rhythms • Explores and learns how sounds can be changed	• Begins to build a repertoire of songs and dances • Explores the different sounds of instruments

Songs and Activities

Bibliography for Source Materials

Blakeley, P., Harrop, B. and Gadsby, D. (1996). *Apusskidu: songs for children.* 2nd ed., London: A & C Black – *Going to the zoo; She'll be coming round the mountain.*

DfE (2007). Letters and Sounds: Principles and Practice of High Quality Phonics Phase 1. Crown Copyright – *Adjust the Volume; Mrs Browning has a box; Matching Sounds*.

Harrop, B., Friend, L. and Gadsby, D. (2005). *Okki-tokki-unga: action songs for children.* 2nd ed., London: A & C Black – *In a Cottage; The Three Bears*.

Nicholls, S., Scott, P. and Hickman, S. (2003). *Music Express, Foundation Stage*. London: A & C Black – *Clap your hands; Sally go round the stars; Sound Parade.*

Standring, G., Price, D. and Roberts, S. (1987). *Birds and beasts: animal songs, games and activities*. London: A & C Black – *Farmer in the Fog*.

Thompson. D and Baxter, K. (1978). *Pompaleerie Jig*. London: E. J. Arnold – *Drop out; Stand up, sit down; Switch; What am I playing?; You can't see.*

Whitlock. V. & Court, S. (2002) *Singing Sherlock: the complete singing resource for primary schools, book 1*. London: Boosey and Hawkes – *Dr Knickerbocker; Mountain Song; Neighbours; The Penguin Song; Who's that?*

York, M., (1988). *Gently into Music: possible approaches for non-specialist primary teachers*, London: Longman – *Clapping, foot tapping, knee slapping; Echoing rhythm stick patterns; Hot potato; One potato, two potato; Playing to a drone accompaniment; Repeated rhythm patterns; Singing names; Ten fat sausages; Who has the penny?*

References for the Resource Pack

Castles, A. & Coltheart, M., (2004). Is there a causal link from phonological awareness to success in learning to read? *Cognition*, 91(1), pp.77–111.

David, D. et al., (2007). Rhythm and reading development in school-age children: A longitudinal study. *Journal of Research in Reading*, 30(2), pp.169–183.

Goswami, U. & Bryant, P., (1990). *Phonological Skills and Learning to Read*, East Sussex: Earlbaum.

Johnston, R.S. & Watson, J.E., (2004). Accelerating the development of reading, spelling and phonemic awareness skills in initial readers. *Reading and Writing*, 17(4), pp.327–357.

Overy, K. et al., (2003). Dyslexia and music: measuring musical timing skills. *Dyslexia (Chichester, England)*, 9(1), pp.18–36. Available at: http://www.ncbi.nlm.nih.gov/pubmed/12625374.

Overy, K., (2000). Dyslexia, Temporal Processing and Music: The Potential of Music as an Early Learning Aid for Dyslexic Children. *Psychology of Music*, 28, pp.218–229.

Richardson, U. et al., (2004). Auditory processing skills and phonological representation in dyslexic children. *Dyslexia*, 10(3), pp.215–233.

Rose, J., (2006). *Independent review of the teaching of early reading*, Nottingham: DfES publications.

Schön, D. et al., (2008). Songs as an aid for language acquisition. *Cognition*, 106, pp.975–983.

Thomson, J.M., Leong, V. & Goswami, U., (2013). Auditory processing interventions and developmental dyslexia: a comparison of phonemic and rhythmic approaches. *Reading and Writing*, 26(2), pp.139–161. Available at: http://link.springer.com/10.1007/s11145-012-9359-6.

Verney, J.P., (2013). *Rhythmic Perception and Entrainment in 5--Year--Old Children. An Exploration of the Relationship between Temporal Accuracy at Four Isochronous Rates and its Impact on Phonological Awareness and Reading Development*. Cambridge.