"I don't know anything about music": An exploration of primary teachers' thinking about music in education

Elisabeth D. McCullough

A thesis submitted in partial fulfilment
of the requirements of
Northumbria University
for the degree of
Doctor of Philosophy

School of Health, Community and Education Studies

November 2005

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Ph.D.   2005

Abstract

Teachers' thinking underpins their actions, in various ways, consciously or nonconsciously, and therefore it is necessary to understand their thinking in order to understand their teaching. Part of such thinking concerns subject knowledge, which is an important, albeit often assumed, feature in professional practice. For primary school teachers who cover the breadth of the National Curriculum there are particular issues. In music, despite frequent reports from Ofsted referring to the good quality of teaching, there still appears to be considerable lack of confidence among such teachers, frequently linked with a perceived lack of subject knowledge. Subject knowledge in music is under-researched in this country and this small-scale study was intended to explore the nature of teachers' beliefs about music in education.

In a qualitative case study approach, the teachers in a two-form-entry, inner-city primary school talked individually, in three separate sessions over the course of an academic year, about various aspects of music in education. They also constructed concept maps to represent their thinking.

A process of inductive and iterative analysis led to the identification of four main findings concerning enjoyment, the value of music, issues relating to instrumental teaching and the use of schools' broadcasts. These aspects form the basis of a discussion which moves beyond the original research questions to build an orthogonal model that conceptualises and contextualises teachers' thinking within two dimensions representing their professional/non-professional lives and the formal/informal contexts of musical involvement, nested in their beliefs regarding the nature and value of music. It is suggested that this model might also apply to other subjects.

There are implications from this study not only for teachers themselves and for the schools in which they work, but also for those involved in supporting student and practising teachers through ITE, INSET and CPD, as well as for policymakers.

Acknowledgements

I am grateful to all those who have been involved in supervising this study at different times, but particular thanks are due to Professor Patrick Easen, without whose support it would have been neither started nor, possibly, completed.

I should also like to thank my friends and colleagues throughout the country who have maintained interest over the last few years, variously agreeing with, challenging, stimulating, reassuring and, above all, encouraging me through the research journey.

However, I am most indebted to the teachers who so generously shared the thinking that forms the core of this work. They know I could not have done it without them.

Author's declaration

No part of this thesis has been submitted for any other award. It is the work of the named student alone and any references to the work of others have been appropriately acknowledged in the text.

Contents

Notes to reader

- While aesthetically somewhat cumbersome, chapters are numerically subdivided for ease of cross-referencing within the thesis.

- The use of words such as `instrument' `instrumental' and 'instrumentalist' is restricted to the sense of musical instruments, unless used otherwise by specific authors, for example Stake's (1994) instrumental case studies (see section 3: 3.1). This obviates the need repeatedly to use the adjective 'musical' to distinguish between implement or means and, for example, tambourine or piano.

- The acronym for the *Office for Standards in Education* has, over the years and in different contexts, even within the organisation itself, been variously written as `OF STED', 'Ofsted' and 'ofsted'. Its website (www.ofsted.gov.uk) currently (summer 2005) uses 'Ofsted' when referring to itself and for visual uniformity this is thus the format to which the word has been standardised throughout this thesis, unless a direct quote or a title contained another format.

- The name of the government department concerned with education has evolved during the course of this study. Although named fully in the bibliography (Department of Education and Science, Department for Education, Department for Education and Employment, Department for Education and Skills), references in the text mostly use abbreviations (DES, DFE, DfEE, DfES).

  - American spelling is retained when used in direct quotes.

- Words in ‾‾‾ boxes refer to labels used in the concept mapping activity. Terms from the list relating to the nature and value of music have initial capitals and are *Italicised.*

- Any references from within this study, from the teachers or from my research diary, use [square brackets]. All quotes from the teachers are enclosed within "double quotation marks".

- Although the teachers have pseudonyms in the text (see Appendix A), they are also referenced according to the year group of the class they teach. Thus N is the nursery teacher, Ruth; RA and RB are the Reception class teachers, Rosemary and Laura; 1 A and 1B are the Year 1 teachers Fiona and Jo; up to 6A and 6B for Alison and Valerie; with DH signifying Dave, the Deputy head, and H the Head.

- Each interview is identified by a Roman numeral: I, II or III. Numbers following that refer to the line within the transcript for that interview. Thus, for instance, a quote referenced [3A II: 246] identifies it as coming from line 246 of the transcript of Sheila's second interview. Part of Hilary's [4A] first interview concerned her role and views as music coordinator and quotes from this coordinator's interview are referenced as CI.

- Obviously, because of reassurances that the teachers would be as anonymous as possible, the school's Ofsted report from which I quote cannot be fully referenced. In any case, it has recently been superseded on the Ofsted website by a more recent inspection report.

1

Introduction

1: 1 Description and rationale

This study is an exploration of teachers' thinking about music. In particular it investigates aspects illuminating the knowledge that the class teachers from one inner-city primary school in the north-east of England have of music in education. As such, it links areas from research into teacher thinking with the situation in schools trying to implement the National Curriculum in England. 'Music in education' is seen as wider than music education, involving not only how teachers think about *music education,* but also how they think about music *within* education and how they think about music *itself* It is therefore an investigation into teachers' espoused conceptions of the subject, contextualised within education but with links to their wider lives.

Knowledge of teacher thinking is important because of the connections, albeit not always straightforward or conscious, between thought and action. An awareness of how teachers think is therefore valuable not only for teachers themselves, but also for all those engaged in supporting them in initial teacher education/training (ITE/ITT), in-service training (INSET) and continuing professional development (CPD). Subject knowledge is part of teachers' thinking and potentially underpins all aspects of the teaching cycle: planning, delivery (content and approach) and assessment. Subject knowledge in music is currently under-researched in this country in comparison with other subjects, particularly those comprising the National Curriculum's core subjects, and with other countries, especially the United States. Therefore, there is a gap in the literature.

At the time when the empirical part of this research was undertaken (1999-2000), the National Curriculum requirements were well established and the Office for Standards in Education (Ofsted) reported that, in primary schools, although there continued to be some variation in provision of the music curriculum, on the whole teaching, quality of learning and teachers' subject knowledge were good (Ofsted 1993; 1995a; 1998c). Yet there were also persistent research (see below, section 2.51) and anecdotal reports of a lack of confidence among generalist primary teachers, implying a possible mismatch between what Ofsted and the teachers were regarding as knowledge or music or music education. This study was therefore formulated to look more closely at the content and nature of teachers' knowledge in order to help explain some of the issues relating to their thinking and, ultimately, practice.

However, there were also personal reasons for my involvement in this study. Having started my career as a generalist primary school class teacher, for many years I was employed as a music advisory teacher in different Local Education Authorities (LEAs), working, sometimes over considerable lengths of time, with teachers and their classes in their normal primary school settings. The title of this study, *"I don't know anything about music",* was the most common initial response that I received when talking with teachers. I have also been involved in planning and delivering in-service training sessions of both one-off and extended natures at all levels from individual to national. During this time, I have become fascinated with the varied ways in which different teachers approach and relate to music in education.

In particular, I remember an occasion when a teacher asked how she could ensure each child in her class had a go on an instrument. My subsequent thinking led, eventually, to a realisation of the potential complexity of musical subject knowledge in that

- there was something about how that teacher was perceiving music that made problematic what I considered a general class management issue — because she would not have asked how to make sure each child had a go with the sand tray, for example;

- some teachers therefore treated music differently from other subjects; or perhaps treated each subject differently;

- there was more to subject knowledge for a teacher than amounts of knowing *about* that subject (propositional knowledge);

- given the ubiquity of music in everyday life, of which all — in this country under normal circumstances — have experience, there was a perceived distinction between music in and out of school;

- there was a wide range of attitudes between teachers even in the same school.

This emergent consciousness of pedagogical content knowledge, even if I was at that stage unaware of the term, sparked an interest in developing my own knowledge regarding their thinking However, it was not until the convergence of various professional, personal and practical conditions that it was possible to embark on the PhD journey.

In her introduction to an American journal issue dedicated to papers presented at the first *Qualitative Methodology in Music Education Conference,* Bresler (1994) advocated the importance of bridging the gap between theory and practice. By her terms, I have a foot in each camp: a teacher/adviser, familiar with the practical, school-based situation, but researching from within a university, with my researchees being other teachers, that is, on one level, colleagues, albeit previously unknown to me. Bresler describes how 'teachers who have daily access, extensive expertise, and a clear

stake in improving classroom practice have no formal way to make their knowledge of classroom teaching and learning part of the scholarly literature on teaching' *(ibid.* p. 11). This study looks to give them that voice.

Music education research is, by tradition, frequently rather isolated from mainstream education. This study took place within a university education department rather than in a music education department. One of my specific, even if secondary, intentions was to try to embed and entwine the music education aspects within more general education literature in an attempt to make the area more accessible to readers outside the usual music education community.

1: 2 Overview of subsequent chapters

Following this introductory chapter, the thesis is structured along conventional lines. Because there is a comprehensive Contents list and because each chapter starts with a consideration of aims and contents, the next section is very much an overview, with the intention of showing how each chapter links with the others in the overall structure.

Chapter 2: A review of the literature

This provides the context of the study in all senses, aiming to establish a background covering the aims and justification of the study as well as a description of existing relevant literature. It underpins the rest of the thesis journey.

The sections included follow a progression that shows the nested nature of research into teachers' subject knowledge. Thus a general background to the broad and complex field of teacher thinking is followed by several sections converging the focus via professional

knowledge and subject knowledge in general to subject knowledge in music in particular.

Various contextual considerations are described — in general and in relation to the current educational situation. The notion of the teacher's 'self' is established and emotion is found to play a varied and important role.

Chapter 3: Methodology

This describes the rationale and details behind the empirical part of the research: the discussions with the teachers in a primary school regarding their thinking relating to music in education.

Following the formulation of the research questions, a general consideration of the qualitative paradigm leads on through the decision to employ a case study methodology to the data gathering using, mainly, semi-structured interviews and concept map construction. These methods are described and justified.

There are sections relating to the school and teachers, including details of access and practical arrangements, before a brief consideration of the pilot study leads into a detailed description of the three core interviews.

Although data analysis went on throughout the programme, there is a separate section for clarity of description. Similarly, although concerns relating to research criteria and to ethical considerations were ongoing, they each have discrete sections here.

Chapter 4: Findings

The teachers were generous in their responses and a wealth of data was gathered, but after an extended iterative process, four main findings emerged. These related to the multi-faceted position of enjoyment within the teachers' thinking regarding music in and out of school; the teachers' valuing of music for many and varied reasons; various views relating to instrumental playing in their own and their pupils' lives, as well as its position in music as a whole; and the use of schools' broadcasts in the delivery of the music curriculum within this school.

None of these areas will be new for anyone involved in primary music education. However, the sort of detailed consideration possible in a study of this nature sheds more light on what are often anecdotal reports.

These findings are illustrated by extensive quotes from all the teachers concerned in an attempt not only to support the identified aspects, but also to give the teachers a voice and to impart a feel for the individuals themselves — in particular their different views relating to the nature and value of music These beliefs form the basis for the next chapter.

Chapter 5: Discussion

This chapter falls into two main sections, the first of which discusses the teachers' responses in the light of the original research questions, while the second builds on that in order to move towards a particular model concerning the nature of the teachers' knowledge.

An on-going interest, for me, concerned the different responses of different teachers in their response to the challenges of teaching music. In this discussion of the findings, it becomes apparent that despite the teachers' universal enjoyment of the music they choose to access at home, some aspects of school music are problematic. Their particular beliefs regarding the nature of music seem to influence their views not only about what music is and music education should be, but also about their identities as teachers of music.

Chapter 6: Conclusion

Having laid the foundations in the previous chapter, this one draws on some of the aspects discussed to build an orthogonal model representing the contextual nature of teachers' subject knowledge. This model, it is suggested, can also be used to illustrate how teachers position themselves in respect of the various forms of music they encounter in their professional and non-professional lives.

The significance of various aspects of this research is considered, along with some suggestions for future research and implications for practice.

In accord with a study that has been about teachers' thinking, it closes with some final reflective thoughts from the teacher-researcher.

2

A review of the literature

2: 1 Introduction

As stated in the previous chapter, this study investigates primary teachers' thinking concerning the knowledge that they have of music in education, exploring that thinking in relation both to the statutory and extended curriculum and to issues beyond their professional lives.

2: 1.1 Aims and overview

The underlying intentions of this chapter are that

- this study should be sited in the literature;

- the area of teachers' knowledge in music is described and clarified;

- the area is justified as a research focus;

- the basis for the particular route of this specific research journey is established.

I have chosen the term 'music in education' in order to include what knowledge in and of *music* might be and what knowledge of music *education* involves, as well as taking into account what wider role music might have *within* education. In turn, these aspects relate to more general issues about the nature of knowledge and to the place and role of music in the curriculum. As a research focus, these areas are 'nested' in the broader research category of teacher thinking Therefore, this chapter takes an increasingly focused route from the general background of teacher thinking, through various aspects relating to the nature of knowledge, towards a consideration of knowledge of music in education. As will be apparent, this comprises a vast, complex and interwoven field,

approached by researchers from many different perspectives. Although it is intended that some indication of the field as a whole should be given in order to position this particular study within the literature, nevertheless choices have inevitably been made in the light of relevance to this study and to my particular perspectives. Previous research has been used to inform the present study in epistemological, substantive and methodological respects.

In order to justify a research focus it is necessary not only to establish a gap in the literature but also to establish the need to fill that gap. Therefore throughout this chapter there are sections explaining the importance of research into each area: both in the sense of how those aspects affect teaching and learning and of how knowing about these areas can be beneficial in various ways. In addition, it is necessary to assert the importance of music as a subject — in general, as well as in the sense of a component part of the curriculum within primary schools in this country.

2: 1.2 Description of the chapter

The following brief description of each section within this chapter gives an outline view of the contents, together with reasons for inclusion.

This initial section not only provides a background to the study and describes the contents of the chapter, but also gives an indication of the variety and complexity of the field.

The second main section gives a background account, drawing especially on Calderhead's writing (1987, 1988, 1991, 1993, 1996), of the origins of the field of research into teacher thinking, describing how a growing awareness of the importance

of such thinking, together with shifts within cognitive psychology and within research methodologies, led to its development as a significant research focus. Many of these contributory aspects remain valid in the present educational climate.

Next comes a consideration of teacher thinking itself: what it is, how we learn, and how different aspects of it are variously defined. This section is intended to place the current study in context by showing where and how it fits with existing literature. Furthermore, it indicates how the teachers involved in my study might be expected to conceptualise their thoughts.

There are various ways of categorising and describing different aspects of teachers' knowledge. Although there are many possibilities, the intention of the following section is to highlight those aspects found to be particularly relevant in this study, thus providing contextual background and suggesting potential characteristics that may be expected in the empirical part of my study. In particular, there is an emphasis on Eraut's public and personal aspects of professional knowledge (especially 1994) and on Shulman's conceptions of subject knowledge (from 1986a to 1996). The various sources of and influences on teacher thinking are considered in order to inform empirical and discussion phases of the research. There is then a description of the present significant place of subject knowledge in England as portrayed in the various `official' documents from, for example, Ofsted, followed by a summary of this subsection.

The overview of the official position continues by describing the place of music in the curriculum at the time of the school-based part of this research (1999-2000). This leads to a consideration, using mostly literature from the music and music education field,

particularly the work of Reimer (1989, 1997, 2003) and Swanwick (especially 1994), of some of the ways in which aspects of the nature and value of music are conceptualised and justified within the wider domain of arts education. There is some emphasis, for the purposes of this study, on the place of emotion and the importance of various contextual aspects. This not only gives a theoretical setting for music education in schools, but also indicates some of the ways in which the teachers in this study may view music.

Examples of research are used to illustrate points throughout this chapter, but the penultimate section looks specifically at research into teachers' subject knowledge, with the obvious final focus on generalist teachers teaching music within English primary schools.

The chapter concludes with a summary showing how the preceding considerations of literature relating to the nature of thinking in general and into music subject knowledge in particular justify and lay the foundations for this study.

2: 1.3 General dimensions of research into teacher thinking

Research into teachers' knowledge is situated where the generic field of enquiry into teaching overlaps with the field of cognitive exploration into knowledge: the nature of knowledge, how knowledge is constructed and stored, *what* knowledge is held, and how that knowledge is then accessed and used.

Teachers' thinking is a general term relating to the content, acquisition and use of different forms of knowledge in various circumstances. Although it has tended to be used loosely, referring to different processes from different perspectives, Calderhead writes that 'the term has come to unite a body of research which ... has a common

concern with the ways in which knowledge is actively acquired and used by teachers and the circumstances that affect its acquisition and employment' (1987, pp. 4-5). However, such knowledge is neither discrete nor well defined in form, content or source, and therefore comprises a wide and complex field.

This complexity is then compounded as a research focus when one considers the different perspectives that may be held by those researching the area (Day, Pope & Denicolo, 1990, p. 2; Munby, Russell & Martin, 2001, p. 878). Researchers may come from the disciplines of psychology (for instance, Calderhead, 1996), philosophy (for instance, Fenstermacher, 1986) or sociology (for instance, Ball and Goodson, 1985). They may also have different epistemological viewpoints — for example the positivist, interpretive and critical stances identified by Habermas (1974; see Day, Pope & Denicolo, 1990, p. 2; and Calderhead, 1996, p. 715). These provide different perspectives not only for the researchers but also for the readers, and thus have implications for both investigation and interpretation.

Calderhead describes the different characteristics of these three traditions thus:

> *Positivist research* derives its principles and procedures from the natural sciences. It assumes an objective reality and aims to develop testable generalizations about human behavior that would enable greater levels of prediction and control. *Interpretive research,* on the other hand, is concerned with describing an individual's experience of reality and aims for highly detailed studies of individuals for the purpose of understanding human action in context. Research within the *critical tradition* has a greater concern with emancipation through understanding, aiming to sensitize people, through a critical analysis of their situation, to the power relations in their own context and the causes and consequences of their own actions. (1996, p. 713)

This has obvious implications for how knowledge is viewed:

> Within the positivist tradition, professional knowledge is viewed as a set of lawlike generalizations that can be identified through classroom research and applied by practitioners. The interpretive tradition, on the other hand, views meaning as context dependent and seeks the meaning that humans attach to the

interpersonal and social aspects of their lives. Explicit knowledge exists in the form of case studies and ethnographies ... The critical theory tradition views knowledge as serving particular interests and characterizing certain power relations. *(ibid.* p. 715)

Because the focus, content and research perspectives are so varied, there is no single agreed way of describing and sorting the relevant literature. The way in which the literature is arranged in this chapter therefore reflects the way in which I am categorising it in order to support this particular study, bearing in mind my own perspective on the field as both primary school teacher and music advisory teacher. The ways in which researchers describe and categorise teachers' knowledge are a reflection of the ways in which *they* think as well as of the ways in which those researched think. Patterns are imposed in order to make sense of the phenomena. For instance, Clark and Peterson (1986) divided their summary of research into teachers' thought processes into `teacher planning', 'teachers' interactive thoughts and decisions' and 'teachers' theories and beliefs'. However, they admitted that these three categories 'reflect the researchers' conceptualisation of the domain of teachers' thought processes more than an empirically derived categorization of the domain' *(ibid.* p. 257-8). In turn, one might add that they also reflect Clark's and Peterson's *own* conceptions relating to the field. As Eisner, well known for his scholarship in the fields of arts education, curriculum studies and qualitative research methodologies, memorably explains, 'The kinds of nets we know how to weave determine the kinds of nets we cast. These nets, in turn, determine the kinds of fish we catch' (1996, p. 41).

This variation means it can be difficult to compare research (Calderhead, 1996, p. 713). However, on the other hand there is the advantage that we can draw from these different viewpoints in order to obtain what Day, Calderhead and Denicolo referred to as a `metaperspective' (1993, p. 2). Different perspectives are inevitable, according to

Shulman, because the social sciences are 'quite different from Kuhn's conception of a mature paradigmatic discipline in the natural sciences,' characterised by a *single* paradigm (Shulman, 1986a, p. 5).

As far as *reading* the literature is concerned, Rowland has pointed out the 'very personal and creative nature of reading' means that 'The meaning of a text for one person is different from its meaning for another. It will be dependent upon the context of the reader, the history of their ideas, recent experiences and so on' (1988, p. 59).

It is necessary, therefore, to bear in mind that there are many ways of considering and conceptualising teachers' thinking as far as authors and readers are concerned. There is also, of course, the possibility that anyone reading this thesis perceives meanings other than those intended by the author.

2: 2 Background to the field of research into teacher thinking

2: 2.1 The beginnings of research into teacher thinking

2: 2.1.1 Contributing factors

During the first half of the 20th century, much research on teaching was concerned with how best to teach, asking the question 'What methods are best?' (Brown and McIntyre, 1993, p. 2). Such studies were based on an acceptance of the apparently straightforward and unidirectional sequence of teacher behaviour connecting to pupil behaviour, which then directly affected pupil achievement, known as the process-product or process-outcome approach (Brophy and Good, 1986; Lowyck, 1990; Calderhead, 1996). Researchers in this area 'emphasized the identification of "effective" teaching behaviors

over the study of the beliefs or knowledge that might lead teachers to employ such behaviors' (Nespor and Barber, 1991, p. 426). The aim in these studies was usually to come to context-free generalisations that could then become the basis of educational theory, and so the emphasis was on the key issues of reliability, validity and replication (Beattie, 1995, p. 55) within, usually, the then dominant positivist paradigm, as described above.

By the early 1970s such behaviourist studies were being criticised 'on methodological, theoretical, and ideological grounds' (Calderhead, 1987, p. 5), seen, for instance, as overly narrow and as ignoring contextual factors, including those to do with intention and function. Nevertheless, even in 1975, Lortie was able to write, in his influential sociological study *Schoolteacher,* 'although books and articles instructing teachers on how they should behave are legion, empirical studies of teaching work — and the outlook of those who staff the schools — remain rare' (1975/1977, p. vii).

By then, advances in cognitive psychology were revealing more complex connections between thought and action (Clark and Peterson, 1986; Shulman, 1986a) and 'The view that human beings were capable of constructing their own reality and responding to it in unique and idiosyncratic ways directed psychologists' interests to the interactions of knowledge, thought, and behavior and led to many fruitful areas of inquiry' (Calderhead, 1996, p. 710). During the second half of the twentieth century, therefore, interest started to be focused on underlying thinking behind the behaviour: 'the knowledge and beliefs that inform teachers' decision-making' (Grossman, 1995, p. 20).

This can be seen in a review of research literature in the mid 1980s, when Clark and Peterson were able to conceptualise and present a model, as 'a heuristic device',

representing the relationship between the different parts of the research literature on teacher thought processes. Their figure clearly shows the two main domains of teacher thought and teacher action linked in a reciprocal, rather than the previously accepted one-way, relationship (1986, pp. 256-7).

Piaget's work in cognitive development was very influential in education during the late 1950s and into the 1970s and was part of a shift from an emphasis on behaviourist towards cognitive theories of learning (see below) when new theories of learning had implications for the role of teachers. There was, therefore, a new acknowledgement of and interest in teachers as 'active agents' in the interaction between teacher and learner, rather than as mere transmitters of knowledge (Calderhead, 1987, p. 5; see also Stenhouse, 1975).

There were also several other connected trends and advances that influenced, and were in turn influenced by, the development of research into teacher thinking For instance, partly arising from the view of teachers as active agents, there was increased consideration of teaching as a profession, one feature of which is 'a body of specialized knowledge acquired through training and experience' (Calderhead, 1987, p. 1). This, therefore, focused interest on the knowledge possessed by teachers. Linked with this, the view of a 'reflective practitioner', especially as developed by SchOn (for example, 1983), has shaped both the consideration of how professionals reflect 'on' and 'in' their action, drawing on their specialist knowledge, and the appreciation of how important such reflection is on the development of professional practice.

In addition, curriculum studies were acquiring a distinctive character and position, with increasing awareness of the importance of teachers' intrinsic role in curriculum

development or innovation (Calderhead, 1987, pp. 5-6; 1996, p. 710). Stenhouse (1975), for instance, believed there could be no curriculum development without teacher development.

Not only was the field expanding within the traditional field of educational studies but `other researchers from [for example] the disciplines of philosophy, anthropology, and linguistics also developed interests in teachers' thinking and decision-making and in the verbal reports of teachers about their work' (Calderhead, 1987, p. 6). It was also at this time that 'Interest in human thought became invested in *situated cognition* rather than in highly general, context-independent mental processes' (Shulman and Quinlan, 1996, p. 401). Reflecting the shifts in the dominant learning theory, positivist research methodologies were frequently found to be inadequate for new areas viewed from new cognitive perspectives and there was a reciprocal shift — and not only in *education* research — to what were seen as more varied and appropriate qualitative methods (see Elliott, 2002). New areas of research encouraged new methods of inquiry, while innovative methods of inquiry stimulated and enabled interest in fresh aspects of research focus (Beattie, 1995, p. 56). An example of this was the development of action research during the latter part of the century, carried out by school-based practitioners in their own settings for the eventual benefit of those settings, providing a closer relationship between research and practice (Stenhouse, 1975; Treacher, 1989).

2: 2.1.2 Early years of research

One of the most cited summaries of the early years of research into teacher thinking is the 'authoritative review' (Brown and McIntyre, 1993, p. 3) by Clark and Peterson (1986), mentioned above. They identified Philip Jackson's book *Life in classrooms* (1968) as an early attempt 'to describe and understand the mental constructs and

processes that underlie teacher behaviour' (Clark and Peterson, 1986, p. 255). They explained how Jackson's book was notable for the originality not only of its subject matter but also of the way in which the subject matter was treated as a descriptive, qualitative study rather than as one of 'the then-dominant correlational and experimental research paradigms' *(ibid.)*. Content and method were thus linked from the beginnings of this field of enquiry. Jackson did not omit the quantitative side but, as Eisner later put it, 'What resulted from Jackson's observations was an insightful, artistically crafted book remembered more for its metaphors and insight than for the nods Jackson gave to the quantitative data' (Eisner, 1991/1998, p. 13).

However, the generally accepted starting point for the study of teachers' thinking, when it was 'more or less officially initiated' (Halkes, 1986, p. 211), was the 1974 conference on *Studies in Teaching* convened by the National Institute of Education (NIE) in the United States of America (henceforth abbreviated as US). Panel 6 (of ten) deliberated on 'Teaching as Clinical Information Processing'. Their ensuing report emphasised the link between thought and action, stating, 'It is obvious that what teachers do is directed in no small measure by what they think', so that 'while teaching is done ... by human teachers, the question of the relationships between thought and action becomes crucial' (NIE, 1975, cited in Clark and Peterson, 1986, p. 256). Research into teachers' thinking was therefore necessary if teaching was to be understood. However, it should not be forgotten that this was an evolutionary rather than a sudden realisation because 'while research on teachers' thought processes is new, it has deep roots in early teaching effectiveness and curriculum research' (Clark and Peterson, 1986, p. 292). Nevertheless, as Brown and McIntyre have observed, while 'the need for this additional perspective seems obvious in retrospect, ... it ... has transformed research in teaching' (1993, p. 3).

2: 2.2 The importance of research into teacher thinking

The importance of research into teacher thinking is, of course, connected with the significance of teacher thinking itself. Calderhead describes the value and range of research into teacher thinking in the following passage:

> How teachers make sense of their professional world, the knowledge and beliefs they bring with them to the task, and how teachers' understanding of teaching, learning, children, and the subject matter informs their everyday practice are important questions that necessitate an investigation of the cognitive and affective aspects of teachers' professional lives. (1996, p. 709)

In other words, as Day succinctly asks, 'Can we really understand teachers' work without understanding their understandings of it?' (1999, p. 55).

2: 2.2.1 Links between thought and action

Although there are various perspectives within cognitive psychology, one of the shared themes is 'the central role of knowledge in thinking, acting, and learning' (Borko and Putnam, 1996, p. 673). Connelly, Clandinin and He agree that 'teacher knowledge and knowing affects every aspect of the teaching act' and note that research on teacher knowledge 'exploded' in the decade following the influential 1986 Clark and Peterson chapter (Connelly *et al.,* 1997, p. 666).

Many of the reasons behind the development of research into teacher thinking continue to underlie its importance today. This is because of the two-way connection between teachers' thinking and their actions at all stages of the educational process (Richardson, 1996, p. 104; Pajares, 1992, p. 326). Shulman considered 'the potential determinants of teaching and learning in the classroom are the three significant attributes of the actors' (that is, the teachers and their students) `-- capacities, actions, and *thoughts'* (1986a, p. 7, my italics). In other words, in order to gain information and insight into what teachers *do,* it is necessary to investigate how and what teachers *think.*

However, there is neither a simple nor consistent relationship between thinking and action (Fang, 1996; Munby *et al.,* 2001) and this is reflected in discrepancies in research. Fang, for instance, suggests some of the inconsistency between teachers' beliefs and practices in teaching reading and literacy may be explained by contextual influences on practice or by the different measures used within research *(op. cit.* pp. 52-55).

2: 2.2.2 Ongoing teacher education and support

The importance of knowing about teacher thinking as it affects the area of curriculum development (see above) is illustrated in the music education field by Flynn and Pratt (1995) describing how, despite consultations before the National Curriculum orders became mandatory, 'teachers had no option but to accept the change', thus making the National Curriculum an example of 'authority adoption' (1995, p. 128). As they point out, one of the reasons these often have a poor record of take up is because

> the participants often do not have a sense of ownership and do not fully understand the nature of the change. In this situation, there is a risk that the change will then be reinvented to fit existing and familiar practice. *(ibid.)*

Knowledge of teacher thinking can be helpful to those involved in delivering initial teacher education/training, in-service training and continuing professional development, although Calderhead has described and explained conflicting opinions of its potential contribution in this context (1993, pp. 12-14). He advises seeing different views as parameters rather than discrete perspectives in his demonstration of the complexity of using knowledge of teacher thinking to inform teacher education. In order to clarify this, he consequently advocates encouraging close and reciprocal links between research and teacher education (1993, p. 17).

Golby, in his advocacy of a cognitive theory of emotions to underpin a whole-school approach to professional development, gives a clear justification for the necessity of understanding teachers' knowledge, given that

> [T]here is nothing else in terms of which teachers can be 'developed' other than through their own understandings of their own work. Development, like education, implies starting from where you are. (1996, p. 425)

Eraut (see section 2: 4.1 below) also emphasises the need for awareness of the essential, constructivist role of teachers' personal knowledge in professional development (1994, p. 43). He refers to the 'symbiotic' relationship between the essentially theoretical public knowledge and the practical knowledge of the individual *(ibid.* p. 47). As Flynn and Pratt (1995) suggested above, theoretical codified knowledge is more readily assimilated by practitioners when it relates to their practice and is seen to be useful. Although Eraut agrees there are problems with 'the implicit nature of much professional know-how', nevertheless, 'research into professional practice is beginning to explore the scope for making practical knowledge more explicit, and thus more capable of being disseminated, criticized, codified and developed' *(op. cit.* p. 42). Although Eraut does not there give specific illustrations of this, Elbaz (1983) and Clandinin (1985) would be appropriate early examples. Eraut considers that knowledge about teachers' personal knowledge can be used to inform the theoretical side of teacher education, which can then be adapted to relate more closely to practice. Although he admits that 'There will always be questions about authenticity when describing the ongoing thinking of the actor', he nevertheless considers that 'such attempts at explicit portrayal of professional reasoning are important for the further development of professional knowledge' *(op. cit.* p. 47).

However, there is a dual position for teachers' knowledge and beliefs here. Although they act 'as filters through which [teachers'] learning takes place', so that it is 'through

these existing conceptions that teachers come to understand recommended new practices' (Borko and Putnam, 1996, p. 675), they may also themselves need to be `critical targets of change' in order 'to help teachers make significant changes in their teaching practices' *(ibid.).* Therefore, 'a teacher's knowledge and beliefs are both the *objects* or *targets* of change and important *influences* on change' *(ibid.).* However, it is not easy for teachers — for anyone — to question, and thus potentially undermine, existing practice (Galton, 2000).

In a further connection with teachers' professional development, Calderhead suggests that research on teachers' thinking can assist teachers develop their practice because such research can help conceptualise the practice of teaching and therefore provide teachers with 'a language and concepts that realistically represent their classroom practice' which they can then use to 'analyse and discuss teaching issues' and 'even, on occasions, ... defend the integrity of their practice' (1987, p. 4). This then, importantly, helps give teachers control over their own developing practice (Carlgren and Lindblad, 1991).

2: 2.2.3 Professional knowledge base

Links with the development of a professional knowledge base have already been mentioned (section 2: 2.1.1). Research into teacher thinking helps make explicit the nature of the 'body of specialised knowledge acquired through training and experience' (Calderhead, 1987, p. 1) that can promote the view of teaching as a profession. This is important because

> The power and status of professional workers depend to a significant extent on their claims to unique forms of expertise, which are not shared with other professional groups, and the value placed on that expertise. (Eraut, 1994, p. 14)

Yet, as Eraut wrote, 'people *do not know what they know'* (1994, p. 15, his italics). Research can therefore help draw out that knowledge. Indeed, in the field of music education, Swanwick has specifically proposed that 'research should contribute to developing a base of professional knowledge' (1994, p. 71), because 'No profession can develop without debating key ideas or theories, bringing its assumptions out on the table for public scrutiny. Music education is not exempt from this professional obligation' (1988, p. 9).

In general, therefore, 'We, the community of researchers on school practice, have a moral obligation to ourselves and the community of practitioners (teachers) that we serve to be better informed about the dilemmas of practice so that we are better prepared to help them and ourselves to develop professionally' (GudmundsdOttir, 2001, p. 229).

2: 3 What is teacher thinking?

As already stated, 'teachers' thinking' is a general term used in relation to the content, acquisition and use of knowledge in different circumstances. Specifically, 'teacher knowledge refers to the particular knowledge that teachers have relating to their knowing how to teach' (Bresler, 1994/5, pp. 26-27, citing Stenhouse, 1982). However, this deceptively simple definition refers to a broad and complex area, which is by no means discrete and well defined. Parts of this knowledge are explicit and even in the public domain, but large sections are mainly tacit, when 'we know more than we can tell' (Polanyi, 1967), and are built up by individual teachers through their experience in and outside the classroom. Teachers' work is complex and therefore so is teachers' thinking (Jackson, 1968; Carter and Doyle, 1987; Brown and McIntyre, 1993; Eraut, 1994).

Relevant terms such as 'thinking' and 'knowledge' are defined and used in varied ways within educational research. This general section about teachers' thinking is therefore included firstly to illustrate how other researchers characterise such terms in definition and scope. Secondly, it leads to a description of how such terms will be used within this current study. Thirdly, it suggests aspects that need to be considered and areas that need to be included within the empirical stage of this study; and finally it indicates how the teachers involved in my study might be expected to conceptualise their thoughts. However, because the field is vast and this overview will, of necessity, be brief, some areas with a substantial literature of their own can, inevitably, merely be touched upon.

2: 3.1 How we learn: constructivism

There are links between how and what teachers think and how they learn: how they develop and store their knowledge. Gergen states that "The central epistemological challenge is to understand how individual consciousness comes to have knowledge of the external world' (1999, p. 9). As already indicated above, up until about the late 1950s the dominant theory of learning was behaviourism, with its focus on stimulus leading to response seen in observable behaviour. Many of the advances in epistemological theory during the latter part of the twentieth century revolved round the concept of constructivism, with its basic thesis that the world as we know it is a construction of the human mind, a principle which traces its roots back to the eighteenth century German philosopher Immanuel Kant (see, for example, Stubley, 1992). More recently, the works of Dewey, with his emphasis on drawing knowledge out of meaningful experiences (for example, 1916), Piaget's views on cognitive development (for example, 1973) and Vygotsky's emphasis (for example, 1962) on the socio-cultural context of learning, especially as mediated through language, have also helped, in

different ways, to shape various branches of this theory which covers perceiving, thinking, remembering and understanding.

According to Borko and Putnam, modern cognitive psychology holds that

> The learning of individuals, including teachers, is a constructive and iterative process in which the person interprets events on the basis of existing knowledge, beliefs, and dispositions. Learning outcomes are the changes in mental organization, structures, and processes that result from this active, constructive process. These changes in turn influence the individual's actions in various settings. (Borko and Putnam, 1996, p. 674)

Constructivist learning — for both pupils and teachers — is therefore an active cognitive process where what is learnt is as much a matter of interpretation as acquisition. This view of learning as a subjective construction is usually contrasted with the positivist or realist view where an independent external world — objective truth — is viewed through the application of reason. From that perspective, any discrepancies in individuals' views are the result of distorted perceptions of that objective truth.

From the constructivist perspective comes research interest not only into how teachers might build and hold their knowledge but also into what might influence that construction of knowledge, in particular the physical, cultural and social contexts in which knowledge and learning are situated. Fox has argued that such views 'have relatively little to say which is distinctive and not already implied by common sense, broadly empiricist, accounts of learning' (2001, p. 23). However, although his provocative deconstruction is valuable in its challenge to what might otherwise remain taken for granted, he does not suggest what he might consider a preferable theory.

As indicated above, the term constructivism refers to a particular epistemological conception that became a feature of cognitive psychology during the middle of the last

century (Winch and Gingell, 1999, p. 42). However, although the term is frequently used in educational practice in a general sense (for example, Littledyke and Huxford, 1998), constructivism is actually an umbrella term covering a range of related theories. For example, as Burr writes, from her social constructionist perspective, 'Readers may sometimes be confused by the fact that the term `constructivism' is sometimes used to refer to theoretical approaches that seem to share fundamental assumptions with social constructionism' (2003, p. 19). Although the terms associated with constructivism and constructionism are sometimes used synonymously (as an example I suggest Robson, 2002, p. 27), Burr distinguishes in the following way:

> The essential differences between such constructivisms and social constructionism are twofold: in the extent to which the individual is seen as an agent who is in control of this construction process, and in the extent to which our constructions are the product of social forces, either structural or interactional. (Burr, 2003, p. 20)

Part of the difference appears to derive from the disciplinary background of the respective position. Constructivism itself is a philosophical construct criticising essentialism that, as already mentioned, was taken up by *cognitive* psychologists such as Piaget and Vygotsky. Constructionism also takes a critical stance towards positivism and empiricism (Burr, 2003, pp. 2-3) and is also a psychological construct, but modern social constructionism is particularly developed from the *sociology* of knowledge found in Berger and Luckmann (1966), which in turn drew on symbolic interactionism (Burr, 2003, pp. 13-14; and see, for example, Charon, 2001). Gerger (1999) distinguishes between **radical constructivism:** described as 'a perspective with deep roots in rationalist philosophy, that emphasises the way in which the individual mind constructs what it takes to be reality'; **constructivism:** 'a more moderate view in which the mind constructs reality but within a systematic relationship to the external world'; **social constructivism:** where although 'the mind constructs reality in its relationship to the

world, this mental process is significantly informed by influences from social

relationships' (often associated with the work of Vygotsky); **social constructionism:** where 'the primary emphasis is on discourse as the vehicle through which self and world are articulated, and the way in which such discourse functions within social relationships'; and **sociological constructionism:** where 'the emphasis is on the way understandings of self and the world are influenced by the power that social structures ... exert over people' (Gerger, 1999, p. 60).

However, because much literature concerning teacher thinking and research most typically uses terms such as constructivism and constructivist in the general sense of an individual constructing knowledge in response to various contextual factors (for example, Prawat, 1992; Pope and Denicolo, 1993; Schwandt, 1994; Borko and Putnam, 1996; Calderhead, 1996; Munby *et al.,* 2001), that is the way in which it is used in this thesis, albeit with some emphasis on the social context so important to social constructivists. The implications of constructivist views on acquiring and holding knowledge for this study lie in the emphasis on individual learning and the important (although not exclusive) role of experience — past and present — in helping the individual construct concepts. Context of time and place (in the widest sense), including social influence, is therefore an important issue. It will also be interesting to see whether the teachers involved in the study employ constructivist teaching approaches. In particular one might look for examples of Vygotsky's (social constructivist) notion of the zone of proximal development (ZPD) where, through the teacher's scaffolding (not a Vygotskian term), the learner is helped to move from a level of actual to potential development.

As well as a metaphor for how we acquire knowledge, the term constructivism is also used in relation to certain research methodologies, 'a loosely coupled family of

methodological and philosophical persuasions', where 'their particular meanings are shaped by the intent of their users' (Schwandt, 1994, p. 118). For example, Burr refers to Kelly's personal construct psychology (PCP) as a constructivist position (Burr, 2003, p. 19). Therefore, any research methods associated with PCP, for example, repertory grid techniques, would fit a constructivist perspective. So this is also a consideration in the current study.

Constructivism being the current dominant learning perspective means it also provides the backdrop for the consideration of some of the related terms in the next section.

2: 3.2 Thinking: an exploration of some common terms

Although Pajares advocates 'not only clarity of thought and expression but also preciseness of word choice and meaning' (1992, p. 309), this may not be possible in the field of teacher thinking where various terms are used interchangeably and with different meanings. In particular this section considers the terms *thinking, knowledge, beliefs* and *understanding.*

For example, Calderhead describes teacher thinking as referring to 'various processes such as perception, reflection, problem-solving, the manipulation of ideas, etc.' (1987, p. 4). Yet 'thinking' can also be used to refer to the product, 'thoughts', which Shulman, broadening the scope still further, defines as 'the cognitions, metacognitions, emotions, purposes — the tacit mental and emotional states that precede, accompany, and follow the observable actions, frequently foreshadowing (or reflecting) changes in the more enduring capacities' (1986a, pp. 7-8). This interlinking of cognition and affect will become a recurring strand through this study.

Eraut has described the problematic nature of the term 'knowledge', particularly as exemplified in the 'frequently cited triumvirate — knowledge, skills and attitudes', where skills are assumed to be separate from knowledge (1994, pp. 15-16). In a similar way, therefore, we might query the National Curriculum's 'knowledge, skills and understanding' (see, for example, the requirements for music, Department for Education and Employment/Qualifications and Curriculum Authority, 1999). Although here given as an instance of the unclear distinctions between terms, this latter example is also relevant because of the emphasis on subject knowledge in National Curriculum contexts (see 2: 4.3.5).

The division between knowledge and belief is also unclear. Either any distinction is ignored (as by Borko and Putnam, 1996; and Fang, 1996), or an attempt is made to apply a 'truth condition' to knowledge (reported by Richardson, 1996, p. 104) with beliefs implying 'suppositions, commitments, and ideologies' (Calderhead, 1996, p. 715). However, Munby, Russell and Martin (2001) relate that 'the research literature does not always adhere to this convention; thus research on teachers' knowledge can be as much about teachers' beliefs as teachers' knowledge' (2001, p. 885). In any case, Eraut has pointed out that a 'truth test' is 'quite impracticable in areas of complex theory' where there may be much debate (1994, p. 16).

Richardson attempts to unpick the difference between *attitudes* and beliefs by describing how generally, in social and educational psychology, attitudes have come to be considered *affective* predispositions while beliefs are *cognitive* in essence (1996, p. 103). But this association of belief with the cognitive had been disputed by Nespor (1987) and Pajares (1992), and Calderhead suggests there is little distinction when he writes that 'beliefs' are used 'almost interchangeably' with 'values, attitudes,

judgement, opinions, ideologies, perceptions, conceptions, conceptual systems, preconceptions, dispositions, implicit theories, personal theories, and perspectives' (1996, p. 719).

As far as research into teacher thinking is concerned, this confusion of terms often seems more an epistemological concern than a practical issue. Perhaps it is the case that in a relativist and constructivist context, the notion of belief and knowledge as separate entities is inherently problematic. They are certainly very close in the personal practical knowledge of, for example, Elbaz (1983) and Clandinin (1985). Given that we each have individual awareness of the world, Eisner makes the point that 'we cannot secure an ontologically objective view of the world' (1991/1998, p. 60).

In a similar way, the word 'understanding' is 'applied to a range of targets', which, according to White and Gunstone, can be concepts, whole disciplines, single elements of knowledge, extensive communications, situations or people (1992, p. 3). If we invert the word to 'standing under' there is an implication of underlying unification, and an implied connection between different aspects is an important characteristic supported by Newton (2000), who has explored the concept of understanding, its nature and significance, as it relates to educational settings. He describes understanding as the `relating or linking of thoughts, ideas and information to form a coherent whole' *(ibid.* p. 16). This then becomes a working (mental) model that, because it can be manipulated in one's mind's eye, can therefore be used in different situations. However, he agrees that 'understanding ... can mean different things in different contexts' (p. 2) and hence advocates 'a broad view of what understanding encompasses' (p. 17). Perkins (1986) went even further when he maintained that understanding involved familiarity with the purpose as well as the structure of knowledge.

Just as knowledge and belief seem a continuum, White and Gunstone describe how `understanding ... is a continuous function of the person's knowledge' (1992, p. 7), arguing that although common verbal usage would have it that either one does or does not understand something, in fact, 'Everyone understands to some degree anything they know something about' *(ibid.* p. 6). Moreover, a further limitation of verbal language is found in the possibility of understanding a concept without being able to put it into words. In the context of the current study, this becomes a particularly important point in relation to music, where meaning is carried in non-verbal symbolic form (see 2: 5.2, below). It is also relevant because it means that every teacher taking part in this study who has some experience — and therefore knowledge — of music, will have some understanding of it, even though they may not be able to be articulate it.

The teachers involved in this study can thus be expected to reveal different forms, depth and complexity of understanding, some of which may be inferred from how they use, as well as talk about, music. However, as we have seen, these terms can be used with overlapping, even conflicting, meanings which may include affective as well as cognitive considerations (see 2: 4.2.4 for further links between cognition and affect). Therefore, in order to be as inclusive as possible, and to allow for the different usages of the various terms both in the literature and by the teachers in my study, I will follow those, such as Kagan (1990) and Borko and Putnam (1996), who use the word `knowledge' as a grouping term, incorporating other terms such as belief, understanding, attitudes and propositions. Part of the content of that blanket term will undoubtedly be propositional knowledge, but much is likely to be less objectively verifiable, albeit possibly held as 'truth' by the people concerned. In this open usage I am emulating Eraut who, at the beginning of his important book on the nature and development of professional knowledge, explained

I intend to use the term 'knowledge' to refer to the whole domain in which more specifically defined clusters of meaning reside ... This enables the relationship between these types of knowledge and their significance for professional work to be discussed without repeatedly getting embroiled in definitional issues. (1994, p. 16)

2: 4 Aspects of professional knowledge

The main focus of this study is the thinking surrounding knowledge relating to music in education, which thus comes under the category of subject knowledge. In turn, subject knowledge is embedded within wider professional knowledge. The following section gives some indication of

- how professional knowledge can be conceptualised using Eraut's distinction between public and personal knowledge;

- the influences on teachers' knowledge: context (time, place, experience, 'self') and emotion;

- ways of categorising professional knowledge, including pedagogic and subject knowledge;

- how such knowledge is held — for instance as images, metaphors or case studies;

- the nature of subject knowledge — particularly drawing on the work of Shulman — including links with generic pedagogic knowledge;

- the importance of subject knowledge.

2: 4.1 Public and personal knowledge

Michael Eraut, whose work has already been referred to in this chapter, has published extensively on professional knowledge and learning (for example, 1985; 1994; 2000a; 2001). His erudite writings comprehensively cover the nature and acquisition of professional knowledge but, for the purposes of this study, the next section concentrates

mainly on one strand of his work: his division of professional knowledge into two main areas: public and personal.

For Eraut, public knowledge is a codified body of propositional knowledge which he likens to Ryle's (1949/1963) 'knowing that'. Although it might contain propositions *about* skilled behaviour, it does not include those actual skills (`knowing how'). It is the formal knowledge embodied in a profession, and as such is 'explicit by definition' (Eraut, 2000a, p. 114).

He distinguishes between three forms of propositional knowledge:

- 'discipline-based theories and concepts, derived from bodies of coherent, systematic knowledge', which may, however, be seen by practitioners as irrelevant because they do not necessary originate from the 'field of professional action';

- 'generalizations and practical principles in the applied field of professional action';
- 'specific propositions about particular cases, decisions and actions', which are usually seen as relevant but have more problematic validity because the practitioner has to generalize from his/her experience of individual cases — either directly or vicariously from other people's experiences (1994, pp. 43-44).

In this public category, therefore, would come, for example, National Curriculum requirements, as well as much information from professional development sources.

However, Eraut advises that 'important aspects of professional competence and expertise cannot be represented in propositional form and embedded in a publicly accessible knowledge base' (1994, p. 15). Hence personal knowledge, which is the particular knowledge, or 'cognitive resource', each individual draws on in order to act

as a professional (2000a, p. 114). Although such knowledge includes some of the public, codified knowledge, only *apart* of that selection — known as 'action knowledge' — will be 'sufficiently integrated into or connected with personal practice to be either automatically or very readily called into use' (1994, p. 17). Although in *this* book Eraut identifies and describes process (procedural) knowledge as a separate, third, body of knowledge (1994, p. 103 and pp. 107-116), he later incorporates process knowledge into personal knowledge (2000a, p. 114). Much of this personal knowledge base includes memories of previously encountered cases and problems 'which have been encountered, reflected upon and theorized to varying extents and with varying significance for current practice' (1994, p. 17).

However, despite that part of public knowledge integrated as action knowledge, it does not follow that these two areas, public and personal, are necessarily consonant (1994). This means professional knowledge cannot solely be characterised by either the codified body of knowledge or in terms of what the individual professionals know — not least because each individual's version will be different, 'raising questions of whose knowledge it is that is being described' *(ibid.* p. 18). Because each individual has personalised, through the influence of different experiences (see above, section 2: 3.1), the selection of public knowledge that has become action knowledge within his/her personal knowledge base, not only may there be differences between the public codified knowledge base and the personal knowledge of practitioners as a whole, there may also be considerable differences between the individual professionals themselves. It should also be noted that there is also the possibility that a teacher's espoused theory may not be a reflection of that person's implicit theory of action (as defined by Argyris and SchOn, 1974, see Eraut, 1994, p. 29). Argyris and Sch8n (1974) argue that professional actions are based on implicit 'theories in use', which may differ from the overt

`espoused theories' used to explain them. In support of research such as the current study, `Argyris and Schiin regard making such theories explicit, and thereby open to criticism, as the key to professional learning' (Eraut, 1994, pp. 42-3). Such aspects are further developed in SchOn's later work promoting the influential notion of the professional as 'reflective practitioner', drawing on various embedded aspects of knowledge-in-action (see, for instance, SchOn, 1983).

Eraut considers that 'Codified knowledge is identified by its source and epistemological status, personal knowledge by the context and manner of its use' (2000a, p. 114). He maintains that acquisition and use of professional knowledge are the same process because it is through use that knowledge is learnt and is thereby transformed (when integrated in context, through use, with a person's own experience) (1994, p. 25). This is supported by Eisner, who considers knowledge is not 'an inert material' to be collected, but rather 'a functioning aspect of human cognition' which, in order to exist, `must be known'. Furthermore, 'To be known, someone must act upon it. In short, knowledge is a verb' (1991/1998, p. 210). In music education, such statements resonate with, for example, Elliott's conception of a praxial philosophy (1995; and see 2: 5.2 for other literature regarding music and knowledge).

If this is so, then it follows that it may be possible to look at the use of knowledge — in various ways — in order to infer meaning. In relation to this study, it could mean looking at how the teachers use music — in and out of school — as a means of investigating their knowledge.

2: 4.1.1 Tacit knowledge

Investigating teachers' knowledge becomes problematic when one considers that personal knowledge can be explicit or tacit, with Eraut questioning whether the 'tacit' is an attribute of the knowledge or of the knower (2000a, p. 114). As with several of the other terms connected with thinking, tacit knowledge is another variously used expression. Sometimes it refers to knowledge that *cannot* be articulated, as in Polanyi's (1967) oft-cited definition: 'that which we know but cannot tell'. Other times it is knowledge that has not *previously* been articulated, but can, possibly, be accessed, maybe with the help of another, for instance a skilful researcher. Sometimes knowledge may *become* tacit because the actions arising have become so familiar and practised that one no longer needs to think about them, so that 'knowledge about practice which is explicit soon becomes implicit, embedded in the practice itself(Day, 1999, p. 23).

In research into teacher thinking, tacit knowledge obviously poses a problem of access, either because it truly cannot be articulated or because it is just not brought to mind at the time, although one should remember that 'even the most complete, explicit account of expertise from an ideal witness will still lack aspects of tacit knowledge which remain unrecalled and undisclosed' (Eraut, 2000a, p. 119). There is thus a challenge for researchers who need to 'reach as far as they can down the continuum from explicit to tacit knowledge' either by helping those 'witnesses' to tell what they know, or by inferring the knowledge from what has been said *(ibid.)*.

2: 4.2 Influences on teachers' thinking

The various factors that determine and shape teachers' thinking can be considered *contextual* influences in that they provide the conditions within which the thinking takes place. This framework includes various different dimensions relating to professional

and personal life and self, as well as to time, 'environmental' and social contexts, for example. Carlgren and Lindblad (1991) have explored connections between teacher thinking and its context and have also drawn attention to the importance of teachers' *own* conceptions of context, thus indicating the need to include this aspect within the empirical stage of my investigation of teachers' thinking (see 3: 7 and 5: 2.4.2).

The following sections cover some of the contextual influences, extending over a range of personal and professional aspects, identified in the literature. Following a general overview, there are specific considerations of teaching experiences, self and affect. Although these areas are isolated for the purpose of description, in reality there is inevitable overlap. These sections not only describe the influences on teachers' thinking identified by other researchers but also, therefore, suggest areas that may be found in the current study. However, it should be remembered that teachers' knowledge is in a constant process of development, so that research into an individual's knowledge can only provide a snapshot for that point in time because 'Teachers' knowledge is not static. In the process of teaching and reflecting upon teaching, teachers develop new understandings of the content, of learners, and of themselves' (Grossman, 1995, p. 22).

2: 4.2.1 General aspects of context

Links between thinking, practice and context are well established (see, for example, Shulman, 1987a; Leinhardt, 1988; Day *et al.,* 1993; Yinger and Hendricks-Lee, 1993; Eraut, 1994).

The developmental nature of constructivism, drawing from experience, has already been described. Cognitive theorists emphasise the situated nature of cognition, whereby cognition cannot be treated apart from the contexts in which it is acquired and used

(Bruner, 1990). In an educational context, Dewey (1910/1997) stressed the interaction of 'funded experience' (an individual's unique store of previous experience) with immediate experience, where intellectual, emotional and imaginative capacities are used to interpret the present in the light of the past. As part of his assimilation learning theory, Ausubel went so far as to say 'If I had to reduce all psychology to just one principle I would say this "The most important single factor influencing learning is what the learner already knows. Ascertain that and teach him accordingly"' (1968, p. v). Yinger and Hendricks-Lee, in their examination of teachers' `working knowledge', suggest knowledge exists in the interaction of different contexts within cultural, social, physical, historical and personal 'systems' and so teaching involves interacting within those systems. Thus 'Knowledge is not solely a matter of mind and person but one of relationship and place' (1993, p. 101). Sch8n's concept of professional knowledge-in-action (1983) similarly underlines the importance of context.

Vygotsky's emphasis on the social context of learning (for example, 1962) was mentioned above (2: 3.1). The situated nature of learning and cognition is also seen in the emphasis on the social context of learning in the work of Wenger and Lave, who have developed the concept of 'communities of practice' as a way of exploring and explaining aspects that influence the development of knowledge, meaning and identity (see, for example, Wenger, 1998). The related sociological notion of sub-culture is well established within music (Hebdige, 1979) and, in the field of music education, Swanwick has described how 'Any group of people sustained by a common interest or a set of shared values ... will develop customs, conventions and conversational manners of a more of less specialized kind, creating a sub-culture' (1988, p. 3). At a more specific level, the philosopher of music education Estelle Jorgensen has developed the notion of 'spheres of musical validity' to describe how particular types of music are

connected with particular communities 'of those who share attitudes, understandings, and practical traditions', so that 'This community acts as a social group, corporately and individually, and assumes and maintains a life of its own' (1997, p. 37; see below, section 2: 5.2.7).

On a professional level, Shulman describes how teaching happens in a context comprising of nested levels within which there are 'two sorts of agendas ... two sorts of curriculum', one to do with the hidden curriculum, the 'organizational, interactional, social, and management aspect of classroom life' and the other to do with 'the academic task ... and manifest curriculum' (1986a, p. 8). Both these aspects, which could be considered linked to general pedagogic knowledge and subject knowledge (see below), can therefore be influenced by any of the surrounding contexts. Newton has also written of the classroom as an embedded context when referring to the essentially situated nature of understanding (2000, p. 187). GudmundsdOttir gives another example of the effect of this nested nature of education when describing how the 'language of practice' used to portray what happens in schools inevitably uses vocabulary embedded in the relative narrow specific school culture, as well as the wider social cultures within which that school functions (2001, p. 233).

When trying to understand the process of teaching, Clark and Peterson emphasised the importance of considering the context, giving as examples the physical setting, school, community, and curriculum (1986, p. 258). The curriculum is thus not only something acted upon by context, but is also itself a potential contextual influence. This is an example of the two-way and interrelated nature of contextual influence. Similarly, the formation and use of a teacher's knowledge can be specific to particular children, schools and materials (Calderhead, 1993, p. 15). More recently, the Primary

Assessment, Curriculum and Experience (PACE) team, tracking the impact of the Education Reform Act (ERA) of 1988 by means of a longitudinal study (for example, Pollard, Broadfoot, Croll, Osborn & Abbott, 1994; Osborn, McNess, Broadfoot, Pollard & Triggs, 2000) argued that 'there is a complex interaction of personal and institutional factors as well as external pressures and trends which influence the coping strategies of particular teachers' (Gipps, McCallum & Brown, 1999, p. 133). This suggests the potential effect of non-professional as well as professional influences on a teacher's thoughts and actions.

One of the ten precepts on which Day's (1999) book about continuing professional development was based is that 'teachers' thinking and action will be the result of an interplay between their life histories, their current phase of development, classroom and school settings, and the broader social and political contexts in which they work' (1999, p. 2; and see Goodson, 1992, for life history research). Nias has also observed how teachers are affected by social, political and historical forces (for example, 1989, pp. 3-4). However, in addition, she points out that although each teacher is an individual, with different experiences, nevertheless there are some commonalities. In her study of a hundred primary school teachers she wrote how 'unique though each of these teachers was in terms of personality and experience, they shared common views of themselves, especially in terms of motivation, values and ideals. Patterns emerged' *(ibid.* p. 26). This helps explain why influential studies relating to only one (Elbaz, 1983) or two (Clandinin, 1985) teachers can yet be seen as having wider relevance, offsetting the lack of research generalisability.

2: 4.2.2 Experience of teaching

Teachers' are also influenced by their on-going experiences of their own and others' teaching. GudmundsdOttir remarks that 'Like all human activity, school practice is culturally mediated' (2001, p. 227). A view of education as enculturation can apply to pupils and teachers and, from the perspective of teachers' knowledge, means that it can be developed almost incidentally, through immersion in the particular culture. This can happen throughout one's career — or even beforehand. Lortie, for example, has talked about the 'apprenticeship of observation' whereby teachers receive much information about the nature of teaching from their own experiences as pupils 'on the other side of the desk' (1975/1977, p. 61). In particular, he relates how the teachers in his own study frequently referred to the influence of individual teachers on their own teaching *(ibid.* pp. 63-64). This is therefore another aspect that may emerge in the current study.

This can then affect students' response to ITE in that 'Entering students hold strong images of teachers, both negative and positive, and these images strongly influence how they approach their teacher education program' (Richardson, 1996, p. 108). Lortie (1975/1977) described how, in general, teachers tended to teach what and how they had been taught, which, together with the difficulties in questioning their own practice, supported inherent conservatism in teaching. However, Grossman's (1990) study found initial teacher training could lead to beneficial changes in teachers' practice. In relation to subject knowledge there is mixed research information about the efficacy of initial teacher education changing and developing student teachers' subject knowledge (Borko and Putnam, 1996, pp. 687-8) although it not always clear what sorts of understandings are being considered. In music education, Hennessy (2000) reported that aspects relating to school placement played important roles in affecting the student teachers'

growth of confidence in teaching music. This early stage of a teacher's career is thus a further area worth including in the fieldwork section of this study.

Although experience may involve continuous development, research has also focused on the effect of particular occurrences: critical incidents and events (for example, Denicolo and Pope, 1990; and Woods, 1993). Thus this study will also need to take account of such aspects, 'which may crucially affect [teachers'] perceptions and practice' (Goodson, 1994, p. 36).

Richardson summarises the content of and influences on an individual's experience — of the world in general as well as education in particular — as follows:

> Personal experience includes aspects of life that go into the formation of world view; intellectual and virtuous dispositions; beliefs about self in relation to others; understandings of the relationship of schooling to society; and other forms of personal, familial, and cultural understandings. Ethnic and socio-economic background, gender, geographic location, religious upbringing, and life decisions may all affect an individual's beliefs that, in turn, affect learning to teach and teaching. (1996, p. 105)

This section has therefore shown there are chronological, professional, personal, social and political contextual dimensions to consider in a study about teachers' thinking As Connelly, Clandinin and He have pointed out, 'everyone works in a context' (Connelly *et al.,* 1997, p. 672). Carlgren and Lindblad warn against any tendency in such research `to isolate teachers from their social and historical context' and ignore the 'complex interplay between internal and external determinants on teaching' (1991, p. 507).

2: 4.2.3 Teachers' `selves'

The influence of personal as well as professional influences was mentioned in the previous section. Fullan and Hargreaves remind us that teachers exist outside school

when they write 'Teachers are people too' (1994, p. 67). They consider it is impossible

to understand teachers or their teaching without considering the people they are. Any attempts to change teachers thus involve changing 'the person the teacher is' because of the 'deeply grounded' nature of their work and the 'important moral and social purposes they want to fulfil through their teaching' *(ibid.)*. Although teaching may be considered a 'professional' activity, Nias has also argued that, in order to understand how primary teachers construct their work, one needs to grasp the importance they attach to a 'sense of personal identity'. This is not only because 'they exist as people before they become teachers' but also because 'their work calls for a massive investment of their 'selves'' (1989, p. 2). Similar points are made by Goodson (1992) and by Day and Leitch, who advocate teachers should themselves be conscious of this aspect: 'Teaching at its best requires motivation, commitment and emotional attachment, and this requires a deep knowledge of self as well as student' (2001, p. 414).

This indicates the vital role of 'self' as well as the need to acknowledge teachers' lives outside school in any consideration of their thinking (seen also in Pajares, 1992). How teachers see themselves is a critical influence on their professional perception (Nias, 1989, p. 13). Similarly, from his sociological perspective, Lortie wrote that `socialization into teaching is largely self-socialization; one's personal predispositions are not only relevant but, in fact, stand at the core of becoming a teacher' (1975/1977, p. 79). Two related and specific areas of research in this area are those into self-theories (particularly Dweck, 2000) and self-efficacy (especially Bandura, 1997).

This sense of self as teacher influences teachers' actions (Brown and McIntyre, 1993, p. 9). Teachers' constructions of their personal and professional identities also affect their perception of the curriculum, which implies that 'Content and pedagogical knowledge cannot, therefore, be divorced from teachers' personal and professional needs and moral

purposes' (Day, 1999, p. 2). Woods and Jeffrey (2002) suggest that the recent restructuring of the education system has necessitated changes in primary teachers' self-identity away from the major values of humanism and vocationalism epitomised in the Plowden Report (Central Advisory Council for Education in England, 1967).

An interest in teachers' self can be seen in research into understanding teachers' personal knowledge such as that by Elbaz (1983), for whom knowledge of self was one of five categories of practical knowledge, and Clandinin (1985). Turner-Bisset includes knowledge of self as part of her development of a model of knowledge bases necessary for (primary) teaching (1999, p. 46). Although she states that knowledge of self was not included in Shulman's original list of knowledge bases (see below), it was certainly included as part of his conception of pedagogical content knowledge by 1987 (see Wilson, Shulman and Richert, 1987, p. 115).

Knowledge of self is, therefore, an area to be considered in the current study and will be revisited in the Discussion chapter.

2: 4.2.4 Emotion

Although there have already been several mentions of the connection between cognition and affect in this chapter, in this section I will include other references that attempt to explain the nature and implications of the link.

Newton quotes Reid's argument that cognition alone is not sufficient for understanding in the arts and that feelings and thinking are indivisible (Reid, 1986), although the implication is that this connection is only so in the arts (Newton, 2000, p. 17). Certainly this aspect is revisited in the section on music below (2: 5.2). However, Eisner, for

many years an advocate of the arts as providing cognitive experiences of unique and vital kinds, gives a description of the connection between affect and cognition that applies to all thinking when he writes 'affect and cognition are not independent processes; nor are they processes that can be separated ... They are part of the same reality in human experience' (1996, p. 21). This, he argues, is because cognition is connected to the senses through their primary and essential role in experience and perception: 'It is through the perception of qualities — not only those we can see, but those we experience through any of our senses — that our consciousness comes into being' (1991/1998, p. 1). This is not something that Plato or Descartes would have agreed with, because for them the ultimate world of pure reason and abstract thought was disconnected from the body (Eisner, 1996, pp. ix-x; Plato, 1955).

As well as the inseparable link between cognition and affect in thought itself, emotions can also affect our thinking in different ways. For example Pajares describes how apparently propositional cognitive knowledge — the example given is a teacher's knowledge of a faculty handbook — can be influenced by related beliefs — in this case about the effectiveness of the school principal (1992, p. 310). Day and Leitch describe how there is neurological evidence to demonstrate that the emotional mind can 'swamp' the rational mind 'when we are upset, distressed by strong emotions or indeed in touch with our passions' so that 'powerful emotions ... disrupt thinking and, therefore, learning' (2001, p. 406; and see Goleman, 1995; Damasio, 2003). Thus, therefore, memory is also affected (Welch, 2000, p. 8). Nespor has also pointed out the effect of the emotions on how we store and retrieve knowledge in the teaching environment (1987, pp. 324-325).

The act of teaching itself is also a mix of cognition and affect (Calderhead and Gates, 1993; Day, 1999) and there is a growing acknowledgement that emotional aspects of teaching are highly relevant. For instance, Wagner observed that teachers' reported thinking was 'often full of emotions, anxieties and inconsistencies' (1987, p. 11), frequently expressing conflict between moral and practical considerations, which she called 'knots'. These were often rooted in previous experiences and, she recommended, should be confronted rather than explained away. More recently, in a journal issue devoted to the emotions in teaching, Nias (1996) identified three main reasons for making the claim that `affectivity is of fundamental importance in teaching and to teachers.' Firstly, teachers feel, 'often passionately', about various aspects of their work. This is a circular feature in that because teachers feel so strongly they therefore invest heavily in it, so that then they 'feel profoundly about their work because they invest heavily in it'. Secondly, the connection between cognition and emotion means that 'one cannot separate feeling from perception, affectivity from judgement' (also see Eisner, 1996). Therefore, 'one cannot help teachers develop their classroom and management skills without also addressing their emotional reactions and responses and the attitudes, values and beliefs which underlie these.' Finally, both cognition and feeling are indivisible from 'the social and cultural forces which help to form them and which are in turn shaped by them' (Nias, 1996, pp. 293-294).

Andy Hargreaves has been particularly instrumental in promoting recent interest in the affective nature of teaching with his work relating to educational change, maintaining that 'Emotions are at the heart of teaching' (1998, p. 835). Hargreaves considers relationships between teachers and pupils call not just for emotional sensitivity and understanding but also 'immense amounts of emotional labor' *(ibid.),* reflecting Nias's remark about 'massive investment' (1989, p. 2, quoted above). Hargreaves describes

how these emotions act as a filter to teachers' responses to educational change, thus influencing planning, teaching strategies and routines (1998, p. 842, for example).

Another of Hargreaves' basic precepts is that the 'emotions of teaching ... are also shaped by the moral purposes of those who teach and the extent to which the conditions of teachers' work permit them to fulfill those purposes' (1998, p. 840). This can have a positive effect since, as Nias comments, teachers 'experience self-esteem when they feel that they are acting consistently with their beliefs and values' (1996, p. 297). On the other hand, an inability to achieve such purposes, which comprise a teacher's fundamental beliefs relating to the nature of teaching, can lead to teachers experiencing emotions such as shame (Bibby, 2002), guilt (A. Hargreaves, 1994) and even grief (Nias, 1993). Bibby's study focused on the shame experienced by generalist primary teachers with regard to their maths subject knowledge. As she says, 'Traditional views of mathematics are that it is an unemotional subject ... however ... for many people it is experienced in highly emotional ways' (2002, p. 706), partly related to the context in which the subject has been learned, indicating affect is both part of and is developed by the overall context of learning. She also suggests that if subject knowledge 'is mediated by powerful feelings rooted in [teachers'] autobiographies', then that affects 'the ways in which that knowledge is used professionally in the classroom' (2002, p. 706). Bibby reports a body of research on affective issues in mathematics education, and there are a few examples of research mentioning similar aspects in music education (for example, Hennessy, 2000; and Mills, 1989). In other words, music as a subject is likely to be an emotional concern for the teachers involved in this study not only because of the inherent emotional links within music itself (see section 2: 5.2 below) or because of the many ways in which teaching itself involves emotional aspects, but also because of the

attitudes and beliefs teachers may have concerning music as a subject, influenced by their previous experiences, in and out of school.

Also relevant is the work of Daniel Goleman on emotional intelligence (for example, 1996; 1998), which, he argues, can play a crucial role in thought and success. Emotional intelligence involves self-awareness and appropriate management of one's own emotions as well as recognising emotions in others and handling relationships — involving managing emotions in others (see, for instance, 1996, pp. 44-45). Although it is possible to criticise the view that emotional intelligence can be reduced to a set of trainable competencies that ignores issues of gender, class or race (Boler, 1999), nevertheless the principles are gaining widespread interest in all phases of education (see, for example, Kingston, 2005) and Eraut includes 'Handling emotions' as part of the personal development aspect of informal learning in the workplace (Eraut, 2004, p. 265) .

It therefore seems that 'To ignore the place of emotion in reflection, in, on and about teaching and learning is to fail to appreciate its potential for positively or negatively affecting the quality of the classroom experience for both teachers and learners' (Day, 1999, p. 33).

In summary, teachers' knowledge can be influenced by various contextual aspects. Alongside the nested institutional context, and inseparably interrelated, are features from the teacher's personal nature and life (past and present). All such aspects have been found to have potential impact, and therefore should be kept in mind in any investigation of teachers' thinking. Each teacher's context will be unique to him or her, partly because each teacher's previous and current experience is unique, but also

because each teacher's *conception* of context is unique. However, just as Nias identified patterns in the individual teachers she studied (1989, p. 26, see above), Golby considered that there could be teachers with similar outlooks because although teachers' experience is 'subjectively unique to them' it is also part of the 'collective history of schooling' (1996, p. 425).

2: 4.3 Knowledge bases for teaching

Eraut's personal knowledge included 'procedural knowledge and process knowledge, experiential knowledge and impressions in episodic memory' (2000a, p. 114; see 2: 4.1 above). The following section describes how the content of such knowledge might be categorised, always remembering that any divisions are human constructs attempting to clarify a problematic issue. They are models of knowledge, not the knowledge itself (Borko and Putnam, 1996; Munby *et al.,* 2001).

2: 4.3.1 Some ways of categorising

Grossman (drawing on Shulman's work, see below) suggests that one 'possible typology of teacher knowledge' includes the following six domains of knowledge: content, learners and learning, general pedagogy, curriculum, context and self (1995, p. 20). In a further adaptation, Borko and Putnam use a similar framework while discussing learning to teach, condensing it into the three 'domains of practice' of `general pedagogical knowledge and beliefs', 'subject matter knowledge and beliefs' and 'pedagogical content knowledge and beliefs' (1996, p. 675). However, this seems to ignore the knowledge of 'self, which, as has been described in the above section (2: 4.2.3), is an important influence on teachers. Self was also one of the five emergent domains identified by Elbaz (1983) in her study of one teacher's 'practical knowledge', the others being milieu, subject, curriculum and instruction.

Calderhead (1996) gives a useful overview of research into teachers' knowledge and beliefs that, intentionally following on from Clark and Peterson (1986), covers 1985 to 1992. He divides the section relating to 'the day-to-day working knowledge of teachers' into subject knowledge, craft knowledge, personal practical knowledge, case knowledge, theoretical knowledge, and metaphors and images (1996, p. 715-9). Theoretical knowledge seems to be the equivalent of Eraut's action knowledge (see above). Craft knowledge is a term used by Brown and McIntyre in their investigation into good teaching and is described by them as

> the professional knowledge and thought which teachers use in their day-to-day classroom teaching, knowledge which is not always made explicit by teachers and which teachers are not likely always to be conscious of using. (1993, p. 19)

Similarly, personal practical knowledge is a term used by Clandinin to refer to her particular interpretation of the aspect of pedagogical knowledge she investigated in her study of two elementary school teachers (1986). Elbaz's study of a high school English teacher (1983) is also included here (although Elbaz herself termed this aspect of knowledge 'practical knowledge').

However, 'case knowledge' and 'metaphors and images' — although each certainly used as a research focus and tool — seem to me to refer more to the forms in which teachers represent and *hold* knowledge than to substantive content, as can be seen in Clandinin's work (for example, 1985; 1986). In an earlier publication, Calderhead appears to agree with this use when he writes 'it is generally agreed that images of practice are economical ways of storing the vast amounts of knowledge that teachers appear to draw upon' (1991, p. 274). He later adds that 'Images also seem to represent well the ways in which teachers talk about their own knowledge — often in terms of mental pictures, capable of manipulation' *(ibid.* p. 275) — which was how, as he describes, they were

utilised by Clandinin. Clark (1986) considered that it was *because* teachers might hold their knowledge as images and cases that there could be important differences between how experts in a subject and teachers of that subject held and expressed knowledge of the same phenomena. Carter (1992) has written about the value of using cases as a way of helping teachers build up a rich store of contextualised knowledge. Similarly, since Lakoff and Johnson (1980) showed how much of our language, thought and action depend on and are explained by metaphor, a rich body of research has grown up round teachers' use of metaphors (for example, Munby, 1986), including a complete issue of the journal *Theory into Practice* (1990).

To sum up, case knowledge and metaphors and images seem to be at a different level of classification, serving different purposes, from types of knowledge such as craft knowledge, personal practical knowledge and theoretical knowledge, but all can provide appropriate areas of research into, or means of explaining, teachers' thinking and may include considerations of subject knowledge.

2: 4.3.2 General pedagogical knowledge

Pedagogical knowledge is the general knowledge that 'encompasses a teacher's knowledge and beliefs about teaching, learning and learners that transcends particular subject matter domains' (Borko and Putnam, 1996, p. 675, and see Shulman, 1987a, p. 8). In other words, this knowledge does not include subject specific knowledge, although research into general aspects may relate to subject knowledge insofar as the teachers involved were teaching *something* at the time. For example, the subject of Elbaz's (1983) comprehensive study of 'practical knowledge' was a teacher of English, while the two teachers involved in Mitchell's (1994) investigation of 'implicit' theories to do with questioning were secondary social sciences teachers.

Although my study relates to subject knowledge, reports of research into more general aspects have also provided useful information, for instance about various methods. Examples of this include Pope and Denicolo's (1993) use of repertory grids, career `snakes' and self-characterisation sketches in their enquiry into student teachers' views on teacher effectiveness; and Winitzky, Kauchak and Kelly's (1994) study of classroom management, using ordered trees and concept maps.

2: 4.3.3 Subject knowledge

Calderhead included 'subject matter' as one area of teachers' understanding that `informs their everyday practice' (Calderhead, 1996, p. 709; extended quote 2: 2.2 above). Borko and Putnam cited it as the aspect transcended by general pedagogic knowledge (1996, p. 675; quoted 2: 4.3.2 above).

Lee Shulman had been chairman of the panel that produced the influential NIE report already acknowledged as the starting point for research into teachers' thinking (NIE, 1975; see section 2: 2.1.2). It was his identification, in the mid 1980s, of what he variously referred to as 'a missing program' (1986a, p. 25) and 'a missing paradigm' (for example, 1986b) that galvanised research into subject specific knowledge (see GudmundsdOttir, 1990; Calderhead, 1996) of which this current study is an example.

In his overview of the paradigms and research programmes in the study of teaching, Shulman described how 'the essential task for the teacher, ... is to appraise, infer, or anticipate those prior cognitive structures that students bring to the learning situation' (1986a, p. 25). However, although research into *pupil* cognition showed that 'learning is subject matter specific rather than generic' *(ibid.* p. 25), there were not, with a few

exceptions (for example, Leinhardt and Smith, 1985), similar research programmes into relevant *teacher* knowledge. So he declared there was a research gap and called for research into the 'character' rather than into the *amount* of teachers' knowledge (Wilson *et al.,* 1987, p. 107).

This does not mean that subject matter had not been considered beforehand (see Dewey, 1916, for example), but rather that teachers' subject knowledge had not been a research focus, apart from occasionally being a context variable in behaviourist studies (see Shulman, 1986b, p. 6). Nor had different subjects previously been considered as presenting different issues (Wilson *et al.,* 1987; Shulman and Quinlan, 1996, p. 408). However, as Shulman pointed out, much of what happens in schools occurs 'in the context of teaching *something'* (1986a, p. 8). Thus, for him, 'The content and the purposes for which [a subject] is taught are the very heart of the teaching-learning processes' *(ibid* p. 8) and although teachers' subject knowledge was taken for granted, he argued that it had never been defined *(ibid.* pp. 25-26).

He therefore called for greater concentration on research into subject content knowledge. He claimed that as well as ***subject matter knowledge,*** which included both substantive (relating to the content and organisation of concepts) and syntactic (relating to how knowledge is authenticated and interpreted) structures of the discipline (Schwab, 1961/1978), there was also a crucial pedagogic body of knowledge specific to that particular subject: ***pedagogical content knowledge.*** This was to do with the ways of teaching particular subject areas, for instance the various means of representing different aspects, together with an awareness of pupils' common misconceptions. A third type, ***curricular knowledge,*** was described as 'familiarity with the ways in which knowledge is organized and packaged for instruction' in materials and textbooks, for

instance (Shulman, 1986a, p. 26). This can be regarded as an example of Eraut's public knowledge, since it is mostly available as propositional knowledge from various texts (including schools' own policies and schemes). Pollard considers this categorisation of Shulman's 'has been extremely influential in teacher training, provision for continuous professional development and conceptualizing the role of curriculum 'consultants' in primary schools' (1996, p. 164).

Shulman converted George Bernard Shaw's famous aphorism into 'Those who can, do. Those who understand, teach' (Shulman, 1986b, p. 14). Such understanding involved an understanding of the material to be taught as well as of the pupils' understanding. Moreover, 'This understanding must be specific to particular subjects and to individual topics within the subject' (Shulman, 1987a, p. 19). The transformation of subject matter to make it suitable for the learner required the teacher to have '150 different ways of knowing' (Wilson *et al.,* 1987) in order to approach and represent the subject in whichever way might be most appropriate. In Dewey's terms, this is to 'psychologize' it in order to link the logical (subject inherent) and psychological aspects of experience (in relation to the pupil) (Dewey, 1902/1983, p. 283). For Dewey the teacher's knowledge of a subject was different from knowledge of the subject *per se:* 'every subject ... has two aspects: one for the scientist as scientist; the other for the teacher as teacher. These two aspects are in no sense opposed or conflicting. But neither are they immediately identical' *(ibid.* pp. 285-286).

Shulman has written several times on the various types of subject knowledge involved in teaching (for example, 1986b; 1987a; Wilson, Shulman and Richert, 1987, Shulman and Quinlan, 1996) and, although the categories vary somewhat in labels and substance, the underlying premise — that different subject areas have different and specific bodies

of knowledge that affect how they are taught — nevertheless remains constant. So also does the content of the overall body of knowledge, in that it includes knowledge of the subject, of general pedagogic knowledge, of pedagogic knowledge relating to how to teach the subject, of the learners — in general and particular, of curriculum, of curricular materials, and of underlying beliefs and philosophy relating to the subject. Subject knowledge is thus 'more than the facts, terms and concepts of a discipline', as it also involves 'teachers' overarching conception of the purposes for teaching a subject matter — what he or she knows and believes about the nature of the subject and what it is important for students to learn' (Borko and Putnam, 1996, p. 676; and see Shulman and Quinlan, 1996, p. 409).

Shulman was concerned with the nature of teaching as a profession, and with the knowledge base that implies. He thought it important that the teacher as professional should know, and be able to articulate, not just *what* should be done, but also *how* and *why* (1986b, p. 13). An article developing several ideas within the context of a professional knowledge base was intended to help raise the status of teaching as a profession (1987a). Here he described the cycle of pedagogical reasoning and action whereby teachers move from understanding subject matter for themselves to being able to transform it into a form appropriate for students. This involved comprehension, transformation (preparation, representation, selection and adaptation and tailoring of subject matter), instruction, evaluation (checking for student understanding, testing the same, evaluation of own performance), reflection, and then new comprehensions *(ibid.* p. 15). He reiterated the crucial importance of a teacher's understanding of subject matter:

> We expect teachers to understand what they teach and, where possible, to understand it in several ways. They should understand how a given idea relates to other ideas within the same subject area and to ideas in other subjects as well. *(ibid.* p. 14)

Van Driel, Veal and Janssen (2001) show not only how the strong the effect of Shulman's work still is, but how various are the interpretations of his concept of pedagogical content knowledge, even within the scope of one book concerning one subject (science).

However, there have been criticisms. For instance, the issue of the *Harvard Educational Review* following Shulman's article (1987a) carried a critique by Sockett (1987). In this, although he refers to Shulman's article as 'a profoundly important document' (1987, p. 208), Sockett takes issue with its lack of attention to context, in particular with the lack of a central socio-moral context to teaching, and with 'the lack of sophistication in its account of the relation between reason and action in teaching' *(ibid.* p. 212). Shulman argued against the first and third of these criticisms, but accepted a certain, although not complete, element of truth in the second (1987b, p. 476). He also rejected further criticisms relating to his treatment of tacit knowledge and his view of teaching as a profession by retorting [Sockett] insists that my conception of the teaching profession lacks the essential features of professions in general. I argue that his conception of the teaching profession lacks the essential characteristics of teaching in particular' *(ibid.* p. 480).

Shulman's work has also been criticised for its emphasis on a transmissionist model of teaching (Meredith, 1995; Calderhead, 1996), with little acknowledgement of the constructive nature of pupils' learning, and certainly this is the impression from his cycle of pedagogical reasoning. However, he seems to be aware of this when he writes, albeit only in a footnote, that

> There are several aspects of this formulation that are unfortunate, if only for the impression they may leave. The rhetoric of the analysis, for example, is not

meant to suggest that education is reduced to knowledge transmission, the conveying of information from an active teacher to a passive learner, and that this information is viewed as product rather than process. My conception of teaching is not limited to direct instruction. Indeed my affinity for discovery learning and inquiry teaching is both enthusiastic and ancient. (1987a, p.7, note 2)

He explains any lack of emphasis on the learning of pupils in the next note: 'This formulation is drawn from the teacher's perspective and, hence, may be viewed by some readers as overly teacher-centered' *(ibid.* p. 7, note 3).

That subject matter knowledge and pedagogical content knowledge might be discrete categories has also been questioned (McEwan and Bull, 1991; McNamara, 1991; Poulson, Avramidis, Fox, Medwell and Wray, 2001). Shulman mirrors Dewey (1902/1983; see above) when describing that what distinguishes a teacher 'from non-teaching peers' is 'the capacity of a teacher to transform the content knowledge he or she possesses into forms that are pedagogically powerful and yet adaptive to the variations in ability and background presented by the students', in other words 'the intersection of content and pedagogy' (1987a, p. 15).

However, we all represent knowledge to ourselves and to others, whether teachers or not, and therefore McEwan and Bull (1991) maintain all knowledge is pedagogical, albeit in different ways. Perhaps, therefore, subject matter knowledge and pedagogical content knowledge form a continuum rather than a dichotomy. In which case the area of pedagogical content knowledge can also be conceived as blending into general (non-subject-specific) pedagogical knowledge. What Shulman is emphasising is the teacher's need to be able to represent subject specific knowledge in ways appropriate to specific and different pupils. Hence, it is necessary not only to have more than one way of representing knowledge, but also to know when a particular way is most appropriate.

These representations are a teacher's tools. McEwan and Bull maintain that what distinguishes scholars from teachers is not what they know, but what they do with what they know (1991, p. 330) — surely exactly what Shulman argued.

It should also be pointed out that the work he and his colleagues carried out for the Stanford *Knowledge growth in teaching* study was with secondary teachers and student teachers (see, for example, Wilson *et al.,* 1987; Grossman, Wilson & Shulman, 1989). Shulman acknowledged that the findings might not apply in the same way to primary school teachers, writing,

> While I firmly believe that much of the emphasis to be found here on the centrality of content knowledge in pedagogy holds reasonably well for the elementary level as well, I am reluctant to make the claim too boldly. (1987a, p. 4, note 1)

The team reported contradictory responses from elementary teachers: some treating the child, others the subject content 'as the starting point of instruction', and they concluded, 'We suspect that both views are valid. Most elementary school teachers probably devote their initial attention to students and their characteristics. But they *should* attend much more seriously than they do (or, at times, are capable of doing) to the comprehension and representation of the content they teach ' (Wilson *et al.,* 1987, pp. 121-2). However, Grossman *et al.* (1989) thought any implications 'should be drawn cautiously' in view of the primary teacher covering several subjects.

When considering the nature of primary school teachers' knowledge in the light of recent curriculum changes in this country, Poulson (2001) acknowledges the work of Shulman, accepting the existence of subject knowledge and pedagogical content knowledge. However, based on the work of Askew and his colleagues in maths (Askew, Brown, Rhodes, Johnson and Williams, 1997) and particularly on her and her

colleagues' work in the field of literacy, she maintains that subject matter knowledge is over-rated because, for example, in the case of her own study with more than two hundred teachers, 'there was no clear relationship between teachers' explicit academic knowledge and their effectiveness in teaching literacy' (2001, p. 45). She also found that effectiveness was rooted in context, in that teachers had more difficulty when `concepts ... were decontextualised from classroom practice'. In other words, 'Their knowledge was functional: they knew about, and taught the features of language *in use,* but had greater difficulty with language *as system' (ibid.).* It appeared, therefore, that teachers' prior knowledge of subject matter was not being transformed into pedagogical content knowledge as Shulman had suggested, even though knowledge of content was `pedagogically situated' *(ibid.* p. 46). It could, however, be argued that the teachers' original subject knowledge, having been developed in use, in the classroom, was now so integrated — tacit — as pedagogical content knowledge that they were unable to access it as separate subject knowledge.

Poulson cites Edwards and Ogden (1998) as also having doubts about the Stanford model in their exploration of teachers mentoring students when 'They identified the importance of examining not only the *what* of teacher knowledge, but also the *how* of its construction within communities of practice in primary schools' (Poulson, 2001, p. 47). In other words, they considered pedagogical content knowledge as structured within the situation of a particular school more important than subject matter knowledge. This appears to support my counter-argument above.

I would, however, agree with Poulson that it seems that 'subject knowledge, and its pedagogical transformation and articulation is, as Shulman and his colleagues predicated, much more complex in relation to primary school teachers than for single

subject specialists in secondary schools' *(ibid.* p. 47), given the variety of subjects they may have to teach.

Turner-Bisset (1999) seems to support the view that a viable model of knowledge bases for teaching is more comprehensive than Shulman's original list but nevertheless has shown how the basic structure can be developed and applied to initial teacher education, including reflection and assessment, in the primary context.

This section has been necessarily extensive in order to describe work that has underpinned much subsequent research on teachers' subject knowledge. Shulman's three main divisions will therefore be kept in mind when considering the subject knowledge of music the teachers in my study may possess: subject matter knowledge, pedagogical content knowledge (including knowledge of children and their likely understandings and misunderstandings) and curriculum knowledge. These divisions will also provide the structure for part of the Discussion chapter (5: 2.3.1).

2: 4.3.4 The influence of subject knowledge

Despite Poulson's (2001) reservations about the importance of subject knowledge mentioned above, Leach, Williams and Andrews, in their justification of an issue of the *British Educational Research Journal* devoted to research on subject knowledge, wrote

> we believe there are important reasons why British educational researchers should address themselves to research agendas relating to subject knowledge. Teaching and learning subject knowledge is a fundamental aim of schooling in the formal sector, and much of the work of teachers and lecturers is organised around teaching subjects. (2002, p. 643)

In particular, that journal issue demonstrates how epistemology and pedagogy are interdependent: what one thinks of a subject and what one thinks a subject is, affect and are influenced by how one teaches it. Again, this is not a recent concern. For instance,

Clark wrote in 1986 that ' ... teachers' knowledge of content to be taught and the ways in which that knowledge is organized are crucial influences on teacher thinking and action' (1986, p. 11). In 1991, a volume in the *Advances in research on teaching* series was devoted to *Teachers' knowledge of subject matter as it relates to their teaching practice* (Brophy, 1991).

This connection between subject understanding and action has also been made in the music education literature (see section 2: 5 below). For instance, the eminent music education philosopher Bennett Reimer writes of the importance of understanding the nature of the subject, saying that, otherwise, 'Those who lack a clear understanding of their subject can make choices only by hunch and by hope, these being a reflection of the state of their beliefs' (2003, p.5).

In an apparently unintentional link with aspects of Shulman's pedagogical content knowledge, Newton describes how teachers' knowledge affects how they are able to support pupils' acquisition of understanding:

> How well a teacher knows a subject will shape the activities provided, the questions asked and the answers accepted. Similarly, the teaching strategies, explanations, analogies and ways of organizing and managing activities that a teacher knows, both general and subject-specific, will affect the quality of instruction. (2000, p. 127)

Subject knowledge as a whole has been found to affect both *what* teachers teach and *how* they teach it (McNamara, 1991). Gipps and her colleagues, investigating primary teachers' beliefs about teaching and learning, reported a 'general feeling' among the teachers concerned that 'different subjects require different styles of teaching' (1999, p. 128). The amount and nature of subject knowledge has been found to affect planning (Stodolsky, 1988; Grossman, 1990; Ball 1991), delivery (Leinhardt and Smith, 1985; Askew *et al.,* 1997) and assessment (Wineburg, 1997).

For instance, Grossman (1990) reported how differences in subject matter knowledge affected secondary school teachers' ability to adapt material. She considered a teacher's beliefs about the nature of a subject to be related to his/her conception of a subject for teaching, but that the main factor was what the teacher thinks the subject is for *students:* its nature and what they should learn about it. Alexander (1994) pointed out that lack of subject knowledge in one curriculum area could also affect decisions made concerning other areas.

Wineburg has investigated how the particular substantive and methodological logic of history, its 'essential character', is differently conceived and used by novice and expert teachers in the classroom (for example, Wilson and Wineburg, 1988; Wineburg, 1997). Aubrey agrees with this in the introductory chapter to her book considering the role of teacher and pupil subject knowledge in the early years of schooling: 'Suffice it to say that where knowledge is limited the teacher may rely more on scheme work, text books and in occupying children with individual work' (1994, p. 5). This difference between novice and expert teachers is seen in a literally graphic way in the complex semantic nets constructed for the more expert maths teachers in Leinhardt and Smith's study (1985).

Borko and Putnam sum up the differences between teachers with greater or less subject knowledge as follows:

> A number of studies have suggested that, in general, teachers with greater subject matter knowledge tend to emphasize the conceptual, problem-solving, and inquiry aspects of their subjects. Less knowledgeable teachers tend to emphasize facts, rules, and procedures and to stick closely to detailed lesson plans or the text, sometimes missing opportunities to focus on important ideas or connections among ideas. (1996, p. 685)

However, GudmundsdOttir made the point that, by itself, 'teachers' subject knowledge matter competence is not always related to pupil achievement' (1990, p. 116) and that pedagogical content knowledge played a large part (as seen above, section 2: 4.3.3).

Different subjects can lead to different teaching approaches (Gipps *et al.,* 1999). Susan Stodolsky (1988) studied elementary school teachers' teaching maths and social studies and found teachers thought, planned and even organised their classrooms differently for these different subjects. However, one could argue that this might be due to more or less subject knowledge rather than the essential difference between subjects maintained by Shulman. There are several studies showing how teachers may, in fact, have inaccurate conceptions of, for instance, scientific concepts (see Bennett, Summers and Askew, 1994; Newton and Newton, 1997).

On the other hand, as far as *student* teachers are concerned, both Calderhead (1988) and Furlong and Maynard (1995) found students were more likely to draw on the practices of their supervising teacher than on their knowledge base, even when the latter was well developed. It was suggested that this may have been because the teachers themselves did not often refer to their own subject knowledge and were unlikely to articulate any relationship between understanding within a subject area and classroom activities. The emphasis was therefore on the general pedagogical rather than the subject knowledge end of the continuum conceptualised above. In music education, Hennessy (2000) has reported similar findings with her students.

Although subject knowledge does appear to affect what teachers think and do, this is not a clear-cut connection, given the range of other contextual influences that exist (Bennett

et al., 1994; Gipps *et al.,* 1999). Any study of subject knowledge must also, therefore, bear in mind the embedded nature of teaching.

2: 4.3.5 Subject knowledge within the context of the National Curriculum

In this section, a selection of material has been chosen to show the important and consistent place subject knowledge has had in recent educational policies. The National Curriculum is itself built round a framework of subjects and the necessity of subject knowledge is consistently included in reports written for and by government agencies and plays a fundamental role in the standards required of trainee teachers. I have attempted to choose evidence relating to the situation relating to the teachers involved in my study (1999-2000), as well as more recent material, in order to show that subject knowledge was an issue then and is still worthy of attention now.

From the outset, the National Curriculum was divided into subject areas. These areas were assumed to 'cover the range of knowledge, skills and understanding commonly accepted as necessary for a broad and balanced curriculum, and provide a framework for a number of other aspects of the curriculum' (Department of Education and Science, 1989, para. 3.6). Although it was stated that the Education Reform Act 1988 (ERA) `does not require teaching to be provided under the foundation subject headings' *(ibid.* para. 3.7), in practice that was the most common approach, particularly given that Ofsted inspections included those subject divisions (Ofsted, 1995b, p. 44). Even when the programmes of study were relaxed for non-core subjects (see below), it remained the case that inspectors would 'still visit lessons in all subjects and record their observations in the normal way' (Ofsted, 1998b, p. 1). With the introduction of the revised National Curriculum Orders in 2000, new guidance entitled *Inspecting subjects 3-11* reaffirmed the emphasis on discrete subjects (Ofsted, 2000a, see, for example p. 6).

An influential report published in the early days of the National Curriculum, *Curriculum organisation and classroom practice in primary schools: A discussion paper* (Alexander, Rose and Woodhead, 1992), included the issue of teachers' subject knowledge. The authors, colloquially known as the 'Three Wise Men', argued, among other things, that the National Curriculum necessitated a substantial amount of separate subject teaching and that 'good subject teaching depends upon the teachers' knowledge, skills and understanding in the subject concerned' *(ibid.* p. 23). Later they described the teacher's 'curricular expertise' as 'the subject knowledge, the understanding of how children learn, and the skills needed to teach subjects successfully'. This, combined with a description of the required knowledge base *(ibid.* p. 37), has obvious similarities with Shulman's categories within subject knowledge, particularly the need for general pedagogic knowledge and pedagogical content knowledge. Although the authors admitted there were differing opinions over the relative importance of teachers' subject knowledge, their own view was that 'subject knowledge is a critical factor at every point in the teaching process: in planning, assessing and diagnosing, task setting, questioning, explaining and giving feedback' *(ibid.* p. 25). However, they also considered that 'the extent of subject knowledge required to teach the National Curriculum is more than can reasonably be expected of many class teachers, especially but not exclusively in the upper years of Key Stage 2' *(ibid.* p. 1) and this opinion was echoed by Bennett, Summers and Askew a few years further into the National Curriculum (Bennett *et al.,* 1994, p. 34).

The importance of subject knowledge was also emphasised in a later Ofsted document describing different ways of using subject specialists in Key Stage 2 (Ofsted, 1997). This reported 'a strong association between standards and the subject knowledge, skills

and understanding of the teacher' *(ibid.* para. 5). Features of the teaching of successful subject specialists were identified as including 'a confident command of the subject, well structured lessons which promote a step-by-step increase in knowledge of the subject, a driving pace and extremely ambitious expectations' (p. 15, para. 46). In this survey, music was the 'commonest example' of a subject 'taught by one teacher throughout the school' (p. 10, para. 36). Fourteen per cent of the seventy schools involved in the survey had 'specifically appointed music specialists' — the highest percentage of subject specialism (p. 25, para. 69). In other words, subject knowledge was there seen as key to good teaching and effective learning; and music was a subject where subject specialism was particularly appreciated, presumably in response to other teachers' lack of subject knowledge. However, in the same year, this seems to be contradicted by the Senior Inspector for Music who reported that specialist teachers did *not* necessarily provide the best quality music education (Mills, 1997b). This discrepancy is partly explained by a lack of consistent definition of the concept of subject knowledge.

The Hay McBer report into teacher effectiveness also mentioned subject knowledge in its widest sense, including pedagogical content knowledge and curriculum knowledge (2000, para. 1.1.5). The 'thinking' cluster within a model of professional characteristics contained analytical and conceptual thinking, both of which involve subject knowledge *(ibid.* para. 1.3.8). The importance of subject knowledge in planning was also found in an Ofsted report on successful primary schools where 'A key characteristic of the planning process ... was the way [these successful schools] applied their professional judgements and subject knowledge whenever they adopted ready-made material from elsewhere' (Ofsted, 2002, p. 18).

Pollard points out the large number of subject associations in education. Although he cites only those for science, English, maths, history and geography, the existence of the National Association of Music Educators means music can be included in his concluding `etc' (1997, p. 168).

This highlighting of subject knowledge has been mirrored in teacher training requirements. For instance Circular 14/93 from the Council for the Accreditation of Teacher Education (CATE) stated, under the heading 'Subject knowledge and application', that 'Newly qualified teachers should be able to: demonstrate knowledge and understanding of the subjects of the primary curriculum which they have studied, at a level which will support effective teaching of these subjects' (CATE, 1993). In 1998, in a move from 'competencies' to 'standards' (TTA, 1998, p. 1), CATE's successor, the Teacher Training Agency (TTA), required that those to be awarded Qualified Teacher Status (QTS) must demonstrate that they, 'for any non-core, non-specialist subject covered in their training, have a secure knowledge to a standard equivalent to at least level 7 of the pupils' National Curriculum' (TTA, 1998, p. 5, para. 2.g). Despite the apparent continued emphasis on subject knowledge, it is worth noting two points here. Firstly, there is an implication that some subjects may *not* be covered in training and, secondly, at that time art, physical education and music had no such levels, so one might, therefore, infer the relative lack of importance of such subjects. In 2002, new `professional standards' required only that those awarded QTS must 'have a secure knowledge and understanding of the subject(s) they are trained to teach' (TTA, 2002, para. S2.1). For the foundation subjects, of which music is one, it is only required that teachers have 'sufficient understanding of a range of work' across various subject based options (*ibid*. para. S2.1b). As far as music is concerned, even though it still exists as a discrete subject in National Curriculum requirements (DfEE/QCA, 1999), it is

here

subsumed into a category called performing arts, consisting of music, dance and drama. In the accompanying *Handbook of guidance* it is admitted that 'This Standard does not seek to cover all the subject knowledge a teacher may need to teach a class at Key Stage 1 and/or 2' (TTA, 2003, p. 16). It is implied that new teachers should develop their knowledge through professional development opportunities, good resources and via colleagues.

It would thus seem that subjects and therefore subject knowledge continues to play an important role in policy making, National Curriculum requirements and Ofsted inspections.

2: 4.4 Section summary

The previous section has explored some of the aspects involved in professional teachers' knowledge, where the term 'knowledge' includes the deeper connotations of `understanding' as well as the allied implications and influences of affect and context. The following summary includes concepts and issues that underlie future stages in this research project.

Building on the constructivist concept described previously (2: 3.1), Eraut's division of professional knowledge into **public** and **private** components (for example, 1994) means that this study needs not only to include details of the public knowledge available, for example the National Curriculum requirements, but also to be aware that the teachers' versions of this in their personal store of 'action knowledge' may not only be different from the (accepted) public knowledge, but may also vary from individual to individual. From Eraut, too, has come an initial reference to knowing that and knowing how — a distinction that will also reappear in various guises later on.

Although some knowledge may be readily expressible, the various and potentially problematic forms of **tacit knowledge** must be considered at all stages of the research process. One possible helpful factor here may be that the notion of the acquisition and use of knowledge as an inseparable interactive process (Eraut, 1994; Elliott, 1995) indicates that it might be possible to consider how teachers use music — in and out of school — in order to infer their thinking and knowledge about the subject.

An individual's **previous experiences** have been found to be important: both as part of the memories that may be part of that individual's knowledge and also as an influence on the construction of current beliefs. Past and current professional and personal experiences relating to music and music education, including contextual influences of `relationship and place' (Yinger and Hendricks-Lee, 1993, p. 101, cited 2: 4.2.1), will therefore need to be covered during the fieldwork and discussion phases of the study. An important aspect of this includes **an individual's own beliefs** about context.

These contextual influences are also factors in the development of the concepts of **'self'** and **identity.** Inferred from this area of research is the need to take account of teachers' lives outside the professional context. The general area of identity will also be revisited, in the light of the findings from the fieldwork, during the discussion (Chapter 5) and model-building (Chapter 6) stages of this thesis.

Emotion is an area that pervades teachers' professional lives and hence needs consideration during future stages. For example, affect and cognition are inseparable components of knowledge itself through the connection of cognition to the senses; emotions affect thinking processes; teaching is itself a mixture of cognition and affect;

concepts such as emotional intelligence (Goleman, 1995) and 'handling emotions' (Eraut, 2004) are becoming important facets of classroom learning and teaching.

The main focus of this study is the part of teachers' thinking that relates to **subject knowledge.** The subject-based framework of the National Curriculum means that subject knowledge features strongly in literature related to the National Curriculum as well as in ITE/T. Therefore it is an important issue in the current educational climate and thus worthy of investigation. Research has shown subject knowledge can affect both what teachers teach and how they teach it. Shulman's work (1986a; 1986b, 1987a, 1996), including his division of subject knowledge into subject matter knowledge, pedagogical content knowledge and curricular knowledge, has provided the foundation for much research into subject knowledge and therefore these broad categories will be used to provide a structure to part of the discussion chapter that concerns the findings from the fieldwork.

The next section considers more specifically those aspects that might be part of subject knowledge in music.

2: 5 Music in education

This study explores teachers' knowledge about music in education, including music, music education *and* music within education. The use of knowledge as an umbrella term including beliefs, attitudes and understanding has already been established (2: 3.2). Teachers' subject knowledge consists of knowledge of the subject matter, of general pedagogic knowledge, of pedagogical knowledge relating to how to teach the subject, of the learners — in general and particular, of curriculum, of curricular materials, and of

underlying beliefs and philosophy: 'the wisdom of practice itself(Shulman, 1987a, p. 11). Teachers' knowledge about music in education can be perceived as involving not only teachers' individual beliefs about music itself, but also their knowledge of music as an educational subject area; an awareness of its place within education in general, and their attitudes and feelings connected with the subject. Such knowledge may be held in various accessible or tacit forms and so this section draws particularly on the music and music education literature in order to examine the possible nature as well as content of the knowledge teachers may have, in particular drawing on the work of Keith Swanwick and Bennett Reimer, alongside that of David Elliott, David J. Hargreaves, Estelle Jorgensen and John Sloboda. There is also some specific consideration of various aspects of context in relation to music and music education.

This is more than an inquiry into professional knowledge, because teachers have knowledge beyond their professional lives. Music is ubiquitous and therefore one would expect the teachers in this study to have knowledge about music from outside their roles as teachers. This knowledge may or may not have an overtly recognisable impact on the knowledge they employ, consciously or otherwise, *within* their working life, but is part of their knowledge as conceived within the scope of this investigation.

The most immediate professional knowledge that teachers might be expected to hold is related to the curriculum required to be delivered in schools and therefore there follows an introductory section sketching that context.

2: 5.1 Music within the National Curriculum

This section describes the general educational context within which my investigation of the thinking of teachers in an English primary school took place (1999-2000). It

therefore sets the background curriculum context; gives some idea of the relative importance of music within the curriculum; indicates some relevant related aspects, for instance quality of teaching and teachers' confidence; and describes some of the public knowledge teachers might be expected to possess in relation to music.

As a foundation subject within the National Curriculum, music had to be included in primary schools 'for a reasonable time' as part of 'a broad and balanced curriculum' (DES, 1989, para. 4.1) from its inception. From autumn 1992, therefore, statutory requirements set out specific attainment targets and programmes of study in music (DES, 1992). These came into force for the different year groups between then and 1994. From autumn 1995, a revised National Curriculum was in force (DFE, 1995). This was not superseded until August 2000 (DfEE/QCA, 1999). In other words, when my empirical investigation took place during the academic year 1999-2000, primary schools were accustomed to including music within the National Curriculum, and were also, presumably, familiar with the Order then in its fifth year of use (DFE, 1995).

Although there were differences between the music related material in the documents listed above — for instance, Swanwick has traced the different positioning of `knowledge' within early National Curriculum related documents (1994, pp. 54-59) — certain general commonalities run through. The main activities of performing, composing, listening and appraising (in its critical and applied sense particular to the music curriculum) are found throughout, albeit in differing alignments, with an emphasis on the practical and experiential holistic nature of musical engagement. Similarly, attention is repeatedly drawn to the musical elements of pitch, duration, dynamics, tempo, timbre, texture and structure. Although mention of notations as means of refining and recording is included, traditional staff notation is not obligatory for Key

Stages 1 and 2. The uses of body and voice, instruments and other sound makers are specified and a broad repertoire of music from different genres, times and countries is encouraged. This, then, is the basic 'public' knowledge (Eraut, 1994, see above) of the music curriculum with which one might expect practising primary teachers to be familiar, even though, during the year in question, the requirement to follow the *specific* programmes of study had been relaxed as part of an emphasis on literacy and numeracy (Ofsted, 1998a).

The designation of certain subjects within the National Curriculum as core subjects (originally English, mathematics and science) was justified by saying that these subjects encompassed 'essential concepts, knowledge and skills without which other learning cannot take place effectively' so that competence in these subjects was 'needed throughout the curriculum, and in all aspects of adult life' (DES, 1989, para. 3.6). This inevitably set up a hierarchy (Alexander, 1994; Paechter, 2000), affecting the time and effort spent on the non-core, by implication less essential, subjects, including music. This was particularly so after the introduction of the National Literacy and Numeracy Strategies (NLNS) when it was reported that some schools were 'not providing sufficient depth in their teaching of non-core foundation subjects', with 'problems of coverage ... particularly marked in design and technology, art, *music,* geography and religious education' (Ofsted, 2002, p. 2, para. 8, my italics).

It is possibly, therefore, not surprising that in 2004 the chief inspector for schools, David Bell, could warn that 'The gap in standards and quality between English, mathematics and science and other subjects has widened. We cannot afford, and our children do not deserve, a two-tier curriculum' (Ofsted, 2004b, p. 2). On the other hand, one of the features among the successful schools in that earlier 2002 report was 'The

richness of curriculum ... and, in particular, their achievements in the arts' (Ofsted, 2002, p. 7) with music featuring frequently.

Bill Laar reported the confused messages that appear to be being sent out by the Government and by Ofsted (2004, p. 24). He suggested that the limitations in the Ofsted inspection framework meant foundation subjects grouped in blocks might only be `sampled', leading to some subjects not being inspected at all. This therefore sent a message to schools 'that is diametrically opposed to the vision of the primary strategy' set out in the document *Excellence and enjoyment — a strategy for primary schools* (DfES, 2003).

That document emphasises the need for schools to be creative in working out ways of achieving 'ownership of the curriculum' (DfES, 2003, p. 4) and promotes the foundation subjects in statements such as:

> Excellence in teaching and enjoyment of learning is at the heart of what we are doing. Literacy and numeracy remain vital, but we want all schools to be able to offer their pupils a rich and exciting curriculum, in which every subject is taught outstandingly well. *(ibid.* p. 5)

Music is referred to several times, often as an area of potential creativity and as enhancing the distinctive character of a school (p. 4). New initiatives are mentioned, in particular the aspiration that all Key Stage 2 pupils who want to should learn an instrument (pp. 32 and 36). Music is also seen as a subject where the needs of gifted and talented children should be served (p. 42). Although one might query the lack of emphasis on music as a valuable subject in the general curriculum for all children, it would appear that music is still seen as an area of importance and where innovative projects are necessary and valuable. However, in that same document, as far as *teaching*

is concerned, music is identified as an area where 'more dedicated subject-specialist teaching may be helpful' (p. 34).

This is interesting, given that Ofsted had earlier consistently reported the quality of music teaching in primary schools to be higher than that of other subjects (1993; 1995a; 1998c). Surprisingly, given the emphasis on subject knowledge and the widespread use of specialist teachers in secondary schools, it had also been the case that the teaching of music in primary schools was regarded as better than that in secondary schools (Mills, 1997a).

The Ofsted primary music subject report for 1999-2000, the year during which my investigation took place, stated that 'teaching is good in both key stages in about half of schools and is better in Key Stage 2, maintaining recent trends' (Ofsted, 2001). That same report stated that

> In nine schools in ten the curriculum for music is broad and balanced, and one third of schools have a good music curriculum. A well-planned music curriculum links well with other subjects of the National Curriculum as well as making a rich contribution to pupils' spiritual, moral, social and cultural development. (Ofsted, 2001, pp. 2-3)

This was positive, but also identified room for improvement, because 'A weakness in teaching is the lack of clarity about what is to be learned, so that pupils do not extend their work or acquire new skills in a systematic sequence' *(ibid.)*. The corresponding report for the previous year, 1998-1999, the year in which the school involved in this study had been inspected by Ofsted, declared that teaching in both primary key stages had improved, with 'no evidence of the dip in teaching quality found in many subjects in Years 3 and 4' (Ofsted, 2000b, p.1). However, it was noted that 'few primary teachers have attended INSET in music this year' *(ibid.)* It was also noted that although there had been 'some constructive reappraisal of the ways in which time is used in

music' in order to accommodate the promotion of numeracy and literacy, nevertheless, in some schools, 'music is virtually missing from the timetables of teachers who would rather not teach it' *(ibid.).* There were also some adverse remarks about the use of broadcasts in schools that had 'failed to promote music in the curriculum' *(ibid.* pp. 1-2). This, then, was the context at the time of my conversations with the teachers involved in this study.

More recently, it is reported that 'In around three fifths of schools, music provision and the achievement of pupils is good or very good' and that 'The quality of teaching is good or better in over two thirds of schools' (Ofsted, 2005, p. 5) echoing similar findings for the previous year (Ofsted, 2004a).

Despite these encouraging views from Ofsted, many primary school teachers and student teachers have expressed a lack of confidence in their ability to teach music, both before and since the inclusion of music within the National Curriculum (Barnes and Shinn-Taylor, 1988; Wragg, Bennett and Cane, 1989; Mills, 1989; Bennett, Wragg, Cane and Carter, 1992; Lawson, Plummeridge and Swanwick, 1994; Hargreaves, Comber and Galton, 1996; Jeanneret, 1997; Green, Chedzoy, Harris, Mitchell, Naughton, Rolfe and Stanton, 1998; Mills, 1998; Hennessy, 2000; Burnard, 2004; Rogers, 2005). Cox and Hennessy point out that 'The nature of inspections gives rise to large amounts of 'snapshot' evidence that may well distort our knowledge of what is going on, both in quality and effectiveness' (2001, p. 34), which might help explain these conflicting opinions. By now, all state-educated school leavers beginning initial teacher education courses will have experienced music within the National Curriculum. However, one of the most recent of the above references (Burnard, 2004) implies this has not necessarily had a beneficial effect on their confidence to teach the subject.

There are, of course, various alternative possible reasons for Ofsted's positive view. For instance, a greater lack of expertise in subjects *other* than music might reflect advantageously on music; or the use of subject specialists for music might give a distorted result, although, in fact, specialist teachers are not found necessarily to give the best results (Mills, 1997b). Even so, however, it would appear that teachers either are not considering the same aspects as Ofsted; that they know more than they think they do; or that they do not recognise or appreciate the relevance of all the knowledge they have. As Janet Mills, then HMI Senior Inspector for Music, commented, when discussing the first year's Ofsted findings: 'what the successful class teachers brought to their music lessons was their ability to observe pupils, work out what they could do, and plan an activity which would move them forward' (1994, p. 193). In other words, such teachers used their general pedagogic knowledge and their pedagogical content knowledge. It might be hoped that, having followed the music Programmes of Study (PoS) for several years, teachers would feel more confident in their abilities to deliver them. However, as well as those references above, a relatively recent survey from the National Foundation for Educational Research (NFER) has reported that

> Although the best resourced arts subject in terms of teacher expertise, music generates the greatest anxiety concerning lack of expertise or confidence. The evidence gives an impression that one must either be a specialist in music teaching or fear it. (Downing, Johnson and Kaur, 2003, p. 49, para. 5.1)

There is also some evidence that there may not be a common understanding of what the National Curriculum involves, with Welch and Adams, in their review of research related to music in schools, commenting that 'the research evidence is equivocal ... not least because musical behaviour and development is multi-faceted and culturally diverse' (2003, p. 16).

There have been worries about the continued place of music within the school curriculum. However, before this study began, the then Secretary of State for Education and Employment stated that

> [N]o one should have any fear that school music is under threat. It is and will remain a compulsory subject in the national curriculum. The changes we have introduced to the primary curriculum do not mean, as some suggest, that music is "being dropped". It certainly is not. (Blunkett, 1998, p. 13)

As we have seen above, music and the arts continue to feature positively in government documents, helped particularly by the seminal (although initially almost ignored) report *All our futures: Creativity, culture and education* (National Advisory Committee on Creative and Cultural Education, 1999/2001). Despite teachers' professed lack of confidence, music in school is usually valued by staff and pupils (Lamont, Hargreaves, Marshall and Tarrant, 2003). Indeed, in the NFER report mentioned above, not only was the evidence for commitment to the arts in schools reported as 'compelling', but it was also found that 'music is the only arts subject thought by headteachers to be increasing in curriculum time' (Downing, Johnson and Kaur, 2003, p. 49). Following the Wider Opportunities pilot programme, which explored different ways of helping primary children to learn to play musical instruments (see Davies and Stephens, 2004), the DfES published the Music Manifesto in order to pull together and demonstrate the support of a number of government and other bodies for extending music opportunities for young people (DfES, 2004).

To summarise: in the sense that it has been a foundation subject within the National Curriculum since the latter's inception, music is well established within the National Curriculum as it applies to maintained schools within England. Therefore, it is worthy of research aimed at describing and clarifying teachers' knowledge within the subject.

However there is more to knowledge of music in education than the public curriculum knowledge so far described.

2: 5.2 Knowledge and music

Earlier parts of this chapter have examined the nature and importance of subject knowledge in general. The following section draws mainly on the music education literature in order to consider what areas might be included as far as knowledge within music is concerned. This includes knowledge of music in the sense of what aspects a person's knowledge of music might involve, but also addresses music *as* knowledge: the knowledge that is considered by authors such as Elliott (1995), Reimer (1989), Serafine (1988) and Swanwick (1994) to be part of the nature of music. It is acknowledged that the literature cited presents viewpoints from, mostly, the US and UK research community both as far as music and mainstream education are concerned. This study takes place within the English educational system and would be different in content, style and relevance in a cultural setting with different conceptions of music, education and the relationships between those and individuals.

In both the senses mentioned in the previous paragraph, knowledge relating to music is inevitably connected to the nature of music. Debates over what music *is* comprise a wide-ranging and diverse field. The Canadian-based philosopher and musician Wayne Bowman commences his discerning and extensive *Philosophical perspectives on music* by talking of 'a vast, complex, and contradictory body of literature' given that 'For thousands of years philosophers have puzzled over this uniquely human preoccupation called music' (1998, p. 1). For Bowman, the fundamental questions are 'What is the nature and value of music?' And, as he says, 'These seemingly simple questions have generated, and indeed continue to generate, an astonishing array of responses' with no

`one 'essential' way all music 'is' or may be found to be' *(ibid.* p. 2). As Serafine puts it, 'music has been boggling the minds of scholars for well over three thousand years' (1988, p. **1).**

2: 5.2.1 Why we need to know what music is

For the purposes of this study it is not necessary or possible to enquire too deeply into the various historical perspectives. However, having acknowledged Bowman's remark that there is no single way of thinking about music, and accepting that some of the following points apply to other subjects as well as to music (bearing in mind sections 2: 2.2 and 2: 4.3.4 above), it *is* necessary to give an indication of some of the current viewpoints that may influence the teachers involved in the study, because of the influence such knowledge may have. Namely:

- Views about the nature and value of music are part of the knowledge teachers may hold and, therefore, this summary gives some indication of the possible breadth and implications of such knowledge. Christopher Small, using the word `musicking' to emphasise the essential activity involved in any form of engagement with music, goes so far as to declare that 'Everyone, whether aware of it or not, has what we can loosely call a theory of musicking, which is to say, an idea of what musicking is, of what it is not, and of the part it plays in our lives' (1998, p. 13).

- There is a connection between nature and value: what one thinks music is, what it can do, and thus why it is important. In fact, it may be impossible entirely to separate the two given 'the dispute over where to draw the line between music's inherent nature and its supposed effects, between what music is and what it does, between the musical and the extramusical' (Bowman, 1998, p. 13). Swanwick shows a similar interrelation when

he advises that 'To begin to understand how music works its spell requires us to think about how we perceive music' (1994, p. 3).

- There is a link between one's views about the nature and value of music and its place and role in education (Pitts, 2000; Plummeridge, 2002). This also applies to its place and role in *music* education. For example, Reimer declared that his 'single, fundamental premise', expounded at the start of all three editions of his *Philosophy of music education,* was that 'the essential nature and value of music education are determined by the nature and value of the art of music' (1970, p. 1; 1989, p. 1; 2003, p. ix). Elliott, while disagreeing with Reimer's particular philosophy of music education, rests his thinking on the same basic principle: 'the most reasonable way to explain the nature and value of music education is to begin with an explanation of the nature and significance of music' (1995, p. 12). Of course, this connection between a subject and its treatment in education is not unique to music as a subject. Shulman and Quinlan, discussing the comparative psychology of school subjects, write that

> What counts as knowing a subject is pivotal to how we theorize about it, how we study it, and how we attempt to influence its development ... conditions of teaching and learning are treated quite differently as a function of how knowledge and knowing are defined in the particular disciplines to be taught and learned. (1996, p. 399)

- In practice this relationship is revealed in a link between one's conception of music and how and what one teaches. Reimer considers that 'Everything we music educators do in our jobs carries out in practice our beliefs about our subject' (2003, p. 4). This is supported by Swanwick who reports that, in a research study carried out during the 1980s into the context and curriculum of schools, 'quite commonly ... the curriculum seemed largely determined by the 'philosophy', that is to say the theoretical perspective of individual teachers' (1988, p. 9).

- Similarly, there is a connection between *why* music is taught and *how* it is taught:

  > [A]ny particular justification [for music in the curriculum] will have a bearing on how the subject is conceived, presented and taught to pupils in schools. A review of the music education literature ... reveals trends in music teaching that are informed, either implicitly or explicitly, by particular ideas regarding the value and aims of musical studies in education as a whole ... although this is not to suggest that there are necessarily distinct styles of music teaching. In fact, within the classroom, teachers are likely to be fairly pragmatic. (Plummeridge, 2002, p. 5)

While it can be argued that this is another example of a statement that could apply to any subject, nevertheless from that passage we can also note that any beliefs regarding the value of music may be explicit or implicit, as already seen in the general literature, so that a teacher may not be conscious of the underpinning 'particular ideas'.

- The above point also applies in a wider social or professional context. Reimer suggests the possibility of a two-way influence when he describes how a culture's values determine its education and how 'successful education both carries out and develops the culture's philosophy' (1989, p. 149). Jorgensen declares, 'How a profession conceives of itself, its reason for being, and its assumptions about the world with which it interacts has much to do with how it goes about doing what it does and practicing what it professes. The assumptions underlying music education largely shape its particular objectives and methods' (1997, p. xi). This would also apply to the various views, including political, that have influenced the National Curriculum requirements (Cox, 2002a; Plummeridge, 2001).

- The converse is also possible: what one considers education to be and how one teaches influence how one thinks about music in the curriculum. Plummeridge (2001) takes a broadly chronological view in his examination of traditional, progressive and utilitarian theories of music education in this country. He links each approach to the

particular prevailing views of education in general and describes how each 'is characterised by an underlying view regarding the justification of music in the curriculum which in turn leads to specific aims, the realisation of which is dependent on certain types of content and teaching styles' even though, in practice, these 'ideal' types are never found in a 'pure form' *(ibid.* p. 25). This, of course means that teachers may have been taught under one ethos, while later teaching in another one. In the United States Jorgensen (1997) takes a similar approach. However, rather than Plummeridge's broadly historical perspective, Jorgensen examines the nature of education within each of the five concepts of schooling, training, eduction, socialisation and enculturation as `Each of these terms evokes a different concept of what education should be and is' (1997, p. xiii), with her ideal approach containing elements of each.

There is a further consequence to this link between views about general education and particular subjects in that there are implications for the status of any subject in the curriculum (an issue already mentioned). Both Plummeridge (2002) and Pitts (2000) make the connection between the differing justifications for music and its varying place in the curriculum hierarchy. Pitts also points out the two-way influence between a subject's status and role and how it is taught (2000, p. 34). In these instances, although both authors were writing about secondary school teachers of music, their comments seem equally applicable to primary school teachers. Reimer has also described how music is seen as an 'auxiliary' subject in a culture where 'certain subjects have come to be regarded as basic in that their value seems to be essential for all', while auxiliary subjects 'are allowed in school as pleasant or useful adjuncts to the extent they do not interfere with the basics in any significant way' (1989, p. 148). In the general education literature, Nespor has recounted how the 'values placed on course content' exemplify the way in which *affect* relating to teachers' conceptions of subject matter can be

manifest (1987, p. 319), pointing out that 'Affect and evaluation can be important regulators of the amount of energy teachers will put into activities and how they will expend energy on an activity' *(ibid.* p. 320).

From this we can appreciate something of the complex interrelation between education, the nature and value of music, and music education. The following sections try to explore various of these aspects: some of the ways one can view the nature of music; how these beliefs can be seen in some of the most dominant current philosophies of music education; several common justifications for music; and other forms of musical knowledge.

2: 5.2.2 The nature of music

As already mentioned, the nature of music is a vast area and one much debated. Bowman (1998) takes a broad historical approach but is careful to show the links between apparently different conceptions, revealing several recurring issues and themes. For instance, the distinction and relationship between the intrinsic and external nature and value of music are fundamental to many of the different perspectives on music (and, hence, music education). There are also links with another basic dichotomy: that of the nature of the relationship between cognition and affect, and a third issue concerning context, particularly social and cultural. Although context has not always been part of earlier philosophies of music, it has become an important element of more recent thinking (see, for example, Blacking, 1976; Hargreaves, Miell and MacDonald, 2002a) and is an integral feature, in different ways and to differing extents, of the work of Elliott (1995), Jorgensen (1997), Serafine (1988) and Swanwick (1988; 1994; 1999). A specific indication of the increasing awareness of its relevance is seen in the differences

between the second and third editions of Reimer's *Philosophy of music education* (1989; 2003).

However, for much of the twentieth century, when considering the various perspectives on the nature and value of music, and hence music education, the two most fundamental and linked dichotomies were those concerned with the absolutist/referentialist and the formalist/expressionist dimensions (see, for instance, Meyer, 1956). For the absolutist, meaning lies entirely within the musical work, equating with Bowman's (1998) *music as autonomous form,* while for the referentialist, meaning refers to extramusical concepts, actions, emotions and character. The formalist position holds that meaning is an essentially intellectual perception and understanding of the relationships within musical works: the *form* of the music. On the other hand, expressionism considers those same musical relationships can generate feelings that are then perceived in some way by the listener.

These two dimensions combine to form a range of attitudes from the absolute formalism of, for example Hanslick (1854/1957; Bowman, 1998, ch. 4), to the referential expressionism of Cooke (1959). However, possibly the most widespread approach is that of absolute expressionism, seen in the varying positions of, for example, Langer (1942/1957), Meyer (1956) and Reimer (1970; 1989).

For Hanslick (1854/1957), musical form and content were brought together in 'tonally moving forms' so that music was about beautiful patterns with no connection or reference to anything outside music, including feeling. He considered one should engage with music via 'a kind of rapt, vigilant, contemplative hearing' while 'pleasure that is properly musical consists in the mental alertness associated with such hearing,

not some diffuse, emotional experience ... Musical beauty is a beauty like no other, and its source is none other than tonally moving forms' (Bowman, 1998, p. 134). Meaning lies in the contemplation of the relationship between the sounds. Music expresses *itself* rather than something in the outside world.

Cooke's (1959) expressionism lies at the opposite pole. He considered that particular musical sequences and motifs represented specific emotional states and, therefore, direct transference of the emotions of the composer was possible. Such a viewpoint is one of those directly linked to the idea of music as a language (Bernstein, 1976; Sloboda, 1985).

This commonly held association of music with language is also found in the influential philosophical works of Susanne Langer, who occupies a kind of midway position in that she reconciled an insistence on intrinsic form with the presence of feeling. For Langer (1942/1957), music was non-representational and therefore its meaning was symbolic, inherent in the 'significant form' (Bell, 1914/1958). The symbols were untranslatable because 'incommensurable with language' (Langer, 1942/1957, p. 218) and only understandable through their relations within the total structure of a work. Such symbols are therefore presentational (non-linguistic) rather than discursive. Music might be seen as a *'language of feeling' (ibid.* p. 220), but in the sense of expressing the composer's `*knowledge of human feeling'* rather than his *[sic]* personal experience of such feelings in the sense of self-expression (p. 221), so the symbols are 'unconsummated' in that they can only reflect the 'morphology' of feeling (p. 238) rather than particular emotions. She believed that *'music articulates forms which language cannot set forth'* (p. 233) and, because it mirrored the structure of emotions, music helped make the emotions conceivable and thus had a cognitive function in that it enabled people to

understand and reflect on the world of feeling. Emotion and knowledge were thus intertwined. However, Langer stressed that 'such significance is implicit but not conventionally fixed' (p. 241) and that 'the assignment of meanings is a shifting, kaleidoscopic play, probably below the threshold of consciousness, certainly outside the pale of discursive thought' (p. 244). Although there have been criticisms of her work on a philosophical level (especially Budd, 1985, ch. 6) and, from a specifically music education standpoint, Jorgensen has noted the lack of emphasis on 'the role of social context' (1997, p. 35), nevertheless, Langer's work has been 'extraordinarily influential' (Bowman, 1998, p. 199).

2: 5.2.3 The nature and value of music in relation to music education

Similar views can still be seen in current theoretical practice, for instance in the works of Reimer and Swanwick. There is obviously neither space nor need to give a full exposition of their thinking, and consequently I am abstracting only those aspects from each that are intended to enrich this study, while acknowledging that this will inevitably present an incomplete reflection of their total perspectives.

Bennett Reimer

One of the strands running through the first and second editions of *A philosophy of music education* (Reimer, 1970; 1989) describes the connection between the above different views of music with their corresponding influence on music education. The particular view he advocated, music education as aesthetic education (MEAE), became, during the second half of the twentieth century, the dominant philosophy of music education: 'the general view it proposes has become the bedrock upon which our self-concept as a profession rests' (1989, p. xi). However, Elliott (1995), while accepting its dominance, objected to many of the underlying tenets, as he understood them,

particularly the formalist emphasis on the work (see below), and envisaged his own praxial philosophy as a corrective to this paradigm, within which he also placed the work of Swanwick. Swanwick, in return, criticised Elliott's interpretation as 'a caricature' of Reimer's beliefs (Swanwick, 1999, p. 6). Although Swanwick draws on similar sources to Reimer (particularly Langer) within his eclectic mix, there are aspects of Reimer's work that he too criticises, for example Reimer's equating of aesthetic, artistic and intuitive (Swanwick, 1994, pp. 35-36; 1999, p. 3).

While firmly positioning himself in the absolute expressionist sector, Reimer compared and contrasted the three theories of referentialism, absolute formalism and absolute expressionism in order to show how these differing views about the nature and value of music might be manifest in music education. Although much of this was applicable to other arts, he also made the case for music's unique nature and contribution. The following summary is included because it provided part of the conceptual framework at the start of the empirical phase of this study. These were the positions I thought might be seen in the beliefs of the teachers involved.

Reimer describes how the **referentialist,** for whom the meaning and value reside outside the artwork, sees the function of art as giving experience of and explaining something extra-artistic — an idea, emotion, attitude or event — to which the music refers. The success of a work lies in its ability to communicate the intellectual, emotional or practical message, and its importance or value lies in the extent to which the non-musical referent is important or valuable. In music education, this view can be seen in music that tells a story (programme music), or where music is added to a story or another artwork. It is also seen when an emotion, such as sadness or love, is identified as the content of music (see Reimer, 1989, pp. 18-22). The value of music in

education, for one who takes this stance, lies in its extra-musical functions and is described by Reimer as follows:

> Studying music makes one a better person in many ways: it improves learning skills, it imparts moral uplift, it fulfils a wide variety of social needs, it provides a healthy outlet for repressed emotions, it encourages self-discipline, it provides a challenge to focus efforts upon, it gives a basis for worthy use of leisure time, it improves health in numerous ways; it is assumed to be, in short, a most effective way to make people better — nonmusically. (1989, p. 22)

In this category would also come the view that art is self-expression, or a way of releasing emotions the artist is feeling at the time — what Dewey refers to as 'a spewing forth' (1934, p. 65).

For the **absolute formalist,** on the other hand, as we have seen above, 'Artistic events, such as sounds in music, mean *only themselves:* the meaning is completely and essentially different from anything in the world which is nonmusical' (Reimer, 1989, p. 23). This is an intellectual experience, albeit referred to as an aesthetic emotion, of 'the recognition and appreciation of form for its own sake' *(ibid.),* with any references to the outside world held to be irrelevant to the meaning of the work. Such contemplation is only achievable by the few. As Reimer puts it, 'In the rarified *[sic]* realm of pure form, untouched by the homeliness of ordinary life, Formalists find their satisfaction and their delight. They do not expect to find much company there' (1989, p. 25).

In music education, Reimer suggests this view is seen in the practice of separating the formal elements of an artwork in order to study them for their own sakes. The art is studied as a discipline, with an emphasis on propositional information and the development of skills. The major value is intellectual, when music 'transports one from the real world into the ethereal world of the aesthetic' *(ibid.* p. 25). In particular, the

policy of only teaching the 'talented' while 'entertaining' the rest is an application of formalism.

Reimer suggests that each of these two positions contains 'a measure of truth' *(ibid.* p. 26). So that, for instance, art and feeling *are* connected; works of art *can* be affected by subject matter; and they *can* serve non-musical ends (referentialism). However, they can also be devoid of external subject matter; reactions to art works are not like other emotions, and the value inherent in art is inherently artistic (formalism).

The third, and Reimer's preferred artistic theory, **absolute expressionism,** includes those elements from the other two theories, although Reimer maintains the position 'is not in any sense a combination of the other two', but rather 'a distinctive, coherent viewpoint' *(ibid.* p. 26).

Reimer is adamant that any justification for music in the curriculum must relate to music as both unique — providing experiences not obtainable by other means — and necessary, in the sense of essential for all people (1989, p. 8). He rejects the referential explanation of meaning within the arts because that could apply to any other symbol system that refers to external meanings, and, if the same meanings can be conveyed in ordinary verbal language, for instance, then where is the uniqueness of the arts? On the other hand, although formalists may argue convincingly for the unique experience of art, its nature, by their definition, means it cannot be considered essential for everyone.

 The absolute expressionist maintains that meaning and value in the arts are internal: `they are functions of the artistic qualities themselves and how they are organised' *(ibid.* p. 27.). This is the *absolutist* part of the term. However, unlike the absolute formalist

view, any external artistic and cultural references can become part of the internal experience for the one experiencing the work, should that person be aware of the influences. Non-artistic references must be 'transformed and transcended by the internal artistic form' in order to have artistic meaning in the absolute expressionist sense (p. 27). 'Reference, while influential, is never the point' (p. 28).

The expressionist part of the position 'connects the experience of art with feeling' (Reimer, 1989, p. 28). However, 'feeling' here is not the same as the referentialist's direct communication of emotions in the everyday world, but rather connects with the theories of Langer (see above). In a not dissimilar way from Eisner (see 2: 4.2.4), Reimer describes how we experience ourselves and the world around us through our senses, so that 'consciousness itself is affective' *(ibid.* p. 49). Feeling is thus a very broad term and some of this 'self-knowing' is not emotional as such, but rather a mental sensation or sensibility. This means that 'the arts offer meaningful, cognitive experiences unavailable in any other way, and ... such experiences are necessary for all people if their essential humanness is to be realized' *(ibid.* pp. 28-29). They are thus a unique and essential way of knowing the world and Reimer quotes Langer to explain how music, because of its congruency with the forms of human feeling, is a better tool for exploring and learning about 'experiences of feeling than verbal language (Reimer, 1989, p. 50; Langer, 1942/1957, p. 235).

Reimer declares the value of an experience of art to be intrinsic: 'for the sheer, sweet sake of the experience itself and our unique capacity to be aware that we can experience our aliveness' (1989, p. 52). Through this, the arts are seen as 'a means of self-understanding' *(ibid.* p. 53). Although he does not deny that there may be extrinsic benefits from music, indeed considers they are sometimes inescapable, he rejects them

as 'first causes' (p. 8) not only they can be achieved by other means as well as music but, primarily, because music *education* should be 'education for the essentially aesthetic or musical qualities and values of music as an art' (p. 122). However, this does not preclude some of the other functions being included in a music education programme, as long as the *'primary* focus is artistic' *(ibid.,* my emphasis).

For Reimer, the function of music education is thus

> [T]he education of human feeling through the development of responsiveness to the intrinsically expressive qualities of sound. The deepest value of music education is the same as the deepest value of all the arts in education: the enrichment of the quality of people's lives through enriching their experiences of human feeling. (1989, p. 53)

Although the above perspective underpinned the data collection, it proved an insufficient framework for the teachers' beliefs when it came to analysing the data (see 5: 2.3.1) and I discovered a later paper by Reimer (1997) where he recommends a mix of formalism, praxialism, referentialism and contextualism as a basis for a possible universal philosophy of music education. His descriptions of formalism and referentialism mostly follow those above, although he clarifies the latter by distinguishing between the communicative function of music and its 'instrumental utility' (1997, pp. 13-15). With the addition of praxialism (and reference to Elliott), Reimer balances the emphasis on product (in formalism) with 'the process — the doing, the acting, the creating involved in music — as being the essence of music' *(ibid.* p. 10-11). Contextualism is 'intertwined' with the other three, and denotes not only the `beliefs, traditions and values' in which musical processes are situated and also, hence, any such references within the music, but also an awareness of 'the sociocultural functions of music' where 'music is ... a playing out of, or manifestation of, or aural portrait of, the psychological, emotional, political and social forces of the human context in which it exists' (p. 15).

In the third edition of his philosophy (2003), Reimer's position has been further refined and developed in response to postmodernist thinking and to various specific authors (for example, Armstrong, 1975; Green, 1988; Damasio, 1994). Here, he advocates a `synergy' of aspects from music as form, music as practice, and music as social agency, recommending 'soft boundaries' between views of music as unique and as intermeshed with other areas of human experience, and an acknowledgement of widespread belief in the utilitarian values of music, despite the lack of research evidence *(ibid. ch.* 2).

Having drawn on Reimer in order to give a sense of some of the main underlying ways of considering the nature and value of music, together with implications for music education, I turn now to the work of Swanwick in order to examine how knowledge of music might be conceived. In fact, both Reimer (2003) and Elliott (1995) also consider forms of musical knowledge, with Reimer positing 'knowing within' music, 'knowing how', 'knowing about' and 'knowing why' (2003, p. 94 *et seq.);* and Elliott proposing not only procedural knowledge but also formal knowledge, informal knowledge, impressionistic knowledge and supervisory knowledge (1995, p. 53 *et seq.).* However, Swanwick is included for his place within English music education.

Keith Swanwick

Swanwick is an essential source in any consideration of knowledge in music education in England because he (for example, 1979; 1988; 1994; 1999) and John Paynter (especially Paynter and Aston, 1970; and Paynter, 1982) have possibly done more than any other individuals during the latter part of the twentieth century to shape current music education practice in this country. For instance, Cox writes of the 'evolution of the National Curriculum model from the previous work of John Paynter ... and Keith

Swanwick' (2002a, p. 113). Similarly Plummeridge has commented that Swanwick's `ideas and principles have become the source for much current thinking on curriculum design and classroom practice' (2002, p. 7). Paynter and Swanwick were also the founding editors, for fourteen years, of the *British Journal of Music Education.*

The sequence of Swanwick's main publications reveals the cumulative and eclectic development of a philosophy of music education that knits together various important strands concerned with the nature and value of music as an art and what the development of musical awareness and knowledge might mean in educational settings (1979; 1988; 1994; 1999). For Swanwick, music is a form of knowing or cognition (see also Serafine, 1988), a symbolic form and a mode of discourse, 'impregnated with metaphor' (for example, 1999, p. xii, with the notion of metaphor developed pp. 7-13). Music's value is thus connected to its nature in that 'Music is a way of thinking, a way of knowing. As a symbolic form it creates a space where new insights become possible ... this is ultimately why music is significant and valuable' (1999, p. 23). Music's value among the arts lies in its nature as 'a medium in which ideas about ourselves and others are articulated in sonorous shapes' (1999, p. 2).

His book, *Musical knowledge: Intuition, analysis and music education* (1994) is a valuable reference when considering what knowledge might mean in relation to music. As part of his argument, Swanwick divides knowledge into two main types, reflecting divisions noted earlier in this chapter, summarised in the following passage:

> [Musical knowledge appears to be either propositional or direct, by acquaintance. Acquaintance knowledge is prime, for there is no other way of accessing music, and it is complex, having several layers. These I categorise as materials (knowing how), expression and form (knowing this) and value (knowing what's what). Of these it is valuing that characterises the deepest levels of musical experience. (1994, p. 25)

Knowledge is rarely as easily distinguishable as this and Swanwick has earlier explained that although the 'several strands' of knowledge are 'separable for the purpose of closer analysis' they are 'often woven together in our actual experience' (1994, pp. 14-15). This means such knowledge is essentially individual, as he concludes in the same book: 'Ultimately, all 'meaning', all 'knowledge' is a personal, individual interpretation of life experience' (1999, p. 176).

Nevertheless, his ways of thinking about different sorts of musical knowledge are helpful in their distinctions, as well as linking with aspects of Eraut's divisions of professional knowledge. Therefore, there follows a fuller description of each of Swanwick's 'layers'. However, it should be remembered that the following typology from Swanwick originally related to knowledge of the subject itself, rather than the applied professional, pedagogic, knowledge of a teacher.

Knowing *that* is factual and propositional, following Ryle (1949/1963). It involves information *about* music, including, for instance, technical vocabulary and knowledge about historical, geographical and sociological context. Swanwick considers this is the `most obvious and easily recognised category of knowledge', which can 'easily be acquired in non-musical ways' (1994, p. 15). Yet, because of that, it is 'musically inert: second-hand knowledge' *(ibid.* p. 16) although sometimes useful in illuminating other kinds of musical knowledge. This would, in some instances, link with that part of Eraut's public, codified knowledge held in an individual's personal knowledge.

Although Swanwick also uses the term 'personal knowledge', his usage is in a slightly different sense from Eraut, being applied to first-hand knowledge acquired directly through musical experience, what he calls knowledge *of* music (p. 16), or 'direct'

knowledge (p. 26). This, he maintains, is far more important than propositional knowledge and subdivides into a further three sections:

Knowing *how* involves activity skills, such as aural skills, physical and manipulative skills (as in playing an instrument), and notational skills. These cover what Swanwick refers to as 'coming to grips with the *materials* of music'. He also describes this as 'a type of knowledge that we display in action every day', and says of it that 'most knowing 'how' cannot be learned or displayed verbally' *(ibid.* p. 17). This has some connection with Eraut's process knowledge.

Knowing *it* or **knowing *this*** is knowledge by acquaintance — knowing *this* music, — which is, according to Swanwick, the 'absolutely central core involved in knowing music'. Most of this 'is indeed likely to be tacit, unanalysed, unarticulated', however, `[m]any writers on aesthetics have stressed acquaintance knowledge as being absolutely fundamental in the arts' (1994, p. 17; and see, for example, Reid, 1986). As in knowing a person, it is only gained by repeated experiences (Reid, 1986). It is particularly concerned with expressive character and structural awareness. The former is 'not personal feelings in reaction to the music but a perception of what particular feeling qualities can be discovered by attending to the music itself.' These feelings are objective in the sense that they are

> embodied in our experience of the music, arising from our interpretation of the musical object ... When we speak of expressive character we mean that a musical performance has about it a sense of individual expressive identity' (Swanwick, 1994, p. 18)

Structural awareness is concerned with the relationships between different constituents within the whole and 'overarches, complements and is fused with expressive playing' *(ibid.).*

Swanwick thus seems to use 'acquaintance knowledge' as the term not only for the blanket category of personal knowledge of music, as seen in, for instance, his equating of 'Intuitive, personal or acquaintance knowledge' (1994, p. 26), but also, during his exposition of the various strands of musical knowing, as a distinct, albeit 'core' kind of knowledge, which he places after his description of 'knowing how' (see p. 17) and ties to expression and form (see pp. 17-19), the elements by which acquaintance knowledge is revealed. However, he then removes it to its overarching function in his summary (see the quote above, 1994, p. 25). For ease of distinction I have left it here as a separate category (relating to expression and form) alongside knowing how (skills/materials) and knowing what's what (valuing) as, for me, it has an individual identity, especially given his insistence on materials, expression and form, and valuing as the component parts of these strands of knowledge. However, this is not, of course, to deny the essentially personal and experiential nature of all three of these categories.

Knowing *what's what* is attitudinal 'knowing' and Swanwick links it to Bloom's affective domain (see Krathwohl, Bloom & Masia, 1964). As Swanwick says, 'We can respond to music with varying levels of commitment, or with none at all' (1994, p. 19). Again, it is dependent on accumulated experience and therefore, 'As a consequence, this knowledge of 'what's what' is deeply personal, highly subjective and varies not only between individuals but for any person over time, perhaps fluctuating from day to day' *(ibid.).* Although it involves 'experiential or direct valuing, when we as individuals find quality in an encounter', it also includes valuing at one remove, when we recognise particular music 'has value for others' even if we do not respond to it ourselves *(ibid.* p. 20). He distinguishes between meaning 'to' and meaning 'for' when one might appreciate the nature or worth of something, meaning 'to', even if it does not have much

relevance for oneself, meaning 'for' *(ibid.* p. 53). This is perhaps particularly appropriate when thinking about teachers interacting with their pupils, and links also with questions to do with the value of music as a whole, such as 'Why is music worthwhile?' and 'How can we encourage this form of knowing?' There is an additional link with Reimer's work here as valuing is the outcome behaviour of Reimer's 'seven basic modes ... through which people interact with music or any art' (Reimer, 1989, p. 167). Reimer similarly describes how this is a personal matter, which teachers cannot `require' from or teach to their pupils since 'What people choose to value is their own business' *(ibid.* p. 171).

Swanwick argues that these kinds of knowledge are used in criticising, analysing and responding to music at any level, in any circumstance (1994, pp. 22-23), although much may be intuitive rather than analytic. He maintains the strands of knowledge involving materials, expression, form and value cannot be escaped and that 'any analysis of the so-called 'meaning' of music seems to be articulated within this matrix of *knowing'* *(ibid.* p. 25). This therefore may be a potentially useful way of categorising the knowledge of pupils *and* teachers.

2: 5.2.4 Music as a unique art

This section is included as part of the justification for the arts in general and music in particular — thereby validating research in this area of the curriculum — and also because aspects to do with the arts are inevitably connected with the nature and value of music.

A basic justification for the arts in the curriculum lies in their well-established position as a discrete group. This is seen in for instance, in the writings of the philosophers Philip Phenix (1964) and Paul Hirst (for example, 1974, ch. 10) who considered the

aesthetic as represented by fine arts to be one of respectively six and seven unique forms of knowledge.

Abbs has also championed the arts as exemplifying a particular way of knowing: the aesthetic (see, for example, Abbs, 1987; 1989; 1994). Although the different arts have their own specific methods and techniques, Abbs considers they form a generic area of the curriculum because they share a common form of aesthetic understanding and certain aesthetic procedures, 'fundamental intellectual unity', where 'aesthetic refers to a particular form of sensuous understanding, a mode of apprehending through the senses the patterned import of human experience' (1989, pp. xi-xii).

From this stance, music is one of a linked family, sharing modes of understanding. This is a view once particularly associated with the Schools Council Project, *Arts and the Adolescent,* and the works of Ross (for example 1975) and Witkin (especially 1974). The arts were seen as contributing to pupils' subjective knowledge of their own inner feelings, the 'intelligence of feeling' (Witkin, 1974), and thus played a vital role in emotional development. In this view, the arts are both means of self-expression as well as of developing self-knowledge, and would fit in the referentialist position described above. Although they were criticised by, for example, Best (1992), see below, and Swanwick (1999, pp. 3-5), Plummeridge describes how 'their innovative framework has had a major impact on arts education over the past twenty-five years' (2002, p. 5). For instance, the later report *The arts in schools* (Calouste Gulbenkian Foundation, 1982) was an influential advocate for the arts in education in the period before the National Curriculum.

There are two main forms of argument against this way of thinking about the arts. One maintains that there is no shared fundamental essence underlying all the arts, with each having its own nature and value, and the second rejects the emphasis on experience at the expense of learning within education. David Best argues both (see, for example, 1992). Unlike Abbs, he furthermore holds that the artistic and the aesthetic are separate concepts (Best, 1992) and that true appreciation of the arts involves the cognitive/ rational as well as the affective/creative (1989, p. 70).

Many of the justifications for and outcomes of music (see, for example, Pitts, 2000; and Hargreaves, Marshall & North 2003) could apply to other subject areas, particularly to other arts subjects. However, Janet Mills moves from the shared to unique role of music in the following passage from her comprehensive handbook for teachers *Music in the primary school:*

> Music is a way of learning. Music brings you in touch with pattern and structure. It requires reflection and analysis. So, of course, does every other subject. But music does have something rather special to offer here. Whilst you reflect on, or analyse, a piece of music, you cannot hold it in your hand, or even see it, for music exists in time; it is held only in your memory. To analyse music, you have to be able to use your mind rather like a cassette recorder: to record, play, replay, fast forward, and even rewind. The same is true of language. But music differs from language in being non-verbal. Thus music requires processes of reflection and analysis which are at least a little different from those of other areas of experience. (1993, p. 107)

From this can be abstracted the view of music as a distinctive non-verbal, sound-based art, existing within the passage of time; understanding of which involves being aware of and appreciating structures and patterns (Sloboda, 1985; Serafine, 1988; Swanwick 1994, 1999).

Music itself has, for different reasons, been considered an important element of education from at least the time of the ancient Greeks (see, for example, Rainbow,

1989; Mark, 2002). More recently, Howard Gardner has declared music to be one of the major realms of intelligence in his (still debated) theory of multiple intelligences (1983/1985; 1993). As Reimer points out, this therefore provides a basic justification for the inclusion of music in any curriculum intended to develop all children in every aspect (1989, p. 12), although he later suggests there is more than one form of musical intelligence (2003, ch. 7). There is thus a similar validation for the inclusion of music within our National Curriculum, described as 'broad and balanced' and promoting `development in all the main areas of learning and experience which are widely accepted as important' (DES, 1989, para. 2.2). Moreover,

> There is now an enormous body of neurological research evidence that every normal, healthy human being is musical ... It is an integral part of our human design. Therefore, music is, and should be, a necessary and essential component of any broad and balanced curriculum. Without music, we cannot be seen to be educating the whole person. (Welch & Adams, 2003, p. 4)

In this context, also relevant is Eisner's promotion of the view of the unique contribution of each sense in providing 'the content through which our conceptual life takes form' (1996, p. ix). Because he asserts the need to develop literacy — in a metaphoric sense — in 'all the forms of representation that humans use to represent the contents of their consciousness' *(ibid.* p. x), music, as an essentially non-verbal auditory form of representation, is thus an essential element of education.

2: 5.2.5 Valuing music in education

Because of the difficulty in describing an essentially non-verbal medium in the language of words, it is sometimes easier, given the connection between nature and value, to look at the use and valuing of music in order to help illuminate the issue of nature. This approach is supported by Swanwick who considered that, in order to understand the 'complex phenomenon of music', we need 'evidence as to how people (we) make and take music' (1994, p. 2). It is not enough to look at 'the nature and

quality of musical knowledge' independent of 'musically-knowing minds', that is, the people engaged in musical activities. Therefore, it is necessary to try to understand `people as they respond to music as music-makers or music-takers in a cultural context' (1994, p. 3). For the purposes of this study, that context is, mostly, music in schools. Following Bowman's remark that it was sometimes difficult to distinguish between the nature and value of music (1998, p. 13, see above, section 2: 5.2.1), I am also taking the view that usage in schools is related to the various benefits that are credited to its use. As Tia DeNora suggests in her sociological study of how music is used and works as a structuring material in everyday life: 'it is probably impossible to speak of music's `powers' abstracted from their contexts of use' (2000, p. x).

The second and more direct reason for considering the use and justifications for music is that these may be part of the knowledge held by the teachers in the current study.

Pitts reveals the intrinsic/extrinsic debate as she traces three main justification threads relating to 'the child, the community and the culture' that weave through the twentieth century. In her opinion,

> music education has been advocated only rarely for the acquisition of subject knowledge, but rather for its desirable cultural influence, its preparation for the profitable use of leisure time, and its development of sensitivity and imagination. (Pitts, 2000, p. 34)

She does not expand on 'subject knowledge' here and apparently means that music has been valued more for extrinsic than intrinsic reasons, as she later says that, although music is considered relevant for all children, the reasons for that relevance 'tend to focus upon the 'extra-musical benefits of the subject; transferable skills' in today's jargon' *(ibid.* p. 37).

More than twenty years ago, the oft- and still-cited report *The arts in schools* (mentioned above, 2: 5.2.4), more usually referred to as the *Gulbenkian report,* was published. Swanwick refers to it as 'illuminating and persuasive' but considers it ultimately 'somewhat unsatisfactory' as it lacks any 'value-description based on a convincing account of the development of mind' (1988, p. 36). The report promoted the intrinsic value of the arts, saying they were 'absolutely worthwhile spending time on for the sake of the satisfactions that are intrinsic to them', rather than having 'an instrumental value in acquiring things that are valued in themselves' (Calouste Gulbenkian Foundation, 1982, pp. 27-28). However, two out of the six main areas of development in which the arts are considered to make 'vital contributions' to children's education were cited as 'understanding cultural change and differences' and 'developing physical and perceptual skills' *(ibid.* pp. 10-12). These, surely, are extrinsic benefits, in that they relate to aspects outside music.

This highlights the difficulty in defining what exactly *intrinsic* benefits might mean. Music is unique and ubiquitous and, as Hargreaves and his colleagues say, 'music plays a greater part in the everyday life of more people than at any time in the past' (Hargreaves, Miell & MacDonald, 2002b, p. 1). Yet it is a human construction and does not exist independently or naturally 'in the wild'. Therefore, it originated and has continued as something that the human species has considered desirable, although Elliott maintains the ubiquity of music demonstrates a human *tendency* rather than *need* (1995, p. 109). Experiencing music leads to one knowing more about music, but the argument behind music being included in any curriculum — that it is thought important for each child — is because it contributes something to the person concerned. Learning, in the sense of increased knowledge, implies change, whether 'of understanding, perspective or attitude' (Swanwick, 1994, p. 13). That change in a person *must* be extra-

musical because the person is 'outside' the music. Therefore, any of music's effects are outward facing rather than internal in the sense that the music acts on the person, it does not act on itself (even though a composer may then feed back new 'knowledge' into a fresh composition). What counts as intrinsic and extrinsic as far as an individual is concerned? Elliott has similarly touched on this 'logical contradiction' in one of his objections directed at advocates of music education as aesthetic education:

> On the one hand, these writers insist that the aesthetic experience is self-sufficient, disinterested, and impractical. On the other hand, they claim that the primary value of aesthetic experience (and aesthetic education) is knowledge of human feeling — an extrinsic benefit. (Elliott, 1995, p. 36)

This effect of music on the individual is clearly seen in some ongoing work by Hargreaves, Marshall and North (2003) in which they have constructed a conceptual model of possible outcomes of music education using a broad division into three main areas: musical-artistic, personal and social-cultural. All three areas are 'personal' in that they 'describe the effects of music learning on the individual' *(ibid.* p. 159) and the relationship between them is represented in a Venn diagram where the common core demonstrates 'the belief that the ultimate outcome of music education is the development of individual self-identity' *(ibid.* p. 160).

However, it should be noted that, concentrating as it does on the individual, some of the external objectives sometimes promoted, for instance outcomes relating to the transmission of culture, do not appear here, even though one might argue that they are of benefit to the individual as well as the surrounding community. As Tony Knight, then principal subject officer for music, the arts and culture at the Qualifications and Curriculum Authority (QCA), explained, in relation to an earlier version of this model, `Music is a powerful aspect of culture and plays a large part in society. In all societies, music and the arts serve to transmit cultural ideals and values from one generation to the

next' (Knight, 2002, p. 4). The importance of culture and social context will be returned to later in this chapter. This model was originally constructed in the context of music education for school-aged pupils. However, given that teachers are part of the adult community of life-long learners, it seems to me to have potential value beyond that original stage.

Plummeridge (2001) describes how, as far as the individual is concerned, music is variously considered to support intellectual, emotional, physical and social development (see also, for example, the Campaign for Music in the Curriculum, 1998). He suggests that many of the intellectual benefits claimed for music 'can be accounted for in terms of learning to learn' rather than by direct transference from one subject to another *(op. cit.* p. 24). Certainly neither Reimer (1989, p. 85) nor Elliott (1995, p. 131) support the notion of transference, although both Elliott and Swanwick consider there may be links at 'a more general level of cognition' (Elliott, 1995, p. 131; and see Swanwick, 1988, p. 49). However, a current research interest in brain function and cognitive operations is indicating that neurophysiological (Plummeridge, 2001) and neuropsychobiological (Welch, 2001b) evidence may support some of the claims for enhanced cognitive functions, although there is still a lack of agreement as to specific effects and necessary contextual conditions (Odam, 1995; Overy, 1998; Rauscher, 1998; Welch, 2001b; Colwell and Richardson, 2002, especially ch. 52; Ivanov and Geake, 2003).

On behalf of the Performing Right Society, Susan Hallam has produced a website report comprising a comprehensive collection of research into the power of music to affect many areas of our lives including health, education and marketing. As she says, 'Music is powerful at the individual level because it can induce multiple responses — physiological, movement, mood, emotional, cognitive and behavioural.' It is also

`powerful at the level of the social group because it facilitates communication which goes beyond words, induces shared emotional reactions and supports the development of group identity' (Hallam, 2001b, Key points).

In *The new handbook of research on music teaching and learning* there are several chapters dedicated to connections between music education and other fields which refer to and expound on many and more of these aspects (see Colwell and Richardson, 2002, Parts VII, VIII and IX). However, as Bresler identifies, in her overview of research on outcomes associated with engagement in the arts, the essence of such research is that it reflects 'what we value as a society.' Educators are concerned with 'arts for *people 's* sake' where the arts are seen as contributing to 'our well-being and success', however defined (2002, p. 1078).

From this it is evident that music is widely believed to possess a broad range of potential benefits relating to the individual as well as the wider social and cultural context. The issue of intrinsic and external value may be debatable as far as specific definitions are concerned, but does appear to exist as a concept. There are therefore various possible beliefs that may be held by the teachers in this study.

2: 5.2.6 Emotion and music

We have already seen how feelings are intricately bound up with the inherent meaning of music. They can be recognised in *music* by the listener and they can be induced, by external means, in the *participant* (see, for instance Swanwick, 1979, p. 29). In fact, the psychologists Juslin and Sloboda maintain that 'Some sort of emotional response is probably the main reason behind most people's engagement with music' (2001, p. 3). Similarly, in an earlier book, Sloboda says 'The reason that most of us take part in

musical activity, be it composing, performing, or listening, is that music is capable of arousing in us deep and significant emotions' (1985, p. 1). He maintains this emotional factor is transcultural because 'It seems unlikely that music could have penetrated to the core of so many different cultures unless there were some fundamental human attraction to organized sound which transcended cultural boundaries' *(ibid.)*. Somehow 'the human mind endows ... sounds with significance' so that they become symbols for something to which we react to a greater or lesser degree. This implies a cognitive component. As also does the fact that 'most of our responses to music are learned', in the sense of being culturally transmitted/gained from experience, although he accepts `the possibility of some primitive responses to music shared by the whole species' — for instance the rousing effect of loud, fast music and the calming effect of quiet, slow music *(ibid.)*. Even adding the effect of 'conditioning': when 'a piece of music acquires the emotional significance of the emotional circumstances in which it happened to be heard' *(ibid.* p. 2) is not enough to account for our response to music.

Swanwick uses the analogy of a joke to illustrate the importance of context in understanding music (1994, p. 36) and Sloboda earlier relied on a similar analogy to explain the emotional component. It is only after one has 'got' a joke — which 'involves a large set of cognitive processes, drawing upon knowledge of language and the world' — that one can respond, that is 'experience an emotional reaction involving laughter.' In other words, 'there is both a cognitive and an affective stage: a listener cannot find a joke funny unless he understands it' (Sloboda, 1985, p. 3). However, this affective stage is not inevitable: one may not find a joke amusing and may not laugh. Sloboda proposes something similar in music in that the listener passes through a cognitive stage 'which involves forming an abstract or symbolic internal representation of the music' although one may not necessarily then be 'moved' by it *(ibid.)*. In other

words, feeling succeeds

cognition. He entitled a presidential address to the British Psychological Society *Music — where cognition and emotion meet,* contending 'Emotional response is ... an integral outcome of the intuitive structural analysis that goes on while listening' (1999, p. 452). The 'false opposition' between feeling and understanding was the starting point for a conference paper by Spencer (1999) on the problematic nature of understanding in music. He pointed out that the National Curriculum Order links understanding and enjoyment as joint objectives, thereby implying they are discrete entities, with its requirement that 'Pupils' understanding and enjoyment of music should be developed through activities that bring together requirements from both *Performing and Composing* and *Listening and Appraising* wherever possible' (DFE, 1995, pp. 2, 4 & 6 for Key Stages 1, 2 and 3). Following a description of some of the ways in which the terms are used, he concluded 'Feeling, surely, is part of understanding!' (1999, p. 10). Some of his examples of feeling as *concurrent* with cognitive analysis thus broaden Sloboda's view of feeling as *outcome.*

2: 5.2.7 Context, music and music education

Reimer (1989; 2003) and Swanwick (1994, 1999) both emphasise the situated nature of music whereby music is understood in relation to the context that shaped it (see also Serafine, 1988, and Elliott, 1995). This can be a personal, a musical or a social context. However, Swanwick also points out that music can transcend its original culture, explaining that,

> Musical knowledge — while obviously arising in a social context — cannot be permanently locked into a cultural background. If it were so, then it becomes impossible to see how anyone could ever respond to the music of other cultures or other times in any meaningful way. Because of its power as a form of discourse, music is to some extent able to travel across time and between

cultures. (1994, p. 170)

Jorgensen (1997) explores this further by describing how one can only fully understand music if one recognises both its substance and manner. Music's substance, she describes, following Charles Ives, can be grasped in its content. This transcends time and place and so can be appreciated through the imagination 'more or less independently of the listener's cultural understandings of the music.' However, music's manner, indicated in its style, is tied to the time and place of its social context and thus involves 'cultural understanding' (1997, p. 36).

This interrelationship between a person, music and the surrounding culture is also described by Welch when he writes that 'observed musical behaviour may be conceived as a product of the interaction of three generative elements: individual neuropsychobiological development, a particular socio-cultural context and a specific musical genre' (2001b, p. 8). The socio-cultural factors that shape the 'basic cognitive architecture' include 'social and pedagogical structures and processes within the home, school and community, as well as clusters of associated values, norms, roles and identities that facilitate socio-cultural reproduction and transformation' *(ibid.* p. 9). This socialisation determines what is classified as 'music' so that what one thinks of as music is learned, not absolute. In other words, what we are used to hearing affects the patterns we expect to hear. Glover and Ward (1993/1998) describe how 'All music has its roots in the activities of ordinary daily human living' in that the structures of music derive from the patterns of life.

> It is these relationships that underlie the universal ability to hear, make sense of and respond to musical structures whether or not we have been trained to do so. The music we hear connects with what we already know. (Glover and Ward, 1993/1998, p. 2)

Such opinions build on the work of the ethnomusicologist Alan Merriam (1964) who insisted soundmaking could not be divorced from its cultural content.

This issue of context relates to Jorgensen's (1997) notion of spheres of musical validity, to which reference has already been made in connection with Wenger's (1998) communities of practice (2: 4.2.1). In her investigation of 'what is meant by the word *music*' Jorgensen looked at how groups 'come to share certain understandings and expectations about musical belief and practice and how they are able to maintain certain corporate identities as groups or institutions'. In other words what people do and how they maintain those practices. This means music has to be understood as a 'social as well as individual experience' (1997, p. xiv, and see p. 36). Each different music has to be understood in terms of its own form and function *(ibid.* p. 35).

Jorgensen derived the term 'spheres of musical validity' from Georg Simmel (1950). She describes how 'a sphere of musical validity exists about a given musical genre, style, or tradition when similar cognitive responses or meanings are evoked through a shared symbolism that it communicates' (Jorgensen, 1997, p. 37). Spheres of musical validity can exist at different levels of generality and can involve shared 'cognitive, emotional, and physical understandings' *(ibid.;* and see 2: 4.2.1). One can be born or inducted, by formal training or informal enculturation, into a sphere of musical validity, and, although inclusive in that all individuals within a sphere of musical validity share beliefs not held by those outside the sphere, 'Individuals may be members of several spheres of musical validity simultaneously and in different relation to each sphere' *(ibid.* p. 40).

As part of her exploration of the realities and possibilities within music education she reminds us that 'music education has occurred in many places besides schools' *(ibid.* p. 2), thus advocating a broad conception of music education. She describes how a good

deal of school music is `decontextualized and cut off from musical and social contexts in the rest of life' so that students may not see the point of studying music, especially if not relevant to earning a living. She considers that

> If music education were to be reconstrued to include socialization or enculturation, musical learning would have to be more contextualized than it is now, and students, like their apprentice counterparts, would be more motivated to learn. *(op. cit.* p. 30)

In fact I suggest that there *is* socialisation and enculturation — but it is into the *school's* culture, rather than that of the surrounding world. Despite the fact that Jorgensen has developed this notion in order to illuminate school practice by acknowledging and using different spheres of musical validity, she does not appear to view schools as developing spheres of musical validity in their own right. However, Bresler (1998) refers to the `genre of school music' as a discrete entity, shaped by micro (teachers), meso (institutional) and macro (cultural) contexts. Similarly, Swanwick has described the `subculture' of school music which arises when music becomes 'formal, institutionalised' and possibly divorced from the music experienced by pupils outside school, so that students may come to see 'school music' as 'a quaint musical sub-culture' (1999, p. 36-37). One could illustrate this, at least in primary music, by reference to the well-established use of layered pentatonic ostinati played on Orff-style tuned percussion instruments.

In an article that resonates with much of Jorgensen's argument, Sloboda (2001) suggests one of the reasons why many young people give up playing traditional acoustic instruments may be because those concerned associate such activity with the school culture, which bears little relation to their own preferred music. In a survey of secondary school heads of music, York (2001) concluded that the school music culture tended to be 'introverted', 'relying on the received knowledge of music education' rather than

`looking for models of current practice'. Any 'pop and rock' used with the intention of engaging pupils was done so with little knowledge of the specific culture from which it originated. Sloboda claims the consensus surrounding the purpose and content of music in education has broken down in the face of forces such as multiculturalism, youth culture, electronic communication, feminism, secularism, niche cultures, and postmodernism (2001, pp. 249-251). He therefore proposes a wider provision of various forms of music education, both in and out of school. However, because of the near-universal experience of music in school (apparently ignoring the possibility of home schooling when he writes 'school music is the one aspect of the provision that we can guarantee all children receive') he suggests that the role of school music might be 'to provide a core 'anchor-point' where diverse experiences may be reflected upon, integrated and co-ordinated' *(ibid.* p. 253).

Ross painted a similar picture of the irrelevance of the school music culture when he asked and answered *What's wrong with school music?* (1995). He argued against the assumption that the arts *can* be taught, even though he maintained the teacher does have an essential role in providing the various conditions necessary 'to the full development of the pupil's voice' *(ibid.* p. 200).

Hargreaves, Marshall and North (2003) also discuss the issue of the distinction between school and home music, referring to the 'balance between musical learning in and out of school'. They describe how 'The relationship between informal and formal music-making is a complex one, as ... it involves not only the locations and institutions within which learning occurs, but also the relationships between teachers and learners, as well as the ways in which learners view their own role in the process' (2003, p. 156). They also introduce the notion of the 'third environment', for example social contexts outside

formal learning environment, such as playgrounds, youth clubs, the street, bedrooms, where learning occurs, maybe with peers. Such occasions are self-generated and self-directed, with high levels of motivation and commitment. As they say, 'the contexts of music-making are crucial in determining its authenticity for learners' *(ibid.* p. 157).

These musical 'cultures' appear to work at different levels of influence. Hargreaves, Marshall and North describe the growing influence of a social perspective within research into music and music psychology in general, and musical development and music education in particular, suggesting 'four identifiable levels of social influence — the *individual,* the *interpersonal,* the *institutional,* and the *cultural'* (2003, p. 148). This echoes Jorgensen's (1997) belief that music must be understood on individual and social levels. As such, this is further justification for the various nested contexts within which school-based education takes place to be investigated in this study.

The overriding educational context within which the present study takes place is provided by the National Curriculum. The introduction to the current Order relating to music contains the following statement about the subject's importance. In it we can see reference to several aspects already described above, for example, the link between intellect and affect, the range of benefits to be derived — albeit mostly extrinsic — and all four of Hargreaves *et al.'s* (2003) levels of social context:

> Music is a powerful, unique form of communication that can change the way pupils feel, think and act. It brings together intellect and feeling and enables personal expression, reflection and emotional development. As an integral part of culture, past and present, it helps pupils understand themselves and relate to others, forging important links between the home, school and the wider world. The teaching of music develops pupils' ability to listen and appreciate a wide variety of music and to make judgements about musical quality. It encourages active involvement in different forms of amateur music making, both individual and communal, developing a sense of group identity and togetherness. It also increases self-discipline and creativity, aesthetic sensitivity and fulfilment. (DfEE/QCA, 1999, p. 14)

2: 5.3 Section summary

Building on the previous section on the nature of teachers' knowledge (2: 4), this one has considered how some of those aspects might be exemplified in the context of music, both in general and in the sense of providing a framework for the thinking of the teachers' in this study.

The first part describes the **background curriculum context** in place during the fieldwork section of the study, including those aspects of the Music Order that could be equated with Eraut's public professional knowledge (2: 4.1). Music is a compulsory subject, but reports from Ofsted about the good quality of teaching seem frequently to be at odds with anecdotal and research literature describing teachers' lack of confidence in their teaching of the subject. This raises questions about the possibly mismatch between what Ofsted inspectors and teachers might be considering adequate knowledge and practice: an area this study helps clarify as far as teachers are concerned.

Earlier sections on the importance of research into teachers' thinking (2: 2.2) and the influence of subject knowledge (2: 4.3.4) are here made specific to this study's focus in a list concerning the three-way relationships between beliefs about the **nature and value of music,** the **nature of education,** and the **contextual culture and society.**

The work of **Reimer** and **Swanwick** adds to the conceptual framework of this study by contributing, respectively, an exposition of various views of music and music education, and a typology of forms of knowledge of music (knowing that, knowing how, knowing this and knowing what's what). These accounts have been taken from the academic literature in order to provide some possible ways in which teachers may conceptualise music and music education; to show how such theoretical work may or may not be

exemplified in the real world; and, later on, to provide structure to the discussion of the findings (Chapter 5).

There follows a section concerning the justification of **music as a unique art** — thus not only supporting its presence in the curriculum but also validating research in this area — which leads into a description of some of the ways in which music is valued by individuals. This range of extrinsic and intrinsic factors, together with the difficulty in distinguishing between them, has implications for all three of the components of 'music in education' (music, music education and music within education) within teachers' thinking

An earlier section (2: 4.2.4) discussed the multifaceted place of **emotion** in a teacher's work. Here, some aspects particular to music are added to this strand, pointing out the concurrent and consequential place of affect in musical understanding and that emotions can be both recognised in the music by the participant and induced, by the music, in the participant.

The importance of **context** is another strand that runs through this thesis. In this music-based section come aspects relevant to constructivist theories, given that music is created and understood in relation to its cultural context. People can belong to several different 'spheres of musical validity' (Jorgensen, 1997) and schools may give rise to their own distinct musical subcultures. However, because music is experienced and learnt in contexts outside the formal school one, there is potential for conflict between these different contexts.

2: 6 Research into teachers' subject knowledge

It will be recollected that the study concerns teachers' knowledge relating to music in education (see 1: 1). Previous sections have demonstrated, and mirrored, the overlapping nature of music, knowledge and education where they come together as the focus of this study. The following section continues this chapter's route through the levels of research by touching on the generic area of research into teacher's subject knowledge, before focusing on that relating specifically to music.

2: 6.1 Subject focus

There has been a considerable amount of research into subject knowledge since Shulman's identification of the "missing paradigm" (1986b). The importance given to the area can be deduced from the books dedicated to it (for example those edited by Brophy, 1991; Aubrey, 1994; and Goodson, Anstead & Mangan, 1998); a relevant chapter in Berliner and Calfee's *Handbook of educational psychology* (Shulman and Quinlan, 1996); an issue of the *British Educational Research Journal* (see Leach, Williams & Andrews, 2002); and numerous individual papers and journal articles.

However, most existing research, both in the US and UK, seems to have focused on what have become the core subjects in the National Curriculum. For instance, the issue of the *British Educational Research Journal* dedicated to *Research in subject knowledge and application* contains two articles on science and two on mathematics, each connected with primary schools in some respect (see Leach *et al.*, 2002). Although all four articles are interestingly different in focus, method and emphasis, the restriction to two subjects is disappointing in an issue with such a general title, particularly given the possibility that different subjects might have qualitatively different subject matter and pedagogical content knowledge (Shulman, 1987).

It is obviously not possible in this thesis to give an overview of all subject knowledge research. Nevertheless, instances of research involving teachers' knowledge of various subjects have already been mentioned in this chapter, for example, that into aspects of mathematical knowledge by Leinhardt (Leinhardt and Smith, 1985; 1988), Ball (1991), Askew *et al.* (1997) and Bibby (2002); literacy by Poulson (2001); Wineburg's work on history (for example, 1997); GudmundsdOttir's relating to social studies (for example, 1990); and Green *et al.'s* work focusing on various arts (1998). These and other examples will also be referred to when necessary in subsequent chapters.

2: 6.2 Research involving music

The volume that contained Clark and Peterson's stalwart source of information on the early years of teacher thinking, Wittrock's *Handbook of research on teaching* (1986), was not forthcoming on the subject of music. Even the chapter on arts and aesthetics (Jones and McFee, 1986) included only one and a half pages on music education, and much of that related to pupils' musical ability or to different approaches and methodologies in music education, with no mention of teachers' thinking or knowledge. The first subject-specific equivalent, the *Handbook of Research on Music Teaching and Learning* (Colwell, 1992), contained no chapter comparable with that of Clark and Peterson, despite being published six years later, indicating that this was not a widely covered focus in music education. There was a chapter on qualitative research methodology (Bresler and Stake, 1992), giving an overview of the development of that approach, and pointing out that teachers have always used qualitative observation; and there were also aspects of other chapters that touched on the area of teachers' knowledge. For instance Tait, while discussing teaching strategies and styles, wrote `perhaps the main bases [for strategy selection] are beliefs about the nature of music and

beliefs about the teacher's own learning experiences, which together result in beliefs about what will work best for the teacher's own students' (1992, p. 530). He also described Schuell's suggested seven types of knowledge in instrumental music education: propositional knowledge, procedural knowledge, psychomotor knowledge, images, aural knowledge, attitudes and, lastly, emotions (Schuell, 1988). In addition, Verestro and Leglar (1992) pointed out that studies had shown the pre-college music background to be one of the most important factors influencing the teaching of music in the elementary classroom.

However, despite those few references in Colwell's *Handbook,*

> missing are the voices of the classroom teachers, their questions and concerns, and the interpretive frames teachers use to understand and improve their own classroom practices. Nowhere were accounts of teachers' works cited, probably because they were few and difficult to find. (Bresler, 1993b, pp. 4-5)

The second *Handbook* (Colwell and Richardson, 2002) seems to have done little to remedy the gap, despite its editors' assertion, in their Preface, that one of the aims was to 'address primarily those topics that had not been covered in the first Handbook' *(ibid.* p. vii). Maybe this is a vicious circle, in that a lack of research means not only that there is little research to be included in any overview, but also that the area is not readily identified as an important issue for which an overview is necessary, thereby not leading to further research. However, as in the original *Handbook,* there are *some* relevant mentions, for example in the section on *Research on teacher knowledge: From description to inquiry* within a chapter on teacher education (Leglar and Collay, 2002). Both these *Handbooks* are positioned strongly in the North American context, albeit drawing on a few British scholars (for example, in the latter volume, Cox, 2002b; North, Hargreaves and Tarrant, 2002). In 2001, the British Educational Research

Association (BERA) produced a review of music education research in the United Kingdom (Welch, 2001 a; BERA Music Education Review Group, 2004). In the introductory section of that review, it was stated that one of three broad criteria used in evaluating music education research should be that 'the relationship between music, student and teacher is kept in the centre of the frame', thus *'illuminating musical transactions'* (Swanwick, 2001, p. 7, italicised subtitle). However, it seems as though the teacher component in such transactions may still be underrepresented as a focus of research, given that Cox and Hennessy report, in their section on *Music in schools,* that `there is little research concerning music teachers' (2001, p. 35), while research within initial teacher education is also 'limited' *(ibid.* p. 33).

Despite the slow start of music education researchers to pick up on the area of teacher thinking as a suitable and beneficial focus of study, this does not mean that such accounts do not exist — in both British and non-British literature. One of the main American journals in music education, the *Bulletin of the Council for Research in Music Education* has carried several papers of interest. For instance, Liora Bresler, quoted above regretting the lack of such research in the first *Handbook,* has herself written several times about research incorporating teachers' knowledge in music education (for example, 1993a; 1993b; 1994/5; 1995/1996). The second of those articles provided a concise overview of the field as it then existed and described four specific examples that used different approaches, two of which came from Great Britain (Paynter, 1982; Treacher, 1989). Bresler is one of the few researchers to have built up a body of work that includes references to teacher thinking (see also Bresler, 1996c; 1998) and so her studies, albeit often relating to one particular three-year ethnographic study of the arts in elementary schools (Stake, Bresler and Mabry, 1991), are referred to throughout this thesis.

Although one of the leading British journals on music education, the *British Journal of Music Education,* has included examples of teachers' own 'voices', for instance the narrative accounts of three first year secondary teachers in the very first issue (Gebbie, Elliot and Morris, 1984), the two indexed abstracts (1984-1988 and 1989-1993) contained no category for teachers' knowledge or thinking, with any articles such as the above listed in the *Curriculum [Content and] Practice* sections.

However, two articles published more recently have discussed something of the nature of secondary teachers' subject knowledge. Gammon (2003), in a journal section entitled *Points for debate,* described a propositional knowledge test given to prospective secondary PGCE students to assess their 'subject general knowledge' *(ibid.* title and p. 96), justifying this 'knowledge about music' by the need for 'teachers in schools ... to be able to place the music they teach about within a contextual framework' *(ibid.* p. 86). Spruce (2003) responded by maintaining that musical knowledge should be gained in a musical context, particularly drawing on the notion of communities of practice (as in 2: 4.2.1 above), and that using such a test sends the wrong sort of messages about what music education should be *(ibid.* p. 319). However, Gammon had, in fact, previously stated that experiential 'knowledge of' music is 'central to all musical learning' (Gammon, 2003, p. 84) and had also argued that propositional knowledge might have been gained in an experiential music context *(ibid.* p. 86). Possibly even more interesting than issues round the validity or otherwise of such a test in assessing subject knowledge are the sections of the paper where Gammon describes firstly the lack of consensus as to what subject knowledge might be in QCA and TTA statements relating to higher education courses *(ibid.* pp. 94-95) and secondly the broadening of a general conception of what musics should be included *(ibid.* pp. 95-96). This links with the

National Curriculum, as that is the music curriculum students have experienced and is also the curriculum that student teachers are preparing to teach. If there is no agreed core of knowledge for the National Curriculum at secondary level, it is not surprising if there is a lack of 'common understanding' in primary schools (Welch and Adams, 2003, p. 16).

Within the various publications to which Cox and Hennessy (2001) refer in their review mentioned above, there seem none that are principally concerned with the knowledge of primary teachers or with their thinking *per se*. Nevertheless, several of the works they cite contain aspects relevant to my study. For instance, considerations of teachers' and students' lack of confidence (for example, Mills, 1989; Hennessy, Rolf and Chedzoy, 1999), Mellor's investigation into teachers' response to children's compositions (1999), and the enquiry into the implementation of the National Curriculum by Lawson, Plummeridge and Swanwick (1994) all contain pertinent material in that they include references to teachers' attitudes and beliefs. An account by deVries (2000) of how he learnt to be a primary school music teacher in Australia provides an instance of the teacher's voice in another leading British journal.

Explorations of teachers' knowledge seem frequently to be linked to confidence, as mentioned above, particularly in the case of research related to the National Curriculum, for example, several reports from the Leverhulme Primary Project (Wragg *et al.,* 1989; Bennett *et al.,* 1992; Wragg, 1994) as well as papers by Barnes and Shinn-Taylor (1988) and Linda Hargreaves and her colleagues (L. Hargreaves, Comber & Galton, 1996). Several of the studies involving student teachers in various countries have also been concerned with this issue (for example, Gifford, 1993; Barrett, 1994; Jeanneret, 1997). Mills, in her questionnaire survey of non-specialist B.Ed students, examined the

activities that concerned students and concluded that their perception of the subject

knowledge required to teach music was inevitably influenced by their memories of being taught by 'teachers who seemed able to do all of this' (1989, p. 133).

When one of Her Majesty's Inspectors of Schools (HMI), with specific subject responsibility for music, Janet Mills wrote frequently about various aspects of primary music education, particularly drawing on data collected by Ofsted (1994; 1997a; 1997b; 1997c; 1998; 2000-2001) and some of her findings have already been referred to earlier in this chapter. These papers were often written for an audience not necessarily familiar with the English situation and tend to be summaries of a general situation involving large numbers of schools, even though vignettes are sometimes given to illustrate the generalisations. Given the connection with Ofsted there is also an emphasis on the assessment of practice. In other words, a detailed exploration of specific teachers' thinking and knowledge is not the principal focus. However, there are indications of teachers' thinking in descriptions of teachers believing that 'they were 'not musical' and very worried about teaching music' (1994, p. 193).

Bresler has written that 'Research focusing on teacher knowledge is typically (but not exclusively) qualitative' (1994/5, p. 28). While reading other examples of research into various aspects of teachers' thinking, including their subject knowledge, it became apparent that although the underlying paradigm was indeed qualitative, the actual methods used revealed a variety of approaches along the quantitative/qualitative continuum. For example, in the UK, Beauchamp (1997) used a postal survey to investigate Welsh and English teachers' attitudes towards the various forms of curriculum support by asking the teachers to rate different aspects. Such data can then be analysed statistically. Similar methods were used in the US by Byo (1999), Kelly (1998) and Teachout (1997) in their respective studies. Although such a method can

lead to clear results, it only measures pre-determined aspects in a pre-determined way. This makes it valuable with large samples and was used thus, for example, by those involved in the Leverhulme Primary Project investigating how competent teachers felt to teach the National Curriculum with their existing subject knowledge (Wragg *et al.,* 1989; Bennett *et al.,* 1992; Wragg, 1994). However, there is no possibility of asking questions or looking for explanations beyond inference (and see, for example, Robson, 2002, pp. 230-232, for other advantages and disadvantages).

Studies involving questionnaires with some form of follow-up inquiry, for example interview (Barnes and Shinn-Taylor, 1988) or observation or both (Dibb, 2002) provide opportunities for clarification and extension. Multi-method studies are common, for example the ethnographic study of the arts in elementary schools carried out by Bresler and her colleagues (Stake *et al.,* 1991; Bresler, 1993a; Bresler, 1995/1996); the participant observation and interviews of Schmidt (1998); the discussion, written tasks and responses to video-taped cases used by Barrett and Rasmussen (1996); the observation, video, and interviews of Lemons (1997); and the range of discussions and observations used by Lawson and her colleagues (1994) in their investigation of the initial implementation of the National Curriculum.

This descriptive overview of the general situation regarding the literature relating to primary generalist teachers' thinking and knowledge is obviously not exhaustive and, as already stated in relation to research in other subject areas, these and other examples are drawn on at various points throughout this thesis.

In summary, therefore, it seems that the bulk of research into teachers' thinking in general and subject knowledge in particular has been conducted in subjects other than music. If it is indeed the case that different subjects have qualitatively different subject

knowledge and associated pedagogical knowledge (Shulman, 1987) and that teachers approach different subjects in different ways (Gipps *et al.,* 1999), there is a need to cover all curriculum subjects, both to help clarify those general views and to extend knowledge about specific subject issues. Research in the music education field, particularly that mentioning lack of confidence, has sometimes shed light, often obliquely, on teachers' beliefs and attitudes, but there appears to be little investigation specifically focused on English generalist class teachers' thinking in relation to music and music education. Hence the current study.

2: 7 Summary

Following on from the interim summaries at the ends of sections 2: 4 and 2: 5, this section draws on the content of the chapter to show how the original aims, as set out at the beginning of the chapter (see 2: 1.1), have been fulfilled. It then pulls together and makes explicit the main concepts and issues on which the following chapters draw.

The first aim was that **this study should be sited in the existing research literature.** The field of research into teacher thinking is a broad one and thus this chapter positioning and tracing the nature of research into music subject knowledge has, of necessity, been lengthy, narrowing the focus from broad areas concerning thinking and knowledge to professional teaching aspects, on to subject knowledge and, thence, primary teachers' subject knowledge in music. This has covered

- the historical development of the field of research into teacher thinking and subject knowledge;

- constructivist theories about the acquisition of knowledge;

- some of the common terminology used — in order to show how such terms are used in other literature as well as to explain the usage in this study;

- various typologies of professional and subject knowledge;

- the importance of research into teacher thinking and subject knowledge, using examples from the literature to exemplify various points;

- the influence of various forms of context;

- emotion as part of thinking and knowledge, teaching and music;

- the place of music in the current curriculum;

- theories relating to the nature and value of music and music education;

- the importance of music — in itself and as part of the curriculum;

- existing research relating to subject knowledge and to primary teachers' thinking about music.

It was further intended that the area of **teachers' knowledge in music —** as content of their thinking — should be described and clarified. Although various mentions of different examples of research into different aspects of music education have been made throughout the chapter, Reimer's description of different views about the nature and value of music and music education, together with Swanwick's conception of different types of musical knowledge have provided important dimensions to the framework for subsequent stages in this study. From their work we can see that there are both varied views about music — and hence its nature and place in education — as well as different forms of knowledge associated with music.

In connection with the third aim, **teacher thinking as a research focus** has been found to be justified because of the links between thinking and action. To support teachers at all stages of their career it is necessary to understand teaching. In order to understand

teaching it is necessary to understand teachers' thinking. More specifically, teachers' subject knowledge, as a part of that thinking in relation to the classroom curriculum, plays an important, albeit not clear-cut, role in all stages of the teaching cycle of planning, delivery (content and approach), assessment and reflection. In the context of the subject-based National Curriculum subject knowledge is an important issue. However, in this country there is a scarcity of research into primary teachers' thinking and subject knowledge in music. This study helps to fill that research gap.

Finally it was intended that this chapter should provide the **basis for this research journey** and so has introduced several strands that weave in and out during the rest of this thesis, informing the study both methodologically and substantively.

Firstly from this literature review comes the **conceptual premise** underpinning the whole research project: namely, that everyone constructs his or her knowledge in response to his/her particular context (in a broad sense). Such knowledge is thus unique to each individual, although may share common features with that of other individuals. Knowledge affects action. In order to understand teaching, it is necessary to understand teachers' thinking Teachers' beliefs are powerful influences on their actions. A key focus to this research involves the individual perceptions of specific teachers regarding subject knowledge.

Views concerning a **constructivist** approach to the acquisition of knowledge will be seen to influence both the general methodological approach and the particular data collecting tools used in the fieldwork section of this study, with a qualitative interpretive approach being taken in an attempt to understand the thinking of teachers in a small-scale case study. As an example at a more specific level, a concept mapping

exercise also relates, *via* personal construct psychology, to the same conceptual premise (see 3: 4, below) and provides a visual symbolic representation of structured knowledge. Similarly, an acknowledgement of the effect of various kinds of context is reflected in areas in the interview schedules that cover previous and current experiences relating to music education. Contexts of learning and of knowledge use become an important strand as this study progresses.

The **terminology** used in connection with teachers' thinking is various and this study takes a broad perspective including, for example, beliefs and attitudes as well as knowledge. There is a subsequent implication that teachers' espoused thinking will include a similar range of aspects expressed in a variety of ways. This will need to be considered in the later Findings (Chapter 4), Discussion (Chapter 5) and model-building (see Chapter 6) phases of the study. Similarly any investigation of teachers' thinking needs to take into account that **knowledge can be held in various forms,** for example as case studies, metaphors and images, and such aspects may lead to fruitful research insights. That some **knowledge may be held tacitly;** and that 'espoused theories' may not reflect implicit 'theories in use' (Argyris and SchOn, 1974) provides added challenges to the fieldwork and analysis stages.

SchOn's (1983) conception of the **reflective practitioner** suggests it is possible and, indeed, desirable for an individual to access, reflect on and express — to a certain extent — professional knowledge. However, he is not alone in identifying different types of knowledge and knowing and the following ways of categorising different forms of knowledge will be used throughout the study:

- Eraut's (1994) division between the **public and personal** forms of professional knowledge;

- Shulman's (1986a; 1986b; 1987) ways of dividing **subject knowledge** into subject matter knowledge, pedagogical content knowledge (including knowledge of children's likely responses) and curricular knowledge;

- Reimer's (1989; 1997; 2003) expositions of possible different views on the **nature of music and music education,** particularly as they relate to intrinsic and extrinsic values; and

- Swanwick's (1994) four **types of musical knowledge:** knowing that (propositional), knowing how (skills with materials), knowing it (expression and form) and knowing what's what (attitudinal and valuing).

Music in education has been explained as including knowledge about music, about **music education** and about **music within education.** Knowledge about music comes under Shulman's (1986a; 1986b; 1987) subject matter knowledge and might include aspects to do with the nature and value of music, as described by Reimer (1989; 1997; 2003), as well as aspects relating to Swanwick's (1994) four types of musical knowledge. Knowledge about music education includes aspects of Eraut's (1994) public knowledge, transformed into personal 'action knowledge', as well as of Shulman's pedagogical content knowledge and curricular knowledge. Music within education also includes aspects from the Shulman categories, but, in addition, might draw on more general, that is, non-subject specific, pedagogical knowledge. It will be interesting to see which aspects of these theoretical frameworks the teachers in this study exemplify in practice.

Various aspects to do with **feeling** permeate this study as part of thinking, teaching and experiencing music. As already described, knowledge inherently links affect with cognition. Of particular interest in this study, given the conflicting evidence relating to

teachers' confidence, will be teachers' affective, attitudinal responses to the subject, and this also links with teaching itself being fundamentally an 'emotional practice' (A. Hargreaves,1998). As an inherent part of music, emotion can be both recognised, consciously or not, by the participant, and be induced *in* the participant.

The National Curriculum along with other officially imposed structures, provide one of the levels of context within which teachers operate. Their perceptions of these and other contextual influences means that notions to do with **self and identity** will also form an important strand, together with related aspects such as self-efficacy and autonomy.

This study is intended to fill a gap in the research literature by investigating teachers' thinking regarding music in education. The aim is to add to the knowledge about teachers' thinking in music education by providing evidence and insights based on empirical research.

3

Methodology

3: 1 Introduction

The previous chapter considered the varied literature underpinning this research. In this chapter I describe how the empirical part of the study was constructed and carried out, including the underlying thinking and principles.

In view of the importance of the researcher's perspective, as seen in the previous chapter, there are, after this introduction, some further considerations of the researcher's self in order to explain aspects relating to my position.

Then come the research questions that led the research, followed by sections to do with the choice and selection of the overall research paradigm and case study methodology, together with explanations of the main data collection tools: semi-structured interviews and a concept mapping exercise.

A section concerning the school includes reasons for its selection together with a brief description of the school and teachers. There are also accounts of my initial access and the practical arrangements for the interview sessions.

Brief details are given of the pilot study, which made valuable practical and psychological contributions to the main study, before a description of the three core

interviews in the data-collecting programme.

The section dealing with data analysis procedures includes details of the analysis of the transcripts and maps and the final two sections show how specific criteria for 'good' research and ethical considerations apply to this particular study.

3: 1.1 The researcher's self

Bresler states 'It seems that the most important criterion for any research is that it is about something important — important to practitioners as well as to researchers' (1994/5, p. 29). My own interest in this area was declared in the first chapter. In the literature review chapter there was mention of the influence of the researcher on a research project (2: 1.2). This can potentially be seen at all stages: choice, method, analysis, interpretation and conclusion. This is because, as Eisner has pointed out,

> investigators who study schools or classrooms and who engage in that craft called field work will do things in ways that make sense to them, given the problem in which they are interested, the aptitude they possess, and the context in which they work. (1991/1998, p. 169)

Peshkin, too, has commented on the way 'a researcher's self, or identity in a situation, intertwines with his or her understanding of the object of the investigation' (2000, p. 5). Ball, in his reflections about the integral role of the researcher's self in ethnographic fieldwork, describes the researcher as 'the primary research tool' in finding, identifying and collecting data (1990, p. 157). For Ball, the engagement and awareness of the self is paramount and 'Nile presence, the effect, and the biases and selections of the researcher cannot be removed from qualitative research' *(ibid.* p. 167). I have, therefore, as a component in this study, tried to be aware throughout of the need to be reflective and reflexive. I have also followed Ball in his 'preference ... to use "I" in the writing of qualitative research', because, as he says, 'that is the "researcher-as-instrument" position' *(ibid.* p. 170). Eisner similarly prefers 'to keep a sense of voice present', considering such an approach to be 'more honest' (1991/1998, pp. 3-4).

In order to provide 'methodological rigour', Ball advocates accompanying a qualitative research report with a *research biography* — 'a reflexive account of the conduct of the research' *(op. cit.* p. 170) — to give a description of one of the research instruments used, in this case the researcher. To support this, throughout the course of my own study I have kept a similar research *diary* (Griffiths, 1985; Altrichter, Posch & Somekh, 1993; Robson, 2002, pp. 1-2) and have drawn on it at appropriate moments.

3: 2 The research questions

The main research questions were formulated in the light of a preliminary survey of the existing literature in combination with a consideration of the educational situation in schools at the time and an acknowledgement of my own interests and preferences.

The original main question was:

- ***To what extent do teachers in one primary school reveal common views of music education?***

Given that teachers are now working within a common framework (the National Curriculum), it ought to be possible to investigate whether there is standardised thinking about music provision and subject knowledge.

However, it was realised that in order to answer that, it was first necessary to consider:

- ***What are the beliefs of individual teachers?***

To what extent are the teachers able to articulate their underlying 'personally held system[s] of beliefs, values and principles' (Clark and Peterson, 1986, p. 287)? What *is* the knowledge and how are the component 'elements' linked?

And then:

- ***To what extent are their beliefs and understandings shared or different?*** Are there similarities between different teachers' maps of understanding and, if so, in what areas? In other words, are there *patterns* between and within teachers' thinking?

It was appreciated that, according to constructivist theories (see 2: 3.1), previous experiences influenced current knowledge and that although each person's experience was unique, nevertheless certain factors, for instance the National Curriculum Orders, or the school music coordinator, might have resulted in common effects. So, in possible explanation of the similarities and differences, I asked

- ***Within these shared beliefs and understandings, is it possible to identify the effect of any particular influences?***

Later, as part of the on-going analysis and discussion processes, a further question arose from considerations of the answers to those original questions, namely:

- ***Is it possible to construct a conceptual model illustrating and explaining some of the patterns within the similarities and differences in teachers' `beliefs, values and principles'?***

The methods used to investigate these questions had, therefore, to be suitable to elicit information about the content and structure of teachers' knowledge, while also looking at the contexts within which that knowledge had been formed and was held and used.

3: 3 Overall research paradigm

Having formulated the research questions it was necessary to consider relevant ways to answer them. In their influential chapter that has provided the foundation for much subsequent research, Clark and Peterson pointed out the challenge for research into teachers' thinking:

> This research depends heavily on various forms of self-report by teachers, and the central methodological problem deals with how to elicit and interpret valid and reliable self-reports about cognitive processes. (1986, p. 259)

They also describe how 'the domain of research on teachers' thought processes constitutes a paradigmatic approach to research on teaching' *(ibid.* p. 257) referring to the shift towards qualitative methodologies when investigating teachers' thinking, as described in the previous chapter.

Eisner (1991/1998) depicts qualitative study as having six main features, which can be present in varying degrees in any one study:

- It tends to be *'field focused'* in a broad sense *(ibid.* p. 33).

- It relates to *'the self as an instrument'* (p. 34).

- It possesses *'interpretive character',* both in the sense of researchers accounting for what they have *'given an account of* and in the sense of what the 'meaning' is for those studied (p. 35).

- It includes *'the use of expressive language* and the presence of voice in text'* (p. 36).

- There is *'an attention to particulars',* which 'exemplify more than they describe directly' (pp. 38-39).

- It becomes believable 'because of its *coherence, insight,* and *instrumental utility* (p. 39, and see pp. 53-60 for his descriptions of these three criteria).

These features are reflected in the current study, where teachers were invited to talk about their thinking about — their conception of — music in education, in order to provide data that could be used to answer the research questions. Qualitative is not only used here as the 'opposite' of quantitative (more accurately conceived of as a continuum), but because the focus of the study was concerned with what sort of thinking the teachers had: qualities in the sense of distinguishing characteristics rather than of excellence.

Although qualitative research has developed throughout the second half of the last century, its use in music education research has trailed behind other education areas, so that Bresler could state, in the mid 1990s, that 'qualitative research in music education is a recent phenomenon' (1996a, p. 5). She summarised the nature of such research thus:

> The aim of qualitative research is not to discover reality, but to explore different interpretations of that reality by constructing a clearer experiential memory which helps us obtain a more sophisticated account of things. Rather than seeking causality and predictions, the researcher aims at interpretive understanding (verstehen). The process of verstehen involves the ability to empathise, to recreate the experience of others within oneself. The notion of individual and cultural construction implies multiple perspectives. It also implies a contextual and holistic view, where it is impossible to isolate variables from the context in which they [are] embedded. *(ibid.* p. 6)

(Although the term *Verstehen* can refer to a particular sociological tradition, I am taking it here to imply a more general orientation than an explicit connection with the movement usually indicated by the proper noun.)

This emphasis on a relativist, constructivist outlook, dependent on (particularly social) context, which is interpreted by the researcher concerned, is therefore the view taken in this study. This is an appropriate stance for an investigation into teacher knowledge since, as Bresler has written, 'Research focusing on teacher knowledge is typically (but

not exclusively) qualitative' (1994/5, p. 28, also quoted 2: 6.2). She describes how teacher knowledge research relates to a qualitative approach by continuing,

> It draws on the qualitative paradigm in its assumptions that (a) teaching and classroom life are highly complex activities, (b) the same behaviors can be interpreted in dramatically different ways by the different participant (and these interpretations, in turn, shape music teaching and learning), and (c) the understanding of teachers' and students' intentions is crucial for the understanding of what is happening *(ibid.* p. 28)

Bresler therefore advocates a teacher's "emic" (insider's) perspective in order to `understand empathetically classroom phenomena' *(ibid.).* I was not one of the teachers in this school, and was not undertaking this study with the intention of carrying out action research that would feed back directly into the school (Carr and Kemmis, 1986; Somekh, 1995). As Brown and McIntyre explained, when describing their investigation into the professional craft knowledge of experienced teachers, 'We do not ask them to become researchers but rather to talk about their classroom practice; the responsibility for the theorising remains with us' (1986, p. 38). Nevertheless, I *was* conducting the study from a background in primary school teaching and so was able to understand, sympathise and, hopefully, empathise with what was said. In her descriptive editorial overview of the qualitative methodologies in music education research conference from which all the papers in that particular journal issue had been taken, Bresler reported of those contributions, 'all studies reflected the assumption that knowledge must be grounded in teachers' perspectives and the intimate understanding of classroom life, achieved through prolonged engagement' (1994/1995, p. 29). Moreover, 'These studies manifest that when conducted in a disciplined, systematic way, teacher knowledge can enhance the understanding of classroom life and improve both the theory and practice of music education' *(ibid.* p. 30). Similarly Eisner has written, 'If qualitative inquiry in education is about anything, it is about trying to understand what teachers and children do in the settings in which they work' (1991/1998, p. 11). This was my intention here.

Denzin and Lincoln indicate how this might be carried out when they explain:

> Qualitative research is multimethod in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials — case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts — that describe routine and problematic moments and meanings in individuals' lives. (1994, p. 2)

A pithy summary of a similar viewpoint reads 'As a result of being multidisciplinary, multilevel, and inherently complex, educational research is multimethod' (Bartel and Radocy, 2002). Examples of some of the methods used in subject knowledge research were included in the previous chapter.

As detailed below, this study therefore uses more than one method of gathering data (interviews, concept maps, and informal ranking tasks), which are then 'interpreted' as in the Denzin and Lincoln (1994) quote above and according to the characteristics of the interpretive stance described by Calderhead (1996) in the previous chapter (see 2: 1.3). Although one could argue that none of these are natural activities, 'but strategies intended to facilitate reflection' (Bresler, 1996a, p. 8), the interviews took place in the school staff room, that is, one of the 'natural' settings for the teachers where they `naturally' talk.

When starting this study, I initially chose literature and methods that seemed to harmonise with how I thought, as described by Eisner and by Ball earlier in this chapter. By doing that, I was at the time inadvertently beginning to follow the advocacy of Denzin and Lincoln (1994) of the researcher as *bricoleur*. Denzin and Lincoln quote Levi-Strauss in depicting a *bricoleur* as a 'Jack of all trades or a kind of professional

do-it-yourself person' (Levi-Strauss, 1962/1966, p. 17) and expand this by describing how the *bricoleur* constructs a *bricolage* of 'multiple methodologies' and develops 'a pieced-together, close-knit set of practices that provide solutions to a problem in a concrete situation' (Denzin and Lincoln, 1994, p. 2). The juxtaposition of 'professional' and 'do-it-yourself here seems an intentional indication of the best qualities of each, rather than an oxymoron. Although DIY in the house-maintenance sense is associated with an amateur, this does not always imply a shoddy result. In fact, the care taken by someone who is dealing with his or her own property is often superior to that taken by an outsider — however 'professional'.

This research is a weaving together of strands and approaches from various perspectives, thus demonstrating Denzin and Lincoln's advice that 'Nile qualitative researcher-as-bricoleur uses the tools of his or her methodological trade, deploying whatever strategies, methods, or empirical materials as are at hand' and as are appropriate to the context being considered (1994, p. 2). Researcher-as-bricoleur is a vivid and supportive metaphor for a researcher and was also developed by Denzin (1994) in an article for one of the main American music education journals.

Elliott describes how the goal of a postpositivist approach to research 'is continuously to seek relevant descriptions and explanations of a phenomenon based on the best and most complete knowledge we can garner about that phenomenon' (2002, p. 91). In particular he writes how in 'terms of aims and "methods," ... interpretive researchers seek to build our knowledge of complex social phenomena (e.g., teaching, learning, music making) by grasping the meanings and values that educational experiences have for various groups of people' *(ibid.* p. 92). This links with the constructivist, particularly social constructivist, theories mentioned in the previous chapter.

3: 3.1 Case studies

This research incorporates a qualitative, case-study methodology, cited by Denzin and Lincoln, above, as an example of suitable 'empirical material' (1994, p. 2; and see Bannister, 1992, for advocacy in music education). This broad approach is seen elsewhere in the field of music education, particularly in the work of Bresler (for instance, 1993a; 1995/1996; 1996b; 1996c). However, my study differs from hers in that whereas she looked at some teachers from each of three schools, I intended to include all the teachers from one school. 'A case study is a specific instance that is frequently designed to illustrate a more general principle' (Cohen, Manion and Morrison, 2000, p. 181). In this case, it was considered a suitable way of investigating the research questions because it enabled exploration of the 'specific instance' of teachers' thinking in one school, whose 'bounded system' reduced the contextual variations that might have been found between schools, while providing 'a unique example of real people in real situations' *(ibid.).*

Robson points out that 'In one sense, all enquiries are case studies' (2002, p. 185) in that there is a focus on a particular subject in a particular context at a particular time. However, more specifically he quotes Yin as defining the case study as *'a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence'* (Yin, 1981; 1994, quoted in Robson, 2002, p. 178).

Robson continues by extracting key words from that statement, reminding us that 'a strategy' is a 'stance or approach' rather than a method; that 'research' should be understood in 'a broad sense'; that 'empirical' implies 'relying on the collection of evidence about what is going on'; and that 'the particular' involves 'a study of that

specific case', which has implications for generalisability. Similarly, Swanwick (1994) has pointed out that although a case study can provide the 'shock of reality', it can be hard to generalise outwards. All depends on 'the conceptual framework in the mind of the observer and the integrity of the analysis' *(ibid.* p. 75). Robson describes how such a study focuses on 'a phenomenon in context' and involves 'multiple methods of evidence or data collection' *(ob. cit.* p. 179). In this study a constructivist approach is used towards the teachers' knowledge that is being investigated. Practical evidence (in the 'multiple' forms of interview data and concept maps — see below) is collected from the teachers in one particular school.

Of course, in one sense this is a case study containing a series of individual case studies (see, for example, Robson, 2002, p. 181), in that each individual teacher is the focus of exploration, before the knowledge of the staff, representing the school as a whole, can be investigated. This technique is supported by Grossman, who has written that researchers using case studies to inform practice 'stress the importance of using multiple cases of a similar phenomenon to illustrate more accurately the complexity of practice' (1995, p. 23). Stake identifies three types of case study: the intrinsic study, when the case itself is of interest; the instrumental case study, when 'a particular case is examined to provide insight into an issue or refinement of theory'; and the 'collective case study', which is an 'instrumental study extended to several cases' (Stake, 1994, p. 237). This study would therefore seem to fit into his third category.

3: 4 Data collection tools

As seen in the literature review, common methods of gathering data when investigating teachers' thinking in music involve questionnaires, interview and observation (for

example, Bresler, 1993b; Lemons, 1997). However, a broader approach was taken by Yourn who used a range of data gathering techniques in her investigations of music teachers 'learning to teach', including not only interviews, questionnaires and observations, but also student journals, 'in order to generate a narrative of the student's thinking' (2000, p.184). Another interesting approach is seen in DoHoff's (1999) investigations into the development of teacher 'image' in elementary music education students, when she called on their written stories about teachers in their past, metaphors and drawings.

Examples of other methods seen in studies of teacher thinking include the Likert-type scales used by Teachout in his comparison of the responses of (secondary school) preservice and experienced teachers' opinions of the skills and behaviours important to successful music teaching (1997); and the repertory grid technique Olsson used to explore instrumental teachers' personal constructs regarding the nature of musical knowledge (1997). This same technique was used by Mellor (1999) in her investigation into the language teachers use to respond to children's compositions.

So although music education researchers may be coming later to focusing on teacher thinking than those looking at other subjects, the range of tools used is widening.

Those last two studies have an added connection with my study in that the principles of Kelly's (1955) personal construct psychology underlie not only the use of repertory grids, but also card sorting exercises, ordered trees and concept maps. Pope and Denicolo describe how the perception of the teacher 'as a constructivist and capable of being a reflective practitioner' has led to 'the need for tools of enquiry that can give voice to the teacher's constructions' and how personal construct psychology is widely

used in this context (1993, p. 529). Kelly (1955) suggested that everybody construes events differently by making sense of their own personal construct systems (see 2: 3.1). A construct is determined by the similarities and differences between concepts, and therefore a construct system is 'a highly complex network of interconnected concepts, continually being reviewed and changed in order to refine or differentiate one's reaction at all levels of experience' (Mellor, 1999, p. 150). Although I originally considered using the associated technique of triadic questioning in order to obtain bipolar constructs which could then be plotted on a repertory grid in order to 'assess dimensions of an experience' *(ibid.),* I opted for concept maps. This was for several reasons. Firstly, they seemed to me be a potentially richer means of investigation given the breadth and individual nature of knowledge I was researching (Mellor's was a narrower focus). Secondly, the constructing of such a map was similar to a visual form of representing knowledge with which I was already familiar: Tony Buzan's *Mind Maps* (see, for example, Buzan and Buzan, 1995) and such a visual form of data was appealing. Thirdly, I considered this would be a useful and attractive method for the teachers.

Some form of semi-structured interview was also decided to be the most economic and fruitful way of eliciting the particular information necessary for the study, ensuring a certain common coverage of key areas identified from the literature while giving potential for exploration of particular aspects if necessary. In addition it provided a good way of building a relationship with the teacher researchees. Swanwick has advocated the use of interviews when investigating people's conceptions of music, despite the drawbacks:

> Interviews are more sensitive forms of verbal enquiry [than surveys and questionnaires], a technique that is able to take us deeper into the thinking of other people — though at the risk of collecting data that spreads *[sic]* and may become awkward to interpret. Such structured conversations can be helpful in trying to understand how people construe music... (1994, p. 80)

Eisner was also encouraging: 'It is surprising how much people are willing to say to those whom they believe are really willing to listen' (1991/1998, p. 183).

The authentic natural setting as mentioned above by Denzin and Lincoln (1994, p. 2) would, presumably, have been the classroom. However, although observation of the teachers in action was considered, it was considered inappropriate for several reasons. To begin with, this study was intended to be an investigation of teachers' *espoused* theories in one school. An inquiry into the connection with their theories-in-action would be the next stage beyond this one and would not necessarily have produced data relevant to the research questions as conceived. Within the literature there are other studies into teachers' thinking that have not used any form of observation of practice, even in the relatively small field of music education (for example, Austin and Reinhardt, 1999; Barnes and Shinn-Taylor, 1988; BrandstrOm, 1999; Cox, 1999; Dolloff, 1999; Kelly, 1998; Knapp, 2000; and Teachout, 1997). None of these have exactly the same focus as my study, but there is some relevant overlap from each. Moreover, although Calderhead reports some studies have shown 'discrepancies between teachers' espoused beliefs and their observed classroom practices', others `have identified associations' (1996, p. 721). It was considered that the interview and concept map schedule planned (see below) would provide justifiable data for the research questions formulated.

There were also practical factors given that the time necessary to observe each teacher engaged in teaching music would have been beyond the scope of this one-person study, while reducing the number of teachers would have compromised the whole school view. Moreover, the Head and the three teachers involved in the initial consultation about the field study (see below) considered it was probable that most of the teachers would be

unlikely to permit observation, particularly as they had just undergone an Ofsted inspection. In retrospect, given that most of the teachers were heavily dependent on broadcasts to deliver their curriculum, there might, in any case, have been limits to the value of what I would have seen in this particular school. Furthermore, any specific observation within the school would only reflect one context for the teachers' musical engagement: the professional, while this study had an intentionally broader scope.

3: 4.1 Semi-structured interviews

The intentions underlying the use of interviews in this study reflected the assertion by Bresler and Stake that

> Interviews are conducted ... primarily to obtain observations that the researcher is unable to make directly, secondly to capture multiple realities or perceptions of any given situation, and, finally, to assist in interpreting what is happening. (1992, p. 85)

Various authors have given advice about the most effective way to conduct an interview (for instance, Powney and Watts, 1987; Thompson, 1993; Dreyer, 1995). Powney and Watts (1987), for example, include practical points and examples about all stages of the process: preparation of an appropriate interview schedule, selecting and contacting the interviewees, carrying out the interview, recording it, transcribing, and analysing the data. They describe research interviews as 'conversational encounters to a purpose' *(ibid.* p. vii). For Woods (1986) they are 'often the only way of finding out what the perspectives of people are and collecting information on certain issues or events' (cited in Thompson, 1993, p. 84). One of the great advantages of interviews over questionnaires is that they allow for prompts and probes in order to extend the information given (Bresler and Stake, 1992; Thompson, 1993). This advantage not only allows for repetition and clarification, if necessary, but also accommodates aspects arising from what Measor and Sikes refer to as 'a process we have called 'listening

beyond': listening for more than is being said on the surface' (1992, p. 214). Therefore, interviews were considered more appropriate than questionnaires, given the scope of this investigation, even though they have disadvantages relating to the time involved (for both interviewer and interviewee), the problems of recording, and the possible uneasiness of both parties (Verma and Mallick, 1999, pp. 122-129).

The objectives behind the first interview were to establish a relationship with the teacher concerned; obtain background information relating to that teacher; and discuss various aspects to do with music in education. A semi-structured approach was chosen in order to provide sufficient opportunity for freedom of response while following a prepared interview schedule that would allow for consistency over all the teachers (see 3: 7.1 and Appendix B). That first interview then provided the basis for the construction of a concept map by the teacher during the second session (see 3: 7.2 and Appendix C). The third interview was intended to allow for filling in any necessary gaps, as well as clarifying or extending any earlier issues (see 3: 7.3 and Appendix D). This type of evolution and interdependency within a study is supported by Eisner, who has described the development of a qualitative research study as 'contingent upon the features of a future no one can fully anticipate ... As in a good conversation, one listens to the other, and how, when, and what one says depends upon what the other has said' (1991/1998, p. 170).

Novak and Gowin were reassuring:

> A perfect interview is not a realistic goal, for even interviews developed over years and used with hundreds of students still reveal less than a perfect picture of students' knowledge and thinking strategies. Human cognitive structures are so idiosyncratic that no one interview can reveal with perfect fidelity the cognitive frameworks of all students. (1984, p. 127).

Although they were talking about interviewing children, the advice they give is also relevant in a broader context:

> Interviewers must be thoroughly familiar with the material to be covered ... Personality factors [of the interviewer] are important ... Interviewers must listen to the [people] they are interviewing ... Patience is required ... The interview atmosphere should be calm and relaxed ... "I don't know," or "I forgot," answers seldom mean just that ... [People] vary widely in loquaciousness ... Statements revealing feelings are significant ... hi sequential interviews, it can be helpful to refer to prior interviews ... The [interviewee's] own language should be used to rephrase questions or probe further ... Finally, interviews should end on a positive note. *(ibid.* pp. 129-133)

Brown and McIntyre advocate treating teachers 'respectfully in a reflective atmosphere' (1993, p. 118) in order to create conditions conducive to articulating their thinking

When preparing for and carrying out each interview, I therefore not only put considerable thought into the structure of the interview schedule, but also considered the physical requirements necessary and, particularly, aspects connected with my role and relationship as interviewer.

3: 4.2 Concept maps

Throughout the study it was kept in mind that any form of representation influences one's conception of what is represented: *'The choice of a form of representation is a choice in the way the world will be conceived, as well as choice in the way it will be publicly represented'* (Eisner, 1996, p. 42).

3: 4.2.1 Background

The acknowledged power of the visual representation of an idea or process can be seen in everyday life as well as education; in road signs and advertisements as well as classroom displays and textbooks. Concept maps (Novak and Gowin, 1984), also

known as cognitive maps (Eden, 1992; Miles and Huberman, 1994), knowledge maps (Hall and O'Donnell, 1996) and semantic webs or nets (Leinhardt and Smith, 1985; Leinhardt and Greeno, 1986) are therefore potentially powerful ways of representing knowledge structures, with the ability to provide data that are 'grounded in the epistemological tradition of cognitive psychology' (Powell, 1992, p. 227). This technique has links, through personal construct theory (see above), with the free association and card sort tasks used by Wilson, Shulman and Richert as ways of `assessing both the breadth and depth of ... subject matter knowledge' (1987, p. 111). However, although it is an acknowledged method for investigating knowledge, I have not yet found any evidence of its direct use in the field of music education. Even though Bartel and Radocy (2002) include a section on concept mapping in their overview of trends in data acquisition and knowledge development, none of their references relate to its use in a music education context.

The term 'concept map' was originally used in behaviourist studies to describe how rats imaged routes through mazes (Tolman, 1948). The expression broadened to become 'a non-specific but organised representation of prior experiences' when cognitive psychologists hypothesised that the constructive nature of cognition meant that memory traces were left behind in the cognitive structures or 'schemata' (Neisser, 1967). Schemata being an integral part of memory meant that it was through investigating memory that the externalising of these internal structures developed into the graphic representational procedure of concept mapping. By the 1980s such procedures were established as 'a technique of graphically representing concepts and their hierarchical interrelationships along two dimensions' (Beyerbach, 1988, p. 339).

In these maps nodes, concepts, or key terms, sometimes in clusters, are linked in (preferably named) relationships. Eraut has referred to concept maps as 'mediating artefacts to facilitate [the] process' of 'connecting different pieces of knowledge' (2000b, p. 257). Novak and Gowin, frequently cited for their development of this `educational tool' (1984, p.1), considered concept mapping a 'workable approximation' of relevant concepts and propositions *(ibid.* p. 40), which meant the technique could demonstrate and help explain 'the structure of knowledge and the process of knowledge production, or metaknowledge' *(ibid.* p. 8).

Such a map is not, of course, a direct image of how knowledge is *actually* structured in the mind, even though there is enough relationship to cognitive structure for a map to be used as a basis for inferences about that structure (Lawson, 1994). The nodes are not the actual constructs, only a form of symbolic representation (Pope and Denicolo, 1993). This is a metaphor for how we hold knowledge. Developing the map analogy, we might therefore identify particular named features at different prominence (contour), connected by a network of routes. Even though this technique relies on written language as symbolic tool (although pictures can be used in simpler maps), the drawing aspect means the mapper is not dependent on a sophisticated level of verbal articulation to represent complex or subtle conceptual relationships. The maps therefore have the potential in this study to show how the teachers situate music in education, as well as internal linkages within the subject, because 'a concept map aims to show how someone sees the relation between things, ideas or people' (White and Gunstone, 1992, p. 15), in other words, how that person understands the area depicted.

However, there are limitations in such forms of representation in that 'the common two-dimensionality of visualization may distort or at best inadequately represent the

participants' knowledge' (Bartel and Radocy, 2002, p. 1119). Miles and Hubermann caution that 'Cognitive maps have a way of looking more organized, socially desirable, and systematic than they probably are in the person's mind' (1994, p. 136). They also point out that although the archetypal map is hierarchical (Novak and Gowin, 1984; Novak, 1998), showing progressive differentiation and integrative reconciliation, `People's minds — and our theories about them — are not always organized hierarchically' (Miles and Huberman, 1994, p. 134).

3: 4.2.2 Uses

White and Gunstone suggest that 'good testing devices are good teaching devices' (1992, p. 39), reflecting two main ways in which the maps are used: to assess knowledge held and to help construct meaningful knowledge. Of particular relevance for this study is the potential for encouraging reflection and for making thoughts, knowledge, beliefs and attitudes explicit. Such maps can thus help answer Schiin's (1983) call for 'reflective research' (Beyerbach, 1988; Morine-Dershimer, 1989; Adamczyk, Willson and Williams, 1994).

One reason for choosing concept maps as a means of accessing and illustrating the teachers' knowledge was that they are becoming increasingly popular as a teaching tool in schools and colleges (Hofkins, 2003). Such maps, constructed by teacher or pupil, can be used at all levels either to help the learner extend his or her knowledge of a particular domain by giving a visible structure to which new material can be related, or to demonstrate understanding of a topic (see Adamczyk *et al.,* 1994, for an example of their use in science; and Mroz, 1999, for literature). Although particularly useful for those who prefer to learn through a visual medium, the technique has also been found to have a stimulating and motivating effect more generally (Hall and O'Donnell, 1996). In

view of their early emergence in semantic memory investigations, it is unsurprising that they are also now used as memory aids (Robinson, Robinson and Katayama, 1999), where their success derives from the economical and effective visual depiction of the topics involved. That characteristic also supports the use of maps, by a teacher or pupil, in small or large scale planning (Novak and Gowin, 1984; Morine-Dershimer, 1999).

As an educational research tool, mapping has been used with children (Fellows, 1994; Crawford, Neve, Pearson & Somekh, 1999; Pearson and Somekh, 2000); student teachers (Elbaz, Hoz, Tomer, Chayot, Mahler & Yeheskel, 1986; Beyerbach, 1988; Morine-Dershimer, 1989); and adults (Leinhardt and Smith, 1985; Askew *et al.,* 1997). Maps may be constructed by the researchees (Askew *et al.,* 1997; Crawford *et al.,* 1999; Pearson and Somekh, 2000) or, as an analysis tool, by the researchers (Leinhardt and Smith, 1985; Tochon, 1990; Fellows, 1994). Leinhardt and Smith described how semantic nets enabled them 'to graphically demonstrate differences in content and organization in teachers' lessons that would not otherwise have been easily detected' (1985, p. 270). Although the researchee's map is likely to be closer to his/her own thoughts (Pope and Denicolo, 1993), while also giving more 'ownership', it makes comparing across different teachers' maps harder, as Winitzky *et al.* pointed out in their study using concept maps to investigate the knowledge of classroom management held by beginning teachers (1994, p. 126).

3: 4.2.3 Use of concept maps in this study

There were several reasons for using concept maps:

- They were intended to be an enjoyable way of accessing thoughts, knowledge and beliefs (Hall and O'Donnell, 1996). For the teachers involved, as well as

myself as researcher, they would provide a refreshing change from the interview/questionnaire situation. Moreover, given its value as a tool for learning and teaching in the classroom, I hoped that the technique would be a potentially useful one for the teachers to experience.

- The maps were to be an ongoing means of initiating and developing talk. Although they would be created from what the teachers said, they then, both during and after construction, would become a stimulus for further discussion. Beyerbach (1988), Strahan (1989) and Pope and Denicolo (1993) found similar techniques valuable tools for reflection, conversation and the articulation of previously tacit knowledge.

- It was hoped they would be an *effective* way of accessing thinking, of encouraging reflection, and of 'probing understanding' (White and Gunstone, 1992). In this context 'effective' meant economical as far as time and effort were concerned; leading to original aspects not uncovered by other means; and also maybe discovering aspects the teachers had not previously considered. The building of a structure of related elements seemed to fit in well with the study's underlying constructivist epistemology.

- Following Denzin and Lincoln's (1994) advocacy of a multimethod approach (see above), the maps were intended to provide not only a different method of collecting data — thus possibly finding different aspects that other methods would not — but also to provide a way of triangulating data found by other means (such as the conversations between the teachers and myself and the ordering of aspects relating to the nature and value of music). However, I recognised that

there was bound to be some likeness, given that the original terms for the maps were taken from the first interviews.

• Each map would also be an end in itself: a depiction of the individual teacher's beliefs at that time and a concrete record for both of us. I hoped it would also be satisfying for the teacher concerned to have completed something tangible.

Thus the maps were both a means to an end and an end in themselves. They also helped provide the cognitive and affective conditions under which they themselves were effectively constructed.

3: 5 The School

3: 5.1 Selection of school

Robson defines a sample as *'a selection from the population'* (2002, p. 260). Elbaz has advocated looking at the 'ordinary teacher as subject' (rather than at the novice or expert teacher, as in, for example, Leinhardt and Smith, 1985; Berliner, 1986) in order to 'uncover and give legitimacy to the extraordinary that is within the ordinary' (Elbaz, 1991, p. 8). In order to minimise as far as possible the inevitable contextual variations, it was decided to look at one two-form-entry primary school, where class teachers were responsible for teaching the subject to their classes (as opposed to one specialist taking all classes). As I had recently moved into the area, I relied on my university supervisors' local knowledge and connections. It would have been possible for me to call on schools in my former LEA, especially as goodwill would have meant they would have been easy to access. However, not only was the distance involved a considerable

disadvantage, but the schools with which I had the closest relationship were ones with whom I had worked in my capacity as advisory teacher. Therefore several factors made this choice inadvisable. Firstly, the teachers, having been influenced — presumably — by my work with them, might try to 'feed' me what they thought I wanted; secondly, I might interpret what they gave me in the light of my existing beliefs about the schools and teachers. Therefore, a short list of about five schools within reasonable travelling distance was drawn up and initial contact was made by my university contacts. The first school approached had recently had a music support teacher working extensively throughout the school, so this school was rejected as a possibility because this input might have unduly influenced the teachers' response — and indeed, should have done so. The head teacher of the second school reacted along the lines of "Must I? If you're *really* desperate...", so that this school was considered a possibility should no one more suitable be found. Then, potentially more positively, the third Head responded "What's in it for us?"

3: 5.2 Description of school

The school in question was an inner-city school in the north east of England. It had been formed from the amalgamation of an infant and a junior school a few years previously and was housed in what seemed an attractive and welcoming purpose-built building, constructed round a central courtyard (which I later discovered was a target for vandalism — even though the only access out of school hours was over the steeply pitched roofs). The building was on a sloping site and the classrooms were linked in pairs, with Early Years and Key Stage 1 rooms downstairs and Key Stage 2, the Hall/gym, 'community room', staff room and administration offices upstairs. The school was described by Ofsted (after an inspection in the summer of 1999) as a `thriving and energetic community, in which pupils feel secure and valued in a

purposeful learning environment' (Ofsted, 1999, Introduction). The overall quality of teaching in the school was assessed as good. As far as music was concerned, the inspectors reported that, since the previous inspection,

> the school has continued to provide pupils with a satisfactory curriculum to support the development of their musical skills and knowledge. Most pupils ... make satisfactory progress and achieve standards appropriate to their ages ... The quality of teaching is satisfactory overall but lacks expectation of pupils to produce performances of high quality. (Ofsted, 1999, pp. 48-49)

The report went on to say that 'too many teachers feel unsure about the subject and rely heavily on recorded radio programmes as a basis for their work' *(ibid.* p. 49). 'Improve the quality of singing at Key Stage 2' appeared as the last point in the final paragraph of the 'less important but related areas' to be included in the school's action plan *(ibid.* p. 8). In other words, this school appeared to be providing a satisfactory level of music education to the children concerned, with no remarkable features of either a positive or negative nature.

3: 5.3 The teachers

The school included a Nursery, so therefore a total of sixteen teachers (not counting the Head) took part in this study: one Nursery teacher, two for each of Reception—Year 6 and a non-teaching Deputy, who became Acting Head during the course of the year when the Head was seconded to the LEA's advisory staff. The Head, Deputy and two of the Key Stage 2 teachers were male, the other thirteen were female. Their ages ranged from mid 20s to mid 50s. Length of teaching experience extended from four to nearly thirty years, so there were teachers whose experience pre-dated the National Curriculum as well as those who had trained within its requirements. Appendix A gives an overview

of the teachers.

3: 5.4 Access

Following the initial contact, I phoned the Head towards the end of the summer term, 1999, to introduce myself, give more details of the study, and discuss practical issues. By my second call, at the beginning of the next term, he had almost completely forgotten our earlier conversation, but responded "Come and sell it to us." So I visited the school one afternoon after the pupils had gone home and talked to the Head and three of the teachers he had invited as being most involved in music in the school, two from Key Stage 1 and the music coordinator from Key Stage 2. This was my opportunity to 'charm the respondents into cooperation' (Ball, 1990, p. 157)! Eisner talks of how 'researchers are their own best advocates for convincing teachers that the study is important' rather than relying on the Head to channel requests and information (1991/1998, p. 172). Therefore, this meeting with a representative group of staff was important. It also meant the teachers concerned could get to know me and judge not only whether the study would be useful to them but also whether I was likely to be `supportive and sympathetic or hostile and suspicious' and whether I was likely to '"understand" students and teachers' (Eisner, 1991/1998, pp. 173-174).

I had prepared an A4 sheet giving some details about my background, an outline of the project and what would be required of the school. I stressed my origin as a primary class teacher (in fact this seemed to help my credibility at various stages, and the Head later said that had been one of the key points in my favour with those three teachers) and described the personal genesis of this PhD project. I reported that I had worked for many years as a school-based advisory teacher; that I was used to interacting with all sorts of teachers and hoped I could be sympathetic and tactful. I reassured them that in any reporting of the research the teachers would have pseudonyms, although admitted that, even so, individuals might be recognisable to anyone in the community who knew

them well. I also emphasised that the teachers would not be assessed on the level of their expertise and that whatever they might have to say about music in education would be of value to me.

I mentioned that there was little empirical research at this level on music in primary schools and so, hopefully, it would be of value to a wider audience. I suggested that the school could also find it useful. The Head agreed such a project might benefit the school in that it would help raise awareness of music and we discussed how talking about the subject could be beneficial in various ways. This balancing of mutual need played an important role in negotiating access. In my favour was the fact that the school had just completed the Ofsted inspection, mentioned above, that identified the poor standard of singing in Key Stage 2 as giving cause for concern. Therefore the Head was trying to raise the profile of music in the school. He also expressed a hope that talking about music would help his teachers in their thinking, thus echoing SchOn's (1983) advocacy of the reflective practitioner, where the act of reflection helps articulate and develop underlying thinking. Later on in the year, as I was being introduced to a visiting mathematics HMI, it became apparent that the Head also perceived the link with university research as giving a certain amount of kudos to the school. However, his awareness of his role as gatekeeper (Burgess, 1991) was demonstrated in our first telephone conversation when he had talked about needing to protect his staff. At that point, the deciding factor was my offer to pay for supply cover so that the teachers could be released from their classes during the school day. Originally I had considered interviewing teachers outside school hours but, given the pressures under which teachers were then working, I decided there would have been no chance of being able to talk to all, or even any, of the teachers if this had had to be in their own time. Although I did not want to set a precedent for future researchers in schools, I considered this

payment for supply cover part of the 'fair return' due to the participants (Spradley, 1979, p. 38).

I offered to give the teachers at that initial meeting time to think about what I had said, but they decided they wanted to go ahead with the study. They also determined to "just tell" [their words] the other staff it was happening, rather than ask for wider approval. The related entry in my research diary notes that the Head 'was supportive and seems genuinely keen. Teachers were tired but wanting to help.'

Other examples of 'fair return' from me to the teachers included a big box full of useful resource publications, chocolate biscuits at the start of each three-day interview block (see 3: 5.5) and a thank-you card at the end. I kept in mind that 'Access to schools and classrooms is not something that one can take for granted' and that teachers' `willingness to cooperate with a researcher is often predicated upon quid pro quo; teachers justifiably expect some return for the access they provide' (Eisner, 1991/1998, p. 171).

Ball talks particularly about the influence of gender and ethnicity on social relations in the field (1990, p. 161). In those respects I fitted in with the staff as a whole. I was also near in age to many of them (as far as I could tell) and during my first visit to the school I took note even of the type of clothes the teachers were wearing. All this meant that, mindful of issues about power, I could appear as unthreatening as possible. Taylor has described that 'Qualitative researchers try to be accepted, liked, and trusted in the hope that informants will relax, open up, act naturally, and forget that they are being studied' (1991, p. 244). As far as ongoing issues of access are concerned, Ball wrote `Realistically, in any fieldwork setting we are confronted with multiple negotiations of

microaccess. Legitimacy frequently has to be won and renewed repeatedly rather than simply being officially granted'. He pointed out that 'The title "university teacher" can be a handicap in some situations' (Ball, 1990, p. 159). In contrast, as mentioned above, I suggest that my background as a teacher reinforced my credibility. It also meant I was able to take part in staffroom conversations during coffee breaks and lunch times. GudmundsdOttir has written of the advantage of having researchers who have also been teachers because they 'speak the language of practice' (2001, p. 228). Burgess also found his former teacher status 'helpful in gaining access to the perceptions of teachers' in research in school (1991, p. 49), adding, 'I have been very much aware how age, status, and gender may influence the data that are obtained' *(ibid.* p. 49).

As far as the issue of leaving the site 'clean' was concerned, I tried to follow Eisner's advice that

> The affective state with which a researcher leaves a field site — the feeling of well-being and satisfaction the participants experience — can have a large influence on whether they will allow others to work there. Practically, one must attend to the matter of human relations, especially, but not only, during the closing periods of the research. Researchers must keep promises, provide feedback, clear up their own paperwork, tie up loose ends, express thanks, and take general care for the way they depart. Guests in our home who leave their sleeping quarters and the bathroom in a state of disarray are not likely to be welcomed back. (1991/1998, p. 175)

3: 5.5 Practical arrangements

It was agreed that I should come into the school for a three day block during the middle of each term in the 1999-2000 school year (November, February, June) in order to see each teacher for an hour during each block. In other words, each teacher was interviewed for an hour during each term. The times chosen took account of dates in the school calendar such as preparations for Christmas concerts and, in the summer, Standard Assessment Tasks (SATs) for Years 2 and 6.

In general, the Staff Room was used for the interviews — although this was not always without disturbance — but sometimes we were moved, frequently at short notice, to the library or to any other room that was free at the time.

A list, compiled by a senior member of staff, was put up on the Staff notice board to give information about who was seeing me when, although this was open to negotiation. Usually, but not always, people checked with me before changing the times. When unavoidable circumstances in school meant I was not able to see everyone within the three allocated days within each block, I arranged with the Head and individuals concerned to revisit at a convenient time in order to complete the interview cycle.

3: 6 Pilot study

An initial pilot study with two teachers from other schools was carried out to develop the data-gathering procedures and assess feasibility implications in view of the prospective number of teachers involved.

Two friends and professional colleagues agreed to help. One was a primary school class teacher and music coordinator who was also involved in initial teacher education. The other was head of music in a middle school. I had considered asking someone with less musical experience and expertise but decided, for the purposes of this pilot study, it would be more use to have people with readily accessible and, presumably, reasonably well-developed subject knowledge, who would also be able to discuss around the issues concerned. The fact that I knew each of them was a disadvantage in the sense of the sometimes uncomfortable shift in our roles from 'equals' to researcher and researchee, but an advantage when it came to frank discussion.

It was definitely of value to have undertaken this extra part of the process. Areas to be included were decided on and, in some cases, the most effective wording was agreed. The time span of about one hour per person per interview appeared to be reasonable. Various pitfalls and misunderstandings were revealed. For instance, when constructing the concept maps, we discovered it was possible for the same person to put the same labels together in different ways depending on the person's viewpoint at the time — and thus the 'think aloud' aspect became vital. I also experienced at first hand one of 'the basic laws of interviewing ... that the most interesting material emerges when the recorder is switched off (Powney and Watts, 1987, p. 139). One person advised me to put the tape recorders out of sight as she had found it off-putting having the red recording light visible. The other warned me not to be too "apologetic" and I later wrote in my research diary, after the first day's interviews in the school, 'interviewer needs to be confident — or how can interviewees have faith/be supported?'

The pilot study was not only useful for sorting out what should be included, in what format and order, but also had an added advantage in that it seemed to be reassuring for the teachers when I prefaced remarks with "In my pilot study ...". Such words implied firstly that the procedures had been trialled and thus established as valuable and, secondly, that because I had tried them out, I knew what I was doing. Consequently, the teachers were not being guinea pigs but were doing something that 'worked' and was valuable: I was not wasting their time.

3: 7 The data-gathering programme

The fieldwork for this study took place during the academic year 1999-2000, that is, when the National Curriculum had been in place for several years, but before the changes of autumn 2000. This was a time when the Programmes of Study were relaxed, although the subject still had to be included as part of the broad and balanced curriculum and was inspected by Ofsted (see previous chapter).

3: 7.1 First session

As described above, the first session (in November 1999) had a three-fold rationale in that it was intended to break the ice between researcher and researchee; to obtain necessary background information; and to generate terms for the construction of a cognitive or concept map during the second session (even though at that stage the teachers were unaware of the exact nature of the proposed task). The teachers were given assurances about confidentiality and anonymity (pseudonyms used in any reports) and were thanked for taking part at the beginning and the end of the session. Each teacher was asked if s/he objected to being audiotaped. It was stressed that the recording was only to provide a record for me and that I would transcribe the interview for readier access to and analysis of the information included, as well as for easier reference in the thesis. Only the Head declined. I used two tape recorders with different length tapes so that they did not need turning over at the same time.

During that initial semi-structured interview of about one hour, each individual teacher was asked about his/her experiences with music as a child and an adult, both in school and out of school (this was to cover formal and informal encounters) as well as information about their initial teacher education experiences (see Appendix B). This

was partly for background information in view of research into the effect of previous experiences on teacher thinking and the formation of knowledge. Although, as mentioned in the previous chapter, Lortie described the inherent conservatism in teaching in that teachers tended to teach what and how they had been taught (1975/1977), Grossman's later study (1990) found initial teacher training had had a positive effect on teachers. Powell (1992), using concept maps as one of his data-gathering tools, provided a possible explanation when he investigated the influence of prior experiences on preservice teachers' personal constructs of teaching — especially those of non-traditional preservice teachers. He concluded that although 'all preservice teachers in [his] study had personal, implicit theories of teaching when they began their teacher preparation program' the nature of those experiences meant they reacted differently to teacher education programmes (Powell, 1992, p. 236). In the field of elementary music education, Verrastro and Leglar have reported that

> [T]he preponderance of evidence suggests that elementary teachers who have experience of making music are most likely to include music in the daily classroom routine. The factor that seems to contribute most to a teacher's willingness to teach music is precollege background, especially private lessons. Unfortunately this factor is beyond the control of teacher educators.
> (1992, p. 689)

Hennessy (2000) has also indicated the effects of the nature of the teacher education course as well as the nature of the opportunities for experiencing music in college and on teaching practice. Because variations in experiences have different effects, it was necessary to investigate these potential influences.

There were also general sections about the teacher's beliefs regarding the nature of music and music education together with questions concerning the teacher's current involvement in music in the school.

The teachers were encouraged to give examples of relevant incidents and events wherever possible throughout the interview, since these have also been shown to have a bearing on teachers' knowledge (Denicolo and Pope, 1990; Woods, 1993).

At the end of the interview, each teacher was given a sheet summarising the areas covered during the session (based on Appendix B). They were asked if they would mind my contacting them in between interviews if necessary, with a choice of giving me home or school phone numbers, and I pointed out my own contact details on the summary sheet.

This recorded interview was then transcribed, with an edited version being prepared for each teacher — omitting the hesitations and repetitions that are inevitable in a conversation (Powney and Watts, 1987, p. 147). I went through the original transcript looking for what appeared to be key 'concepts' for each teacher. These were written on to small separate cards in preparation for the concept mapping exercise in the second interview (White and Gunstone, 1992). Ideally, as already mentioned, all of these terms should have been identified by the teacher because, in a research context, terms generated by the individual are more likely to be closer to the subject's own thoughts than if they are produced by the researcher (Winitzky *et al.,* 1994, p. 126). However, pressures of time (one hour per interview per person) and the unfamiliarity of the concept mapping technique made it advisable to have some cards with which to start the procedure.

3: **7.2 Second session**

At the beginning of the second interview a term later, in February 2000, each teacher was given a copy of the edited transcript from his/her first interview and had the

opportunity to read it through (see Appendix C for the check list covering this interview). Then I described what seemed to me to be main 'themes' from what they had said and asked for comments. For example, Jo agreed she thought important the child's enjoyment and practical involvement, the personality and experience of the teacher, and the wide-ranging value of music. Next the teacher and I went through my prepared cards of chosen words and phrases taken from that interview so I could point out the source in the transcript. The teacher was free to reject or add to these keywords *at any point* during this session in the hope that this would counter-balance any bias on my part. Appendix E contains computer-drawn versions of the teachers' maps. Rectangular boxes with single borders show the original labels, while boxes with double borders were those added during the session.

Next I described the concept mapping task, including the various school-based uses for which the technique was used, and showed two examples. Each teacher was then asked to arrange their keyword cards on a sheet of A2 card in a way that made sense to them when thinking about music in education (White and Gunstone, 1992, p. 17). The illustration Miles and Huberman (1994, pp. 134-5) give of using such a method to understand how individuals viewed a situation follows the process in my study.

I stressed that there was no one right model and the maps were not expected to be the same. This session was also recorded, with the teacher's permission, and the teacher was asked to 'think aloud' so as to 'provide descriptions of the context of teacher thinking and the sequences of cognitive processes' (Clark and Peterson, 1986, p. 259), to explain why the cards were placed as they were, to give explanations of the links; and to show depth and understanding (Askew *et al.,* 1997).

Sometimes the very act of verbalising actions can be helpful to the researchees as well as to the researcher. However, it should be remembered that there are limitations to any kind of knowledge elicitation. It can be hard or even impossible to access what may be tacit knowledge. One should also consider that the act of making it explicit, by naming it, might distort it. As Eden has pointed out, 'if we take seriously Karl Weick's aphorism that we do not know what we think until we hear what we say, then the process of articulation is a significant influence on present and future cognition' (1992, p. 261). This point was also made by Freeman, when he wrote, 'words create what they refer to' (1991, p. 453), and indicated by Eisner (1996, p. 42) in the quote introducing the section on concept maps (3: 4.2).

Elbaz (1991) has discussed the related problem of how to make teachers' knowledge explicit without removing ownership and has pointed out the potential gap between what researchers produce as a representation of a teacher's knowledge and that teacher's account. Pope and Denicolo (1993, p. 542) have also reminded us that much remains in the mind of the individual, so that any study of this kind can only ever be a partial record (and see the previous chapter).

Clarifications and explanations were sought. If the teacher was unable to proceed then I suggested s/he started by grouping like with like. In the initial proposal for this research project I wrote,

> Given the difficulty of accessing all of even that which is explicit, never mind that which is implicit, it is possible teachers will omit elements they might have accepted without question from a structured, pre-chosen set. Therefore some oblique prompting may be necessary to make pathways into any major areas that seem to be missing. (McCullough, 1999, p. 8)

My actions were guided by Clark and Peterson's assertion that 'The central role of the researcher is to assist the teacher in moving from an implicitly held and private belief

system to an explicit description of his or her cognitive frame of reference' (1986, p. 287).

When the cards were arranged to the teacher's satisfaction, they were stuck down and a felt pen was used to draw loops round groups, add arrows, write descriptive labels and relationships. The map was thus 'unstructured' (in the sense of non-directive), with the terms generated by the teacher concerned, rather than each teacher being given the same `fixed list' (Winitzky *et al.,* 1994).

Following this session, I again transcribed the interviews. However, this time these were not fed back as I wanted the teachers to concentrate on their maps, and much of what they said either related to the map they had produced, or was included in a second, adapted version I constructed as a reflection of what each person had said and done over both sessions. The teacher was given a (smaller) copy of her/his own map, together with this second version. These were sent to the teachers about a week in advance of the third session, the first section of which was taken up with a discussion about the two maps, when the teacher could agree or disagree with, and generally comment on the one I had constructed (my interpretation), as well as add or remove anything from either map, thus providing 'communicative validation' (Tochon, 1990, p. 184). The whole process was, therefore, a joint exercise between researcher and researchee, constructing and interpreting data. I had thought that the passage of time could have meant some teachers, away from the research interview situation, might have thought of extra terms to include. There was also a possibility that interaction between teachers might have meant some teachers were influenced by what others have said. However, in practice, neither of these seemed to occur.

3: 7.3 Third session

The third interview, in June 2000, was intended to be a 'tidying up' session. Therefore, as well as the mapping confirmation above, the teachers were asked to fill in any gaps from the first interview and for clarification of any unclear points from either of the previous two interviews. There were also some questions relating to awareness of the changed requirements for the next term (DfEE/QCA, 1999), resources, progression and, as a way of depersonalising the issue of subject knowledge, a query relating to the knowledge a newly qualified teacher needed (see Appendix D).

However, I thought it would also be useful to have another conversation generating task. For that reason, in order to investigate more closely teachers' views about the nature and value of music, I compiled a composite list of thirty-seven phrases (Appendix F) that related to this area and had been articulated by the teachers during the course of the previous two sets of interviews, each phrase having been written onto a small separate card for ease of manipulation. The list contained at least one phrase from each individual teacher. Originally it was intended that each teacher would rank all of the thirty-seven items according to how important they thought each was when thinking about a child's education. However, this turned out to be very difficult, both in terms of the ability of the teachers easily to do this, and in view of the time available. Accordingly, after the first couple of teachers, I asked each to choose and rank their 'top ten'. Again, each teacher was asked to 'think aloud' while selecting and ordering their choices and once more each interview was tape-recorded, with permission. This exercise was intended to help provide new information and relate to previous sessions, therefore being another potential source of triangulation and development. Each teacher was also asked to rank the National Curriculum subjects according to how valuable the teachers felt they were for their pupils, and to how confident they felt in teaching them

(partly similar to an exercise used by Mills, 1989). This was included because it was thought comparing subjects might be an effective way of eliciting information about the essence of those different subjects in comparison with music. It was also a way of investigating teachers' views about subject hierarchy and about their relative confidence in different subject areas. At the end of the session each teacher was thanked for participating and asked whether they were still happy to be quoted when the research was written up. Again, each recorded interview was transcribed.

3: 7.4 Other information obtained

3: 7.4.1 Interview with the Head

Although the Head agreed to take part in the first round of interviews, he was the only person who was not willing to be tape-recorded. Therefore, for his interview, I took down brief notes as he spoke. The session followed the same framework as for the teachers as far as his previous and current involvement in music were concerned and for the third section about the nature and value of music. However, the middle section had a wider brief than for the class teachers when he spoke about the music in school and how he saw his role in relation to music in the school. Although I wrote up my notes immediately afterwards, inevitably the text data from this interview are much briefer than from the others.

Although supportive of my research, and keen to promote music in his school, we agreed he would not to take part in the following two interviews — not least because he was, by then, seconded part-time to the Local Education Authority advisory service and thus spent a lot of time out of school.

3: 7.4.2 Extra interview with the music coordinator

The music coordinator was one of the class teachers and therefore was interviewed as part of that cycle. However, we used the first, extended, section of her time to talk specifically about her role as music coordinator and about music in the school as a whole. This covered communal occasions such as assemblies, hymn practices and concerts; instrumental teaching and other extra-curricular music; visits from and to outside musicians; music-based INSET for the teachers; and 'paperwork' such as the school policy, scheme, and planning sheets.

3: 7.4.3 Music resources

The music co-ordinator showed me round the school during the first block of interviews. As well as giving a general tour, she also pointed out where music resources were kept (instruments and other equipment, books and CDs). During the rest of my time in the school there were occasions when I revisited various areas to check on available resources. Askew *et al.* (1997), in their investigation into teachers' mathematical knowledge, reported that it sometimes seemed as though teachers were trying to remember chapter headings from published schemes or from the published subject Orders. In other words, they were trying to recall external structures rather than their own mental structures of ideas (1996, p. 55). Therefore it was necessary to be aware of such sources available to the teachers in this school, as well as to have enough information to prompt and probe in appropriate ways.

3: 8 Data analysis procedures

Ball describes how

Data are a product of the skills and imagination of the researcher and of the

interface between the researcher and the researched. The choice, omissions,

problems, and successes of the fieldwork will shape the process of the research in particular ways ... Indeed, what counts as data, what is seen and noticed, what is and is not recorded, will depend on the interests, questions and relationships that are brought to bear in a particular scene. The research process will generate meaning as part of the social life it aims to describe and to analyse. (1990, pp. 169-170)

Certainly I was aware that the questions I asked and the prompts and probes I used were instrumental in the generating of data. To an extent, analysis was proceeding to a greater or lesser degree throughout the study. Prompts and probes in response to something said, or not said, could be considered to be a result of my having analysed the situation and responded as I assessed appropriate. Becker described, in his description of the analytical operations in participant observation, how 'analysis is carried on sequentially' in that 'important parts of the analysis [are] being made while the researcher is still gathering his *[sic]* data' (1958, p. 652). As he then pointed out, this influences the course of future data gathering and is also itself affected by the 'exigencies of the field work situation' *(ibid.)*. In my case more formal interim analyses occurred between the first and second and then second and third interviews and,

> At the many crossroads of my interpretive journey, I made decisions that affected the meaning of old data, the new data I sought to collect, the ongoing substance of my thinking, and what eventually I would write. All this was done in the search for believably firm ground for interpretation. (Peshkin, 2000, p. 5)

3: 8.1 Analysis of transcripts

To begin with, main themes and key phrases were gathered from within each individual teacher's transcript (in order to give starting points for the second session's concept map construction). Abstracting themes from data is a phenomenological means of analysis, where

> A theme can be defined as a statement of meaning that (i) runs through all or most of the pertinent data, or (ii) [is] one in the minority that carries heavy emotional or factual input. (Ely, Anzul, Friedman, Garner & Steinmetz, 1991)

This was akin to the method used by Brown and McIntyre who reported, of the teachers in their study, 'We found that we were able to identify for each individual a small number of 'themes' which they brought into their accounts of their lessons' (1993, p. 38). Similarly, when moving from 'concrete data (the interviews with teachers) to a theoretical framework (the generalizations)', I attempted, like them, to be 'as systematic and self-consciously critical as possible' *(ibid.* p. 53).

At the same time, the transcripts from that first session were sifted according to the questions asked. In other words, each teacher's response to a particular question was examined alongside other teachers' replies to the same question. From that, themes emerged from across the range of teachers by a process of thematic induction. As Nias (1989) reported, in *Primary teachers talking,* 'In general, I used a thematic approach, allowing the themes to emerge whenever possible from the words of speakers.' Any theory generated is thus 'emergent' — it comes from the data, and is grounded in the data — following, rather than pre-existing, the research.

This process was repeated for the transcripts from the second and third interviews, with cross-referencing between the interviews. The second transcripts related to the construction of the concept maps and therefore, as described above, the details gained from them were used as a means of generating and triangulating information.

This was thus an 'inductive, iterative and time-consuming procedure' (Brown and McIntyre, 1993, p. 52), which is summarised in Appendix H.

It was important to me that the teachers' voices should feature strongly at all stages of analysis. As Elbaz has pointed out, 'The notion of voice has been central to the

development of research on teachers' knowledge and thinking' (1991, p. 10), for political as well as epistemological reasons. She considers issues concerning maintaining an authentic 'voice' are problematic because the tacit quality of much of teachers' knowledge means it is difficult to make it explicit without distortion or depersonalised labelling (1990, pp. 16-20). For GudmundsdOttir, writing about narrative research, 'voice is intimately connected with culture, meaning and mediated activity' but is neither created nor inherent, but rather 'claimed in the process of collaborative narrative inquiry' (2001, p. 235). The process of 'claiming' is explained as 'an interaction' between the researcher and the researchee, where 'the individual's meaning comes into contact with external voices of practice' *(ibid.* p. 236). However, as Nias explained, of her own attempt to present an account of primary teachers working from the perspective of the practitioners,

> Inevitably ... any attempt to order their words imposes a false coherence upon the latter and, it can reasonably be argued, therefore presents a distorted picture of the messy, uncertain complexity which is teaching. (1989, p. 2)

GudmundsdOttir reminds us that 'The aim of interpretation is understanding' (2001, p. 230). She also describes how, in narrative research, the selected text becomes the tool for analysis and representation of interpretation:

> Creating a narrative text is basically a hermeneutic interpretation, where the meaning of the parts is a function of the narrative as a whole and the meaning of the narrative as a whole depends on the meaning of the parts. *(ibid.* p. 230)

She describes how 'Any narrative, fictional or research based, functions at two levels' *(ibid.)* and that meaning-making is cumulative with successive choices not only already `infused with meaning' but then becoming 'the artefacts' in the next level *(ibid.).* The current study may not be narrative research as such, but nevertheless, not only did those aspects I selected to follow up become instrumental in shaping the path of inquiry but

also, similarly, the aspects to be described here shape the interpretation and understanding.

3: 8.2 Analysis of maps

Sanger asks 'of what is *[sic]* the data a representation?' (1994, p. 177). For the teachers in this study the maps were a means of representing their thoughts, beliefs and attitudes about music in education at that time on that particular day.

I originally anticipated that the maps' content would comprise a mixture of subject and pedagogic considerations, with references to the current educational context. The National Curriculum Orders would probably provide much of the terminology, but I hoped it would be possible to see beyond that, possibly to issues of development and progression, of musical behaviours and aesthetic experiences, of teaching strategies and subject representation. However, I was aware that if particular aspects did not appear on teachers' maps it did not necessarily mean they were not part of their thinking, just that they were not available for overt scrutiny at that time.

Potential linkages within each set of elements were less readily identifiable, except in so far as research has shown that experienced teachers are likely to have maps with more, and more complex, links (Strahan, 1989; Winitzky *et al.,* 1994). Having defined understanding as 'the set of propositions, strings, images, episodes, and intellectual and motor skills that a person associates with [a particular] label', White and Gunstone explain that 'The richer this set, the better its separate elements are linked with each other, and the clearer each element is formulated, then the greater the understanding' (1992, p. 5). Similarly Askew *et al.* refer to a 'rich network of connections between different ... ideas' (1997, p.1). However, Elbaz (1990) reminds us that teachers'

knowledge is not linear, but operates on several levels simultaneously, and Leinhardt and Greeno (1986) have pointed out that a teachers' set of schemata are at different levels of complexity with some knowledge 'scripted' as a way of facilitating efficient storage and recall. Winitzky *et al.* stress the importance of the *organisation* of knowledge as well as the knowledge itself, referring to expert teachers' `more elaborated, more interconnected, and more accessible cognitive structures' (1994, p. 126). This reflects Berliner's work that demonstrates experts have elaborate schema and a repertoire of scripts built up from long experience (see, for example, Berliner, 1987).

One means of analysing concept maps involves scoring them in a quantitative way: counting the number of nodes/items, levels and links (Elbaz *et. al.,* 1986; Strahan, 1989; Winitzky *et al.,* 1994). However, this is not always appropriate. For example, when maps are used as a diagnostic tool in formative assessment, missing nodes and invalid links can be as revealing as valid ones. Furthermore, as a constructivist tool, all links and omissions are important because they are part of the perspective being mapped (Kinchin, Hay and Adams, 2000).

A second way, albeit sometimes connected to scoring protocols, is by assessing similarity to a 'model'. For example, teacher educators were asked to construct maps of `how they would like their students to think about teacher planning at the end of their course' (Beyerbach, 1988, p. 341). However, there may be 'possible creative alternative hierarchies' (Novak and Gowin, 1984, p. 99), so that 'a rich and justifiable map that is sharply different' from the model may reveal 'an original mind' (White and Gunstone, 1992, p. 36). I intentionally did *not* construct my own map in advance, because I anticipated having to support the teachers in the construction of their maps and did not

want to influence them by calling on memories of mine.

However, these are not the only ways of looking at maps and for Novak and Gowin `Scoring was in many respects irrelevant, for we were looking for qualitative changes in the structure of children's concept maps' (1984, p. 97). Stuart has also queried the numerical scoring of maps, concluding that although 'simple aggregate scoring systems do meet technical criteria, ... [and] do detect differences between individuals, and within individuals over time, they miss much of the data provided by a concept map', particularly 'the 'quality' of the relationships shown' (Stuart, 1985, p. 80). More recently, Kinchin, Hay and Adams complained that 'The aggregation of scoring creates a blurring of what the overall score actually reveals' (2000, p. 46). Furthermore, sometimes 'a map with a small number of terms can quickly reveal a complex structure of ideas about sophisticated concepts' (White and Gunstone, 1992, p. 23), possibly because 'most "experts" tend to leave out explicit descriptions of key concepts or propositions that are very familiar to them' (Novak and Gowin, 1984, p. 49), or may store their knowledge by 'chunking' or 'scripting': gathering together related information.

Although, out of interest, I kept a record of the number of terms used by each teacher (how many they started with, and how many they then added or discarded), a quantitative method of scoring was not appropriate for this study, not least because the sets of starter key terms were unique in content and number to each teacher. Despite the fact that one of the original research questions related to similarity and difference between the teachers' thinking, this required looking beyond a 'score'. In keeping with the qualitative nature of the study, and the constructivist epistemology behind many of the interview questions and the use of concept mapping in this context, more descriptive and interpretive methods of analysis were sought.

Initially, using the interview transcripts and both maps (the teacher's original and my interpretation), I described the visual appearance of each teacher's map: content and structure, including which terms were used, how they were grouped, and how those main groupings were then linked, in other words, the nature of relationships between concepts.

Next I returned to the literature for more rigorous, established methods of analysis. As these maps were both the result and representation of ongoing thought and conversation, which could be seen as narrative — and were construed as such in the interview transcripts — it seemed not inappropriate to look at ways of analysing conventional narrative accounts.

Lieblich, Tuval-Mashiach and Zilber (1998) used two intersecting dimensions: holistic-categorical and content-form. Although developed by them, as psychologists, for their research into life stories, the authors indicated that the method might also be appropriate in a wider context:

> We believe that it has heuristic value for thought and discourse about methods of narrative inquiry and can be used with a great variety of materials: verbal, whether oral or written, and perhaps also *visual*. (1998, pp. 168-169, my italics)

Their model encouraged me to return to my original descriptions of the maps and examine more closely the relationships within each map as a whole, as well as pull together categories between different maps. Lieblich *et al.* consider structure particularly informative, at least in narrative analysis, because 'the structural aspects of a narrative are more attuned to the deeper levels of personality, less easy to manipulate, and perhaps more revealing' *(ibid.* p. 168). They admit it is not always easy to separate

different aspects. For instance, form cannot be considered without some acknowledgement of content *(ibid.* p. 169) and I suggest this is probably particularly so when considering a concept map, where the placement of the words as *content* determines the structural *form.*

A way of identifying particular structures was provided by Gudmundsd6ttir (1990) in her study of the qualitative differences in the pedagogical content knowledge of four social studies teachers, where she adapted the 'mechanisms' of 'centering' and `chaining' from Applebee's (1978) way of analysing the development of narrative form in young children's stories. Applebee, in turn linking with Vygotsky's (1962) stages in concept development, identified six basic structures: heaps, sequences, primitive narratives, unfocused chains, focused chains and narratives. Within this narrative approach there also seem to be similarities with the Structure of the Observed Learning Outcome (SOLO) taxonomy, since the first four stages (pre-structural, unistructural, multistructural and relational levels) show a similar development of internal complexity and cohesion (Biggs and Collis, 1982). Similar approaches have been used in the classification of Year 8 pupils' science maps according to 'spoke', 'chain' and 'net' structures (Kinchin, Hay and Adams, 2000) and when ten-year-old children's maps illustrating their conceptions of 'computer systems' were classified as unconnected, linear, one-centred, several-centred, and 'spaghetti' (Pearson and Somekh, 2000).

In other words, such qualitative ways of looking at maps are accepted practice and reflect the opinion that 'good maps' are 'those that display considerable detail, variety of types of relation, rich patterns of cross-relations ... and clear structure;' while 'poor maps' were 'those with blocks of terms lumped together without clear relations [in] simple chains' (White and Gunstone, 1992, p. 39).

The eventual interpretations I drew from the maps were, to a certain extent, speculative, although there was evidence from the interviews as a whole to reinforce those impressions, and I had fed back to the teachers my original interpretations of their maps. However, in addition, I showed the teachers' maps to a very experienced primary school deputy headteacher, sometime acting head, who had also worked as an advisory teacher for music and in initial teacher education. She did not know these teachers, and I gave her an extremely brief description of concept maps. Nevertheless, it was interesting to find that her interpretations of the teachers, from their maps, was usually extremely close to the impressions I had gained with the benefit of much more evidence. In other words, the teachers do seem to have represented within these maps something of their *personae* as teachers of music.

3: 9 Criteria for 'good' research

Bresler and Stake declare that 'the most important criterion for any research is that it is about something important' (1992, p. 85). The importance of research into teachers' thinking and the lack of such research in the field of music education has already been described in the previous chapter.

The traditional criteria for 'good' positivist/quantitative research relate to various forms of reliability and validity (see Cohen *et al.,* 2000, chapter 5). Robson comments how some supporters of flexible, qualitative research (for instance, Lincoln and Guba, 1985) prefer to use terms such as confirmability, dependability, credibility and transferability. However, he suggests this can downgrade such research, giving 'support for the view that qualitative studies are unreliable and invalid' (Robson, 2002, p. 170). Yet Bresler

and Stake describe how the use of different terms underlines the inappropriateness of traditional positivist criteria and terminology in the axiomatically different naturalist qualitative context (1992, p. 86). Miles and Huberman (1994) make clear that the original terms are used in qualitative research not merely in order to justify such methods in the face of positivist research. They argue that 'the problem of quality in qualitative studies deserves attention in its *own* terms, not just as a justification device'. There are various opinions as to the feasibility or otherwise of specifying criteria for qualitative work, but, as they unarguably conclude, 'the problem of quality, of trustworthiness, of authenticity of findings will not go away. The fact is that some accounts are better than others' (1994, p. 277).

They proceed to describe five main, albeit overlapping, issues, or, as they refer to them, `queries ... [that] can be fruitfully posed when [the researcher] is reflecting on the question, "How good is this piece of work?"' *(ibid.* p. 278). These are now described, using their guidelines *(ibid.* pp. 278-280), to help relate them to my own study. It should be noted that Miles and Huberman pair traditional terminology with possible viable alternatives, some of which are also those preferred by Lincoln and Guba (1985).

Objectivity/confirmability

In view of my remarks about the place of the researcher's 'self' at the beginning of this chapter, it would be impossible to claim neutrality here. However, I have tried to describe and explain clearly the methods and procedures undertaken, taking note of Robson's use of Ahern's suggestions of ways of using reflexivity to identify areas of potential bias throughout the research process (Ahern, 1999, pp. 408-410; see Robson, 2002, pp. 172 and 173). As researcher/reporter I have tried to be as reflective and self-aware as possible about personal biases and assumptions, realising that, just as it was

impossible for my researchees to be fully self-aware, the same applies to me. Conclusions are linked to data and the data are available for scrutiny by others.

Reliability/dependability/auditability

This area is to do with consistency of process. Each teacher was asked about the same main areas and completed the same 'tasks'. Planned schedules were used as checklists for the semi-structured interviews (Appendices B, C and D); with certain areas written out more fully to ensure each teacher received the same information (for instance, the preamble to constructing the concept map, Appendix C). Sometimes an individual's reply to one of the, often open-ended, questions meant the conversation between researcher and researchee went into other areas, but that was an intentional opportunity to delve deeper into the individual's thinking. However, there were times when I was concerned that my input might unduly influence the teachers' responses. These moments typically occurred when the teacher concerned had difficulty answering a question or, particularly, became 'stuck' while completing the map. To a relatively inexperienced researcher, prompts and probes did not, at least at first, come readily. I was also concerned that my occasional conversational rejoinders — intended to help create a relaxed atmosphere (Brown and McIntyre, 1993) and part of Spradley's (1979) `fair return' to balance the contribution of the researchee — might influence the responses. There appears little obvious influence, but that does not mean I did *not* affect matters.

Internal validity/credibility/authenticity

Do the findings make sense? Are they credible to researchees and audience? This is particularly relevant for interpretive studies involving teachers' voices (for example, Elbaz, 1983; Clandinin, 1985; Acker, 1999). Triangulation between the various

interviews and the map produced was used to produce converging conclusions. Interim interpretations were fed back to the teachers concerned as a participant validity check, as were edited transcripts from the first interviews and their maps from the second (see Appendix H). Very rarely were any changes made. However, I am aware that there may be reasons other than agreement for this apparent concurrence, not least time pressures. I tried to give frequent opportunities to amend, reject or offer information (in the widest sense). Throughout the study, emerging theories have been linked closely to data and exceptions to general patterns have been noted. Brown and McIntyre considered the *consistency* within their teachers' accounts as an indication of validity, as also the fact that the teachers 'endorsed' the researchers' accounts of what they had said. They supported that by saying,

> To some extent also our confidence is based on the face validity of our results. To us the teachers' accounts have seemed consistently rich, relevant, focused and persuasive; and having presented these results to some hundreds of teachers and researchers on teaching, we have found a very general readiness to accept them as plausible and sensible. Nobody has suggested to us that the teachers were approaching their teaching in unusual ways or that their reported thinking seemed improbable. (1993, p. 108)

I could speak in a similar fashion about 'my' teachers' accounts, although, as yet, the number of teachers and researchers who have heard my descriptions has probably only just reached triple figures.

External validity/transferability/fittingness

This section also includes the term generalizability (US spelling) and is concerned with whether the findings are transferable to other settings, either to the whole 'population' (less likely in qualitative research), to another case, or having analytical generalizability. Although the setting for my study was opportunistic in the sense that the Head and one of my university supervisors were known to each other, in other respects it was non-

exceptional, as reported above. All the teachers in that school were included in the study and certainly seemed to demonstrate the range of teachers that one might see in other schools, except in so far as any ethnic diversity was concerned. Including more schools would have been beyond the scope of this PhD, single-researcher study and, as it was, interviews with sixteen teachers and the Head made for extensive transcribing. Using one school minimised contextual differences as far as possible.

The National Curriculum applies to all state-funded schools so, given the range of teachers in this school, there is no reason not to expect similar, although not identical, results from another similar school (two-form entry, inner city primary). This would imply there is the possibility of reasonable transferability of findings to other teachers and schools if the schools concerned had a similar level and type of music provision.

In his overview of case study as a focus of study, Stake describes how individual cases in a collective case study (as this was identified above) 'are chosen because it is believed that understanding them will lead to better understanding, perhaps better theorizing, about a still larger collection of cases' (1994, p. 237).

The findings as so far reported to other researchers and teachers have been recognised as consistent with others' experience. I have attempted to give enough detail of procedures so that the study could be replicated elsewhere and enough detail of the teachers' responses and of findings for readers to assess potential transferability to other settings with which they are familiar. This would accord with Bresler's definition of transferability as 'the extent to which the case study facilitates the drawing of inferences by the reader that may have applicability in his of her own context or setting.' In other words this concerns case-to-case relevance rather than covering the whole 'population.'

As Bresler explains: the former is 'inductive, localized and contextual', while the latter involves 'context-free and time-free laws regarding human behavior' (Bresler, 1993a, p. 12, note 3). Brown and McIntyre refer to this as 'naturalistic' generalizability, which they describe in a similar way:

> Our use of the term 'generalization' does not imply the probabilistic kind, which arises from the application of statistics to large data sets in, for example, survey research or experimental studies ... The generalizations in this context are better describes as naturalistic: they form the basis of hypotheses to be carried on from one case to the next, rather than general laws to be applied across a population. (1993, p. 50)

Utilization/application/action orientation

This is an essentially pragmatic issue: of what use are these findings? As far as I, as researcher, am concerned, various isolated aspects hitherto known mainly in anecdotal and experiential forms have been linked together in a way demonstrating the more complex schemas that come from experience. This is obviously explained further in the following chapters. As far as the teachers involved were concerned, it was hoped that the opportunities to focus on the subject would lead to greater awareness, perhaps a small step on the road to Lather's 'catalytic validity' (1986, p. 272). Certainly several teachers made positive comments at the time. However, I have not revisited the school; the Head has moved on; and any longer-term impact has not been solicited. As far as other users are concerned, the literature has suggested that knowing about teachers' thinking should be beneficial to those concerned with initial teacher education and with continuing professional development. This is returned to in the final chapter.

Eisner refers to the potential for the improvement of education as 'the toughest test of educational criticism (and it is the same test I would apply to any form of *educational* research)' (1991/1998, p. 114). He argues eloquently for that improvement — and although he is referring to schools in the United States of America, the conditions and

problems he describes are relevant to this country — and states that in order to deal with such problems one needs the 'ability to see (not merely look at) how they work' *(ibid.* p. 119)*. Thus one can track down and attend to the *sources* of problems, not merely the symptoms (p. 118). This study has been an attempt to examine these teachers' `knowledge' of music — one underlying source of their actions in school — in order to be able to suggest how best it might be possible to support and develop teachers in their teaching of this subject.

Becker suggests one should also consider the *credibility* of the informant: whether the informant (his term) has 'reason to lie or conceal some of what he sees as the truth' (1958, p. 652). In the current study such concerns were mitigated by the type of reactions made — everyone gave a mix of positive and negative responses. Moreover, several people made comments along the lines of "I wouldn't be saying this if it was literacy [we were talking about]", reflecting the low level of music in the perceived objective hierarchy of subjects (Paechter, 2000, chapter 4). Other comments such as "Please don't tell the Head this!" indicated the speaker was aware the response might not be acceptable in a wider school context. Such remarks were usually the introduction to volunteered observations and interpretations, rather than in response to direct questions, and so might be taken to be more likely to reflect the teacher's opinions than `the observer's [ie the researcher's] preoccupations and possible biases' (Becker, 1958, p. 653). Powney and Watts, although acknowledging the possible discrepancy between what people say and the 'actuality', nevertheless advise that [r]esearchers have to make the assumption that people are knowledgeable and logical in their self-awareness' (1987, p. 190). However, despite these teachers' apparent honesty, it is obviously also necessary to be aware of the difficulty of accessing what may be tacit knowledge. Therefore not only must one take into account that these espoused theories may not be

an expression of the teachers' conscious thoughts, but moreover, is what the teacher thinks to be the case for him or her, whether articulated or not, really a reflection of subconscious or non-conscious thought?

3: 10 Ethical considerations

GudmundsdOttir, in her overview of narrative research, writes

> Awareness of ethical issues is an integral part of all narrative research craftsmanship, especially in those cases where researchers are fluent in the language of practice. In those contexts, teachers (as informants) tend to be more personal than they otherwise would have been. Thus, old concerns about ethical issues are being redefined because narrative research on school practice is essentially a moral enterprise rather than a technical one, where researchers and informants see themselves as moral agents in search of a better practice. (2001, p. 237)

This view is surely not specific to narrative research since 'Researchers have an obligation to protect people from being managed and manipulated in the interests of research' (Measor and Sikes, 1992, p. 211).

The ethical guidelines recommended by the British Educational Research Association (BERA, 1992) were used to guide the fieldwork for this study. Although these have since been revised (BERA, 2004), the following points relate and refer to the original guidelines, since these were the ones relevant at the time.

The first of those stated that 'all educational research should be conducted within an ethic of respect for persons, respect for knowledge, respect for democratic values, and respect for the quality of educational research' (BERA, 1992). Within each of these categories there are several subsections. The particular ones that are relevant to my relationship with the school and the participants include the following:

7. Participants in a research study have the right to be informed about the aims, purposes and likely publication of findings involved in the research and of potential consequences for participants, and to give their informed consent before participating in research.

Although the Head and the group of three teachers 'volunteered' on behalf of the whole staff, the purpose of the study was explained, briefly, to each individual at the beginning of the first interview.

10. Participants have the right to withdraw from a study at any time.
Each teacher was told they could withdraw at any point and this assurance was repeated at the start of each interview. I also checked with the Head before each set of interviews that no one had expressed any unwillingness about taking part. As he agreed: "No news is good news."

13. Informants and participants have a right to remain anonymous ... However, participants should also be made aware that in certain situations anonymity cannot be achieved.

As mentioned in the Access section above (3: 5.4), the teachers were told that, in the thesis and in any reports arising from the research, each person would have a pseudonym. However, it was also pointed out that, given the close-knit community, they might still be identifiable to their colleagues in the school. On the other hand, it was made clear that the final thesis would not be completed for several years and the chances of anyone who might be able to identify them reading it were remote! I also said that what they told me would be confidential: I would not, for instance, repeat anything they said to me to the Headteacher. At the end of each interview, I requested

permission to use any necessary quotes in written reports. No one refused this. As explained above, I fed back to the teachers the edited transcripts of the first interview, and their concept maps following the second so that they could assess the 'truthfulness' of my data.

I have tried also to take account of the following more general considerations relating to the research profession as a whole:

2. Educational researchers should aim to avoid fabrication, falsification, or misrepresentation of evidence, data, findings, or conclusions.

4. Educational researchers should aim to report research conceptions, procedures, results, and analyses accurately and in sufficient detail to allow other researchers to understand and interpret them.

6. Educational researchers should aim to conduct their professional lives in such a way that they do not jeopardize future research, the public standing of the field, or the publication of results.

To this I would add that I sought permission from the Headteacher in the first instance, and also wrote a brief letter explaining what I was hoping to do to the LEA music advisor, out of courtesy and for his interest.

My emphasis on aspects that would help me to be seen as someone on their level has been mentioned above. This was an attempt to mitigate issues that might have arisen because of a perceived power imbalance. Stake has described qualitative researchers as

`guests in the private spaces of the world' (1994, p. 244). Day advocates researchers

should have a 'caring' relationship with the teachers which goes beyond the 'hit and

run' approach (1991, p. 537). The original proposal for my research stated

> It will be kept in mind that inquiring into a teacher's practice and life can be an invasive process: "For, if the teacher's practice was a vulnerable focus, the teacher's life is a deeply intimate, highly intrusive, focus" (Goodson, 1994, p. 34). The emphasis will be on attempting to be helpful to the teachers. (McCullough, 1999, p. 10)

4

Main Findings

The iterative process of moving between descriptive and explanatory themes, inevitably affected by my perspective and preferences, eventually resulted in clusters relating to

- the nature and value of music: what they considered music was and why they valued it in education;

- instrumental skills: how they saw themselves in relation to music — as *musicians* — and the place of instruments in the curriculum;

- how they engaged with music in practical terms: what they *did;*

and, underlying and interconnecting with all of those,

- the teachers' affective attitudes towards music: how they *felt* about the different aspects of music and the various ways in which they engaged in and with it.

Drawn from different aspects of those areas come the main findings to be described in this chapter: the fundamental and wide-ranging occurrence of enjoyment, the range of values attributed to music, the place of instrumental skills and the use of schools' broadcasts. Although some comments are made about various aspects within these findings, a more detailed discussion is kept for the following chapter.

4: 1 Enjoyment

The place and role of enjoyment in the music experienced by these teachers throughout their personal and professional lives was a pervasive theme throughout this study. It was

the word most often used by the teachers in connection with a range of aspects —
including music's potential as a learning tool — and I have included it here as an
umbrella term to cover a broad continuum from superficial entertainment to the
satisfaction of a deep and fundamental need, as it was used by the teachers in
relationship to themselves and their pupils.

Music was important to these teachers, in school and out, for themselves and for their
own children as well as for their pupils. All the teachers valued music in their own lives:
"It enriches *me,"* said Rosemary [RA II: 37], while Hilary was even more emphatic: "I
couldn't survive without music ...It's such an important part ...you can just put some
... CDs on, it's great" [4A II: 228-9].

A large part of this valuing concerned the enjoyment gained from engaging with music
in some way and the positive attitude they then felt towards it, so that, as Michael said,
"I could not imagine a world without music. I love music" [5B I: 150-1].

Many teachers spoke of the ubiquity of music in everyday life but each could also
describe some way in which music featured as a chosen activity beyond the unavoidable
casual encounter, that is, because they enjoyed it. The amount and type of contact
varied, but even Patricia, who admitted "I wouldn't say [music] plays a big part in my
life" [5A I: 47], had previously stated she enjoyed listening: "I listen to the radio ... I
still like the Beatles, the old stuff, the 60s" [5A I: 40-1]. All the teachers spoke of
enjoying listening to music, but some also spoke of other ways of accessing music by
going to concerts, playing instruments, dancing and through their church going. At the
other extreme from Patricia was, possibly, Jo, who seemed to engage in most of the

above-mentioned forms of musical activity, including listening to a range of recorded music:

> I would say that now I probably listen to more popular music than I used to. I very much enjoy pop music ...I enjoy *dancing* so that's another way that I express, I suppose, my musical ability ...I've got a major run of concerts at the moment ... James, Blondie, ... I do enjoy very much going to live bands, ... the Arena and the Civic Hall have lots of interesting people to listen to ... [and I've been to] Allendale ... [for] folk music — I've been up there a few times ... and really enjoyed that ... I use my guitar a lot ... at school and at home and my husband works with a man who is part of a ceilidh type group, and we've been round to their house quite a lot and they just *play,* so I've been involved in that, which is very nice. [1B 1: 87-99]

It was noticeable that several teachers differentiated between the making and taking of music when talking about the enjoyment they received from involvement with music outside school. For instance, Laura made a conscious distinction when she said, "I do get enjoyment from listening to music. I don't *make* music — I haven't the skill to make music for myself, but I do enjoy listening to music" [RB III: 26-8]. Similarly, both Patricia and Michael had qualified their remarks quoted above in a comparable way. Patricia had said, "I listen to the radio, but I don't belong to any choirs or anything like that..." [5A I: 40], while Michael had continued his statement thus: "I could not imagine a world without music. I love music. But I can't play anything" [5B I: 150-1]. This reflects an underlying and prevalent assumption that being able to play an instrument was at the top of a hierarchy of ways of engaging with music. Although, while accepting that view, Hilary realised "I can't play football but I love to watch it, though" [4A III: 75].

For some teachers enjoyment was so closely associated with music that it was embedded, or even embodied, in their definitions of music. Rosemary, for example, considered music to be

> A collection of sounds that can be made by people or things, that can represent a number of feelings and moods or can be representative of places and actions

from the past. Everybody enjoys music of some kind. It can come from the environment also. [RA I: 148-51]

Jo recognised the connection between personality and preferences:

It's a series of sounds put together, in an enjoyable way I suppose I ought to say, ... It's enjoyable sounds, isn't it? ... I know that everybody's tastes are different and therefore you can enjoy sounds according to your personality and your background, I suppose. It's what makes you tick, I think, that decides what you like and what you don't. [1B I: 190-200].

While Caroline added the dimension of an inherent need when she said, "It's one of the Arts, something you listen to, something to enjoy. Something you can create yourself. I think it's something that everybody needs, as well" [2B I: 217-9].

Hilary discriminated between listening and other forms of participation when she recognised some different 'routes' of enjoyment:

Music itself is a series of notes put together in such a way that you come up with something pleasing and, you know, enjoyable. It's to listen to and also to participate in ... It's just something I feel that you can gain enjoyment *from* it and you can also *give* enjoyment with [it]. You don't have to be musical to enjoy music. [4A I: 197-201]

While her year colleague, John, omitted any physical description and went straight to the pleasure, albeit immediately adding the heuristic role: "I think first and foremost I would say ... music is all about enjoying yourself. Enjoying yourself and learning at the same time" [4B I: 174-5].

Alison added the social aspect to her composite view:

It's a combination of tune and melody, but also about sounds and non-tuned instruments and sounds that *they* make, and using the voice or objects to create sounds and pattern of sounds, rhythms, beats, to either entertain yourself, for your own pleasure, or to share with other people. And it can be either done by yourself or it can be done in groups with others. [6A I: 134-8]

Finally, a minimalist definition from the Head combined physical and affective/ attitudinal elements: "Music is sound ... A pleasant, enjoyable sound" [H 104-5].

These definitions were spontaneous responses to a request for a definition and therefore might be considered to represent the most readily accessible thoughts on the subject. However, although more deliberation might have both modified and developed these answers, they do indicate the prevalence of enjoyment as a fundamental feature.

The enjoyment motif was also evident when the teachers came to think about music in education, particularly as experienced in this school. For instance, fifteen out of the sixteen teachers selected *enjoyment* as one of their top ten reasons for including music in education — for eight of those it was the *most* important — and the one who did not choose it then [2B] had previously included it in her map as a reason for doing music. A couple of teachers [5A and 6A] also gave it as one of the reasons why music had originally been included within the National Curriculum. It was an aspect cited by seven teachers and the Head when brainstorming what music education meant to them. Similarly, fifteen teachers included it in their maps, with Sheila considering enjoyment the whole background, and Hilary adding an asterisk to it for emphasis.

It was both a justification and an objective for the inclusion of music, as well as an enabling factor in other areas.

As quoted above, John defined music as "first and foremost ... all about enjoying yourself. Enjoying yourself and learning at the same time" [4B I: 174-5]. His colleague spoke similarly when she said, "I know reading and writing, that has to be *it*. But ... I still think music is all about *pleasure* at the end of the day. I want them to appreciate it

and enjoy it and I think it's important that we find the *time"* [4A III: 12-4]. So inherent potential for enjoyment was its main value: "It's value is just as [something] pleasurable, I think, something to be enjoyed is valuable, isn't it?" [4A III: 168-9].

In school it was desirable that pupils should enjoy themselves: "We want them to have fun in school. We want them to enjoy school. This is one way of them having fun" [RB II: 62-3]. This was partly because that is obviously a more preferable state than having an *unpleasant* time. So enjoyment is desirable for the here and now, the *present.* This `present' extended beyond the school itself, a point made by Jo when recounting why she thought music had been included in the National Curriculum: "it's something that can be enjoyed outside of school as well" [1B I: 227-8]. Several others also describing music as providing a link between school and the outside world, which was considered to be "more than home, isn't it? It's everything ... It's out-of-school experiences that they have" [3A II: 214-5].

Other teachers considered the future was also important and that they should be giving the children something they could carry forward with them. Laura talked about this in the context of her own children when she said,

> I value it for my children to have, not to be able to, so when they're older they can play, but just to get pleasure out of it. And also the skill, ... [of] being able to read music and to coordinate. But mainly for the pleasure, just to appreciate *music.* [RB I: 105-8]

Of her class, Hilary said, "To me it doesn't matter if they don't latch on to notation and things as long as you give them an awareness of different kinds of music [so] that when they're older they can enjoy concerts and CDs" [4A II: 223-5]. Patricia spoke similarly: "I think we perhaps do all of this *for* the enjoyment and to help them in adult life ... Something to enjoy in their *leisure* time" [5A II: 92-4].

For some teachers this desirability of enjoyment was a bottom line justification for music, both for the children: "It's important that they get enjoyment *from* it, otherwise what's the point in doing it?" [6A III: 19-20], and the teachers: "And perhaps if the teacher is not *so* good at teaching music, they're still getting enjoyment out of it which is a big part of it as well, isn't it?" [4A I: 314-6]. A connection between child and teacher was made by Michael when he said, "the enjoyment of the children determines the enjoyment of the teacher. For, if they don't enjoy it, I don't enjoy it *either"* [5B II: 77-8]. While Jo approached the sentiment from the opposite direction: "I love doing music with the class. I think because *you* enjoy it, *they* respond to what you do much more" [1B I: 130-131].

Ruth also thought the children's enjoyment was fundamental:

> [T]hat's got to be the sole reason, well, not the sole reason, but one of the very main reasons that I feel we're doing music. I know the children are learning a lot of skills through it, but I think the enjoyment, at our level in the Nursery, I think the enjoyment's got to be [paramount]. [N II: 114-7]

She also gave there an indication of what most teachers (Michael was possibly an exception) considered to be one of the most important implications of the enjoyment gained from music: that of its consequent potential for developing areas other than music.

For Jo music was "the root of learning", explaining

> You can see from the enjoyment, they do learn so much from it because it's something that they are enjoying doing and I think that is the root of learning; if you *like* doing it you are going to learn *much* quicker. [1B I: 237-9]

John made the same point when he said, "If the child[ren] can enjoy themselves, if they find it *Non-threatening,* then they are going to learn, aren't they?" [4B III: 48-9]

Enjoyment was seen as enabling learning, and therefore, conversely, Fiona believed "I think if you don't enjoy music, then you've lost the child or the adult or whoever it is you're trying to teach" [1A III: 75-6]. Other teachers made similar points about music as "a way into learning" [4B III: 46] and Sheila explained its place in the National Curriculum thus:

> it supports everything else, I think ... I'm not sure that that was what was intended ... I think that ... I don't know whether they [the government] appreciate how much support it gives to everything else. You can use it in history and geography as well as creative writing, as well as the maths ... abstract things, yes, as well as the creative. I'm trying to think of blocks of things ... yes, the PSE, yes. [3A I: 266-73]

For two teachers, this potential of music — because of the enjoyment — was the subject's *only* justification within the curriculum since they did not recognise the necessity of teaching music for its own sake given its ubiquity outside school. "I don't know whether it's that important to be taught because I think it's something that children listening to music will learn and will appreciate themselves," said Laura [RB I: 189-91], continuing in a later session,

> We want them to have fun in school. We want them to enjoy school. [Music] is one way of them having fun. But also for the learning, for the number work, and the language work, so these go hand in hand really: they're not going to learn if they're not happy. [RB II: 62-5]

Therefore she rated the *creative development* subjects, which included music, most valuable of the Early Learning areas as far as the children were concerned because "This is the core, to be able, to enable us to use this, to teach these skills [of English and maths]" [RB III: 118-9]. Emma considered music to be "a good learning tool" [2A I: 168] but queried its inclusion in the National Curriculum in its own right since "I know that we're doing it because we have to, but then what is it supposed to lead to?" [2A I: 204-5]. However, when asked whether it should therefore come out of the curriculum

she replied, "No, I think it helps us in other ways ... for literacy and everything, ... it's another way of getting them to listen, and a lot of things come from it" [2A I: 236-8].

For many of the other teachers the power of music as a tool was seen in their top ten choices (see Appendix F), which referred not only to links into other subject areas and allied concerns such as listening skills, but also to more general aspects such as encouraging self-confidence (chosen by five teachers for their top tens) and social skills, which was one of the main reasons for the Foundation Stage teachers getting together for a weekly joint singing session.

This use of music as a tool was also seen in several of the ways in which music was used outside the class music 'lesson', however structured. For example, both Shelia and Dave spoke of using background music in the classroom. Sheila played it during craft sessions:

> I play relaxing music as a background ... that's what you would do at home, wouldn't you? Music that I have ... a relaxation CD, called *Heavenly Realms,* and the children *love* it ... it's total background but it calms them down when they're doing fine work. [3A I: 97-100]

While Dave related how he

> used music in [school] at times other than music lessons ... so if they [were] doing a maths lesson ... [we had] music in the background because it helped to set an ambiance. That sounds a bit pretentious, but I felt that our children come into school troubled and music is therapy. [DH I: 202-5]

Laura talked of using children's enjoyment of sound to use an instrument as a "soothing cue" [RB I: 123] within the classroom, for instance as a way of signalling it was time to clear up. Music was played in Assemblies not only to extend the children's repertoire but also as a way of setting the atmosphere as children entered and left.

There was also one other very important way in which enjoyment affected the teachers. It was specifically identified by several people as being part of a complex mix of interrelated factors connected with the level of confidence felt when teaching the subject — any subject. The most common triangle involved confidence, subject knowledge and enjoyment and this was recognised by Jo, who explained,

> I think firstly and foremost ... you feel confident with a subject you *really* know well and that you can do anything with ... at *your* level ... because as a primary teacher I would happily teach that subject [art and design] to *any* age group because I know it so well ... But also I think it's *your* enjoyment. [1B III: 325]

However it is seen most clearly in Sheila's map (see Appendix E: 3A), where the core is a cluster of linked factors described thus:

I feel, all education is about is about making people feel confident. So music education is no different from any other part. You don't get
_____ confidence unless it's an activity that they can really join in with so you have people working in.
Those two, working together, joining in with things, *should* lead to enjoyment, the fun aspect. And feeling, feeling good, gets back to the _____
You can't get that confident feeling without having some   confidence
knowledge. [3A II: 15-20]   basic

Similar groupings can also be seen in the teacher section of John [4B]'s map which is formed by a square made up of teacher confidence   subject skills   teacher enjoyment

and _____ teacher singing — an area where he *did* feel confident. The maps of
_____ Patricia [5A],

> Michael [5B] and Alison [6A] also show comparable connections.

4: 2 Teachers value music for a wide range of reasons

The compilation list of thirty-seven phrases to do with the nature and value of music (Appendix F) covered a wide range of attributes. As already seen in the literature review, Bowman acknowledges the difficulty of distinguishing between the nature and

value of music (see 2: 5.2.1) and therefore the particular aspects valued by teachers are intertwined with their views regarding the nature of music and music education.

The previous section (4: 1) identified *Enjoyment* as the most frequent choice from the above-mentioned list, albeit often selected because it was a sort of blanket value, helping enhance some of the other factors. The next most popular were *Helps listening skills* (12), *A way of expressing yourself (11)* and *Creative (7);* all fairly evenly spread among teachers across the key stages. The first of these presumably draws on the aural nature of music The last two are somewhat more surprising, at least as far as the Key Stage 2 teachers are concerned, given the general lack of opportunities for musical self-expression and creativity in the curriculum as experienced by pupils in the school — at least during the year in question. They may be aspirational, but perhaps also indicate some of the problems arising when making comparisons.

For example, one should bear in mind that there was considerable overlap between several phrases/labels, so that where two people chose different labels, they may actually have intended the same meaning. Alternatively, the same label may have held different meanings for different people, as Jo recognised when she said, "because other people have written them, you automatically think, 'Have I got their meaning?'" [1B III: 237-8]. It became apparent, for instance, that *Creative* could be seen in more than one light when Michael explained he rated it because "Some person, somewhere, whether he or she be a famous musician, or lyricist, has sat down and worked things out — so there's the appreciation of the creative content that *they* put into it" although, when asked about the children, he also acknowledged 'the creative element that the *children* will put into it" [5B III: 28-31].

In a similar way, while rejecting *Non-academic — lighter than other subjects,* Rosemary recognised it could have different meanings:

> I resent that ... in the sense that the implication is that it's not as important and you don't have to think as deeply — which is rubbish: you do have to think as deeply, and it is very important to the children. If it's 'non-academic' in the sense that you don't write a lot, yes, I would agree with it. But if you take it as a wider sense of non-academic I don't like that at all. [RA III: 134-8]

So it was therefore possible that *A way of expressing yourself* could mean expressing yourself *about* music, verbally, as well as expressing yourself through a musical medium, which was the sense in which Alison intended it: 'It's *a way of expressing yourself in* a different way other than writing, reading, talking' [6A III: 26].

It also might be the case that one label could have been chosen because it led, in that teacher's mind, directly to another aspect, which therefore did not need to be picked. The already mentioned connection between *Enjoyment* and *Reinforces other subjects/areas* is only one example. Another might be that music being *To do with sounds* might automatically subsume *Helps listening skills.*

A further difficulty — for the teachers while making their choices as well as from the analysis point of view — was that the statements were different in character. For instance some were facts *(In all cultures),* some were beliefs *(Good for less able children);* some of them related to the inherent nature of music *(To do with sound(s)),* and some were more about the use to which music was put *(Reinforces other subjects/areas).* In other words what music *is,* and what music *is used for,* mediated by what music *does* and how it does it.

It is not easy to categorise the individual terms/phrases, as already discussed in the previous chapter (see 2: 5.2.5). For example, although they range across Bloom's

cognitive, affective and psychomotor domains of educational objectives (1956; Krathwohl *et al.,* 1964), these do not in themselves seem either discrete or sufficient in this context. Where, for instance, would one put *Social experience?* There is also crossover between areas when, for example, *Enjoyment* is used as an affective motivating factor for the cognitive enhancement of another subject; or when aspects of musical *creativity* could be said to belong to each of Bloom's categories.

Nevertheless it *is* possible to say the teachers, as a group, chose particular labels for cognitive, affective, social, physical, cultural, historical and utilitarian reasons. One wonders how many, if any, other subjects would be valued for such a wide range of attributes and potentials. Certainly the teachers here, as a whole staff, appear to cover most of the justifications for music in education used during the course of the last century (see, for instance, Pitts, 2000). All the aspects they valued were also covered in the statement describing the importance of music at the beginning of the programmes of study introduced in 2000 [DfEE/QCA, 1999, p. 14, quoted above, 2: 5.2.7].

Individually, the teachers each selected across a *range* of `valuings.' This was the case even for the one who might be said to have a very 'cognitive' view about music education, who, explaining why she thought music was included in the National Curriculum, had earlier declared,

> [T]here is a saying that music makes you smart. And I think it trains the brain, myself. I'm a great believer in that. I think it trains — if you're taught music or an instrument from a young age — I think it trains the brain to think in a certain way. I think it is a good discipline. I think it's an excellent discipline for training and for listening, and I do think that it does help young minds develop. I'm a great believer in that. [3B I: 155-60]

When it came to choosing her top ten, Karen firstly, characteristically, put *Encourages critical awareness and response; Helps train the brain;* and *Helps listening skills.* But

then followed them with *A way of expressing yourself; Individual response; Creative; Enjoyment;* and *Can affect one's mood,* before returning to her original focus by specifically rejecting *Non-academic — 'lighter' than core subjects.*

She also rejected *Important for future life — work* and indeed this was the only aspect not selected by anyone, not even by its originator, John, who had talked about it as a possible career route for his pupils [4B I: 157-64]. In fact it evoked a negative reaction from several teachers who were opposed to the idea of music being used as such a directly vocational tool (despite their appreciation of its use across other areas in school). Rosemary declared,

> That seems a *terrible* reason for having it within education. Somehow that's not the right kind of reason ... I would *hate* to think that we were *just* educating [for future work], especially something like music. I mean something like IT I would totally agree with the statement *Important for future life — work.* But it seems so totally *wrong* to have the word 'work' on the end with music. [RA III: 70-6]

This, of course, connects with the longstanding debates over utilitarian versus aesthetic philosophical positions adopted at different stages in the history of music education (see, for example, Rainbow, 1989; Mark, 1996; Plummeridge, 1999; and 2: 5 above). These teachers might not have been aware of the theoretical issues involved, but certainly reveal them in practice.

Another interesting individual was Michael, mentioned above as a possible exception to the general tendency of teachers to appreciate music for its extra-musical potential. He was a strong advocate of the cultural and historical place of music and several people identified him as the originator of the *Part of (cultural) heritage* label. While compiling his top ten list he explained, "immediately I went for the art, the culture, the creative side, rather than the National Curriculum, links with" [5B III: 19-20]. He was the only

person not to refer to music as a tool to promote other areas of learning and his list reflects his belief that music was worth studying for itself and for what it brought to the experience of the individual. For him music was a *Unique experience:*

> [Y]ou could say it is just another art form ... [but] I suppose it's unique in that it's using particular senses, you know, sound: either making sounds with instruments, or singing. And it's listening ... I feel it's unique because it *is* rather special — it just seems different to anything else we do in the curriculum [laugh] ... I think it's just, the *sensory* feeling that you get, it's acting on a part of your brain that other art forms *don't?* . . . It's expressing emotions, feelings, the whole range. [5B III: 64-80]

If one looks across the choices of the teachers there were some trends possibly indicating key stage differences, although the various problems with being too specific about these choices were referred to above. However, it was, for instance, only Key Stage 2 teachers, albeit just three of them, who selected *Non-academic — 'lighter' than other subjects. Part of (cultural) heritage, Part of the National Curriculum* and *To do with emotions* were also labels chosen only by Key Stage 2 teachers (4), while *To do with individual choice/taste/preference* was chosen by four Key Stage 2 teachers and only one from Key Stage 1. On the other hand, *Basic need* (4), *Cross-curricular* (3), *Everybody enjoys music of some kind* (4), *Everyone is musical* (2), *Form of communication* (4), *Music is all around us* (1) and *To do with sounds* (2) were selected only by Early Years and Key Stage 1 teachers.

4: 3 The place of instrumental teaching and learning

The place of instruments was another multi-faceted theme.

The skills associated with playing an instrument were highly rated and formed the major part of 'being musical,' as revealed in Rosemary's comment: "I would interpret

`musical' as being able to *perform* music" [RA III: 114-5]. Sheila thought likewise, and

so therefore she considered 'I don't play so I'm not a musician' [3A I: 197] and "I would say, yes, my children are musical because they can play instruments. And I would think no, I am not musical because I can't" [3A II: 82-4]. Although on the other hand, as far as the children in school were concerned, she thought everyone "if they *want* to, they can play a musical instrument. Because I honestly believe that learning to play a musical instrument; learning to — learning a foreign language, a lot of it is *attitude"* [3A II: 90-3].

Fourteen of the sixteen teachers, as well as the Head, remembered having played an instrument (other than school percussion) during their own school days, with the recorder and piano most frequently recalled (see Appendix A). Only the two Year 5 teachers had not had any such experience. Five of the seven Early Years and Key Stage 1 teachers still played to some extent (two only in school), but only Hilary and Dave in Key Stage 2.

Despite that, in response to a 'magic wand' question (see Appendix B, question 9), all but one [2A] answered that they would like to play an instrument, or to play one better. This was so even for Patricia, in whose life music did not play a big part, yet who nevertheless revealed,

> I'd love to be able to play the piano, I really would ... I've always wanted to, ever since I was small and I think it would be *so* useful as a primary school teacher to be able to play the piano and then I think you'd have a freer range of what type of songs *you* wanted to do, rather than rely on what's been chosen for you, which is what *I've* got to do ... That would be my one big regret, never to play the piano. [5A I: 120-5]

At the other end of the spectrum, two already playing instruments answered "I'd like to be able to play the piano *better"* [4A I: 289] and "Expertise on an instrument, which may or may not be the guitar" [DH I: 217].

Sometimes they wanted to play for their own sakes, at home, or, as Fiona put it, "I'd like to be able to play better *personally"* [lA I: 75]. Valerie felt the same: "I just think it must be nice to be able to just sit down and play a piece of music that you really like" [6B I: 161-2].

More usually they wanted to be able to play as a teacher, in school. This can be seen in Patricia's quote above, where she emphasised the independence this would give her, as a teacher. She considered her lack of ability to play so important that it became the centre of the teacher cluster in her map [see Appendix E: 5A]. Ruth also thought instrumental skills would be beneficial:

> I wish I could [play the guitar] now — I really regret that I can't play a musical instrument. I think it would be very beneficial as a nursery teacher to be able to play something, I really do. [N I: 57-9]

John spoke in a similar vein:

> *I wish* I could actually play an instrument ... I had a friend who would always end up the day by singing a song with the children and playing the guitar ... It would just be a wonderful tool to have at one's side. [4B III: 320-2]

Whereas Jo was more specific when she replied, "I'd like to be able to just sit down and play a piece of music for Assembly. I'd like to have the skills" [1B I: 252-3].

Various people spoke of the (im)possibility of acquiring such skills. As Ruth said, "I keep thinking I'm not 30 yet, I could easily do something about it, but — [laugh]" [N II: 122-3]. However Valerie considered the dream "unobtainable" [6B II: 80] unless "somebody could wave a magic wand" [6B II: 199] and Karen reckoned it was hard to learn when one was older:

> I would like to be able to ... I've got a piano at home but it's hard, it's difficult to learn when you're older. I do tinkle on it and things, but to have *lessons, I*

keep saying when my second daughter's at university I might learn, but I think your brain — you've got to do it when you're younger. [3B I: 226-9]

Instrumental skill, which included the allied ability to read staff notation, was seen as necessary for the confident teaching of music. Karen was particularly explicit about the link: "Teachers are not confident teaching music because ... it's a very specialist thing, to read music, to play an instrument" [3B I: 243-4]. In a later session she continued this thread:

> [M]usic is a specialist thing, and to expect teachers to teach it who are not trained I think is not good practice. But that's the way it works. It's a technical subject ... because unless you can play the piano, which some people can, then it's not easy. [3B II: 8-12]

John several times referred to ensuring music lessons involved *music,* for which he thought the teacher's practical instrumental skills were necessary as facilitator and model:

> I think, [with] the music: you've got the practical side; you've got the theoretical side. And as long as I was read up on it I could deliver the theoretical side quite easily, but I would feel inadequate because I think music's all about, if you can incorporate the use of an instrument into a lesson — guitar, whatever — I would like to do that but I'm not able to do that. So, in the end, the music lesson becomes a bit like an English lesson — you deliver facts about composers etc. ... There are things, as I say there are the resources: there are videos, music videos, there are audio, there are broadcasts, there are song books, song sheets; you can learn rhythm patterns; you can learn the words; you can write songs out — but, personally, I seem to lack the fact that I can't inject any actual music into it. [4B III: 214-23]

Michael talked about being able to enhance the children's performance when he said,

> I look at the staff in school: two or three of the infant teachers, they can play instruments, and whenever we do something for Harvest Festival or Christmas, their children stand up, perform, and you can *tell* — it just zings along, because there they are with their guitars or whatever. I do think a music knowledge helps. [5B 172-6]

He also thought it improved one's credibility with the children because "The kids will focus on it and you have an extra aura [laugh]" [5B II: 179].

Those who were able to play mostly appreciated the usefulness of their skills. Fiona, while talking about playing the guitar, agreed

> I find that useful, and useful that I can play the piano. And I find that that's helped the children with a lot of their rhythm — you'll see them clapping or clicking in time to that. It's developed *their* awareness of musical instruments, I think, if I can sit and play a penny whistle, or a guitar, or the piano it's "What is this instrument?" [1A I: 265-8]

However, Rosemary was initially of the opinion that her piano skills were not important to her when teaching music:

> Other people see playing the piano as very, very useful and I've known other staff here try to learn to play the piano and say, "Oh well, you can do that *because* you can play the piano" but it *isn't* because I can play the piano. When I'm teaching the kids songs, I usually leave the piano behind and actually sing it to them or say it to them. [RA I: 86-90]

However it appeared she may have been taking some of the implications of being able to play for granted because she then immediately agreed those same piano skills were "definitely" useful when accessing new songs, so that she could play them through, "Yes that's always the first thing you do" [RA I: 91 and 93].

For the pupils in the school there were three main ways whereby they might experience direct contact with instruments. There was the classroom curriculum, usually involving school percussion instruments; there was the more formal tuition on orchestral instruments (in this case, violin, guitar and percussion) provided by Local Authority peripatetic teachers; and there was also some provision of extra-curricular (usually lunchtime) sessions with recorders (taken by Hilary, 4A) and penny whistles (Fiona, 1A).

As far as the classroom curriculum was concerned, instruments seemed more likely to be incorporated in activities in the Early Years and Key Stage 1 than in Key Stage 2. Michael acknowledging that

> in this school, when we talk about music, basically it has been *singing*. That's it. I have never seen any instruments being taught although I know they do the percussion in [the] Infants. [5B I: 59-61]

Several of the 'downstairs' teachers (the Foundation Stage and Key Stage 1 area) spoke of using them in the context of class activities, small groups and on a music table for individual exploration. Ruth gave numerous accounts of the ways in which instruments were used within the High Scope structure and routine, saying, "I love musical instruments; I love the children having a go" [N I: 279]. Jo also enjoyed the children's reaction:

> I love doing music with the class. I think because you enjoy it, they respond to what you do much more. They can't wait to get their hands on the instruments ... as soon as you wheel the instruments in it's just like YEEEAAH! ... and we do have — I'd like to have it in the classroom but there isn't room — just outside mine and [Fiona's] classroom ... two little music tables which we change the instruments on and [the children] get choosing time one afternoon a week so they get [the] opportunity to use that then ... and it's very popular, it's one of the areas that there's a massive scrap to get to! They do love it ... there's a little keyboard that we have out all the time but then we rotate the percussion. [1B I: 130-8]

Emma appreciated the potential for practical activity, creativity and group work:

> To get their hands on instruments, they listen and they see them but it's when they actually get their hands on, they love it. Even in their small groups, if they go away and they've all got an instrument, it's not just this one, shining there, and one person gets to use it today, "Will it be my turn next week?" If you can send them off and they all get a chance, they enjoy it. And you don't have to get something out of it; you don't have to have the finished product that's got to go on the wall or got to go in a file. It can all just be [an] ongoing ... process. [2A I: 289-95]

The importance of including instruments in the curriculum as far as Fiona was concerned was seen in her descriptions of what a newly qualified teacher (NQT) needed to know, which she detailed as

> Names of the different percussion instruments? A lot of people don't actually know the names of them. How to sort and group them: shake, bang, rattle, pluck ... I think they need to name them; how to perhaps group them with children, in different ways. How to make simple compositions with them — children doing it in groups. How to do little graphic scores: how to put their little compositions onto scores so that they can read them and another group could read them as well — it might just be pictorial ... Knowledge of ... ostinatos; [pause] accompanying a simple song with just a chime bar; perhaps knowing a little bit about the pentatonic scale; ...knowledge of how sounds are made from the instruments. [lA III: 160-72]

She also included several references to instruments when detailing what she thought about when looking for progression, saying,

> The progression I would like to see, that from perhaps children just using percussion instruments they could add simple ostinatos I think with percussion instruments as well, if [the children] come into school and they know maybe just a triangle or the bells, and if you build up their knowledge with more, sort of, cabasas and guiros and do on; build up all of that knowledge; at the same time building up their knowledge of other instruments like guitar, piano, viola, double bass — so that they can sort instruments out into sections, so that when ... they hear more complex musical compositions, they can say, "That's the string section and these are the instruments that would belong to that." And they could recognise it like in *Penguin Café* instead of just — I suppose that is a bit classical, I don't know, but in something like that or in jazz or so on. [1A III: 195-220]

There was some confusion over the exact statutory position concerning instruments at that time. The coordinator expressed the uncertainty thus,

> [E]very child's supposed to learn a musical instrument, which I don't really think happens. It depends which instrument you're talking about, doesn't it? I mean, they all experience instruments in the school. I've been in one school, years ago, where they all learned recorder — we don't do anything like that. We give them opportunities to learn, and they *all* have the opportunity to do percussion instruments. [4A I: 234-9]

Although Karen was, perhaps surprisingly, clearer about the requirements of the National Curriculum: "you've got to get the instruments out, you've got to do some percussion with the children" [3B I: 259-60]; as was Alison: "they have to use instruments, play them, compose with them, and notate the pieces" [6A II: 74-5].

In fact Alison, together with Sheila, appeared to be the two using most percussion in Key Stage 2. However, it was not easy for Sheila as she taught the whole year group as one unit:

> I do both classes together, yes. So I do it within [the broadcast], with the broadcast I do that. I find it difficult with sixty children, I do, I've *said* that. I don't mind doing it next year, but I would rather do it with thirty. [3A III: 175-8]

Alison tried to keep a "balance of things, so some singing, some instrument work" [6A I: 155-6], but described later on in the year how she was having to defer a composing project she had planned during the Christmas holiday until after SATs in the summer term:

> I've prepared, I've planned, and bought my own music resources ... I bought some good resources over the Christmas holiday to use for my music and a tape to develop the notation and playing side. And it's *planned,* but I haven't yet had time to do it. [6A II: 110-4]

On the other hand, her year colleague admitted she omitted the instruments intentionally because "I don't have the *confidence"* [6B II: 77]. During the summer term Valerie confessed,

> Instruments — I've got a box full of musical instruments [in the classroom] ... never been out of the box. Probably never *will* come out of the box. The only time I used them in Year 3 was ... when we did sound and music in Year 3 — we used them then [as part of science]. But no, it doesn't come into science in Year 6. [6B III: 170-4]

Hilary also mentioned that lack of confidence was a factor in the use, or otherwise, of instruments: "I know that some people worry about getting the instruments out, but, in fact, the children are often so good you don't need to worry because they just show the way forward" [4A II: 217-9]. She also explained how she thought time factors played a part:

> [I]t's Key Stage 1, I think, who tend to use them more often ... But there's so much to do at Key Stage 2. I'm not meaning to criticise the teachers at all, if

it's something they're not as confident with *anyway,* and if the children have got more literacy to do, they've not finished, you want to —. [4A II: 97-100]

John also cited lack of confidence and time as factors behind the lack of instrumental activities when he said,

... music to me is singing and use of instruments. We don't get much opportunity for children to be introduced to instruments, mainly you've got large classes, mainly again it's preparation ... lacking in confidence from the actual teacher ... to take on these things. [4B I: 52-5]

Although, while later describing a specific broadcast, he identified time rather than ideas or confidence as the limiting factor:

So the ideas are there — it's like a lot of things — the ideas are there. And you can see the kids enjoy it: making their noises, the jungle noises ... but in the end you think I just haven't got time. Sort of "good idea, noted it, right." [4B I: 223-5]

For Karen the issue of instrumental skills for both teacher and pupil was even more fundamental as she considered the teaching and learning of such skills to be the most valuable form of music education because of its role in training the brain (see above). It was the discipline of learning an instrument that did this and therefore she did not rate highly most of the curriculum music, saying, while constructing her map, "I'm discounting all this singing and broadcasts and things because that's not really developing their musical interest. That's why it's not good" [3B II: 216-8]. This distinction between classroom and instrumental tuition can be seen clearly in the bifurcated map she constructed (see Appendix E: 3B). During the first interview she developed an argument against generalist teachers teaching music, commencing by declaring that if one hadn't learnt the necessary skills oneself, one could not teach music: "I think one of the things about music is that it is a specialism, and if you haven't been taught it, or trained as a musician, it is very *difficult* to teach it" [3B I: 80-1]. In order to develop these skills you needed to "start when you're young" [3B I: 244]. The

peripatetic teachers were specialists and so "'That's why we've got the peripatetic music teachers coming in, because *they* are the specialists" [3B I: 264-5]. She declared that "Teachers shouldn't be expected to teach things that they're not competent at" [3B I: 290-1]. However, if you had not been given appropriate opportunities when you were young then it was not your fault if you could not do it now, so there was no point in worrying about it: "there's nothing you can do if you don't play an instrument, if you're not a music specialist, then it's no big deal" [3B I: 319-20]. Despite this, she had earlier conceded that "basic music is common sense, isn't it?" [3B I: 47-8] She spoke at length of her own daughters' instrumental learning and stressed the role of the home background in terms of general encouragement, commitment and financial support because "you need the encouragement from home, you need the commitment ... [and] unless you can afford it, I think it excludes a lot of children" [3B I: 64-6].

In this school, peripatetic tuition was only available to a few children in Years 5 and 6, and perhaps for that reason was not mentioned much by teachers in Key Stage 1 except in the context of their own children. One who *did* mention it was Caroline, who thought it was "very important but it doesn't seem to be very important in terms of educational spending. They don't seem to put a great priority on it." She gave an example of another school where a request for more instrumental tuition was turned down with "'We've met our targets. We've got enough pupils.' So there is that side to it, the financing of it, which is a bit sad I think" [2B I: 299-303]. Michael pointed out what he considered the unfairness of the selection process when he said,

> I don't find that very fair, that you hit a couple of targets I suppose, but, there are a lot of children who would *like* to do it, like to learn an instrument, but don't get the chance. [They are chosen] usually out of a hat. The drummer gives them a little test. But it ends up with just maybe two, three, four out of the class and they're pulled out of class and they miss a lesson. [5B I: 301-5]

On the other hand, Karen's stance meant she thought a test was a legitimate way of assessing who had the necessary aptitude:

> You need an aptitude, don't you, to play. [Learning an instrument — you can't learn an instrument unless you have an aptitude for it. That's why, I suppose, they do musical tests. Not everybody can be musical. I mean there are some children who are just not musical ... [3B II: 135-8]

There did not appear to be any opportunities for incorporating children's instrumental learning into classroom music, although Assembly was a time when they could "show off their talents", as Valerie put it [6B II: 136], particularly admiring the violinists: "I think they're brilliant" [6B III: 230].

4: 4 The use of schools' broadcasts

There was widespread use of recorded schools' broadcasts — usually radio — and the only teachers who did not mention using one were Ruth [N] — although she *had* used one when teaching Year 1 in her previous job — and the two Year 1 teachers, Fiona and Jo. Broadcasts were more commonly referred to as a resource than either the school policy or the National Curriculum Music Order, and had, therefore, almost become the school's scheme, as indicated by Emma: "we've got a scheme, we've got *Time and Tune"* [2A II: 113]. Key Stage 2 teachers relied more completely on broadcasts than did those in Key Stage 1, a tendency recognised by Ofsted inspectors during the previous year when they reported of music in Key Stage 2 that 'considerable use is made at this key stage of recorded radio music programmes and pupils gain great benefit from what they hear' (para. 161).

Most of the Key Stage 2 teachers seemed to consider the time available for music should be divided into two sessions: one for the broadcast and the other for

`appreciation.' A possible explanation for this is seen in the school policy where a section on available broadcasts in included under the *Performing and Composing* heading, so therefore the two sessions would then relate directly to the two main divisions in the National Curriculum (DFE, 1995), *Performing and Composing* and *Listening and Appraising.*

The broadcasts were considered by those teachers using them to be "absolutely excellent" [RA II: 127], and "amazing", "wonderful" [3A I: 296]. For Valerie they were essential, "a godsend" [6B I: 158] and her "lifeline" [6B III: 239]. The recently instituted Hymn Practice sessions on Friday afternoons were now filling the other part of the time allocated to music, thus causing some people to comment on the lack of time available to include appreciation in the music curriculum: "we're not doing that *this* ... term, because the other music [session] is taken up with singing" [4B I: 116-7]. Teachers valued the range of activities included in the broadcasts, since, as 6B said, while constructing her map,

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> They are very good because ... they give you <u>notation and as</u> they go through the school they get different things. And there is a <u>Ilistening</u> time, which you can follow up on if you want, and of course there's the <u>singing</u>. [6B II: 154-6]

However, the fact that appraisal — or, as it was more   commonly termed by most teachers, 'appreciation' — was thought to need a separate session might indicate either that they did not realise appraisal was included within most of the broadcasts — perhaps because of the broadcasts' alignment with *Performing and Composing* in the school policy — or possibly because they did not really understand the nature of appraisal itself, an issue returned to in the next chapter.

The teachers also valued the broadcasts' built-in progression. This occurred between the different programmes as children progressed through the school:

> [T]he broadcasts that we do are graded. They start off with the *Song Tree,* which is ... written specially for younger children up to about 7, and they *are* quite *good,* ... especially written for the National Curriculum, ... And then it goes on to Time and Tune. [3B III: 183-7]

There was also recognition of progression within each series, as Laura, looking back over the school year, noted:

> [I]t's developmental, each week, it's progressive in terms of skills that they're working on. We started in September [and] it's very different this week than it would have been last September. So that's been useful. It's been useful for me, as well, to listen in on the skills involved in progression. [RB III: 194-7]

For those teachers lacking in confidence or knowledge the broadcasts were seen as a support at all stages of the planning, preparation and delivery cycle. So that "if teachers haven't got a wide, a reasonably good knowledge of music, then they rely on broadcasts" [3B II: 295-6]. Hilary acknowledged, however, there might be an alternative view when

> [S]ome people say if you put a broadcast on that is not [music], but why *not?* Because some of the broadcasts are very good [and] they can teach [the children] more than the teachers can teach them. [4A III: 276-8]

Ruth thought people could "rely too much on [them]" [N II: 245] and the school's Ofsted inspectors managed to include almost contradictory views in near adjacent paragraphs when they followed up the positive remark quoted above by complaining that 'too many teachers feel unsure about the subject and rely heavily on recorded radio programmes as a basis for their work. These lessons tend to lack energy and the pupils become disinterested *[sic]'* (Ofsted, 1999, para. 163).

Certainly the two Year 1 teachers who did not (apparently) use broadcasts both felt fairly confident about teaching music. One might then ask why Hilary, the coordinator, *did* use a broadcast. However, as she explained, she had just changed year group and "I'm only one step ahead of the children this term, you know, when you move year

groups — which most people here have done — it's, it isn't easy" [4A I: 213-5] and so therefore she was feeling less confident than previously with Year 6. There was also a degree of fitting in with existing practice when she said, "I didn't [use a broadcast] in Year 6 — but I have been this time ... *Time and Tune.* Mainly I think because my ... colleague had always done one and I just fitted in — and the children enjoy it" [4A I: 133-4].

The broadcasts seemed to act as surrogate teachers, as mentioned by Karen who explained, "you've got someone *on* the programme who's the expert teaching it, you see ... you're not teaching it — you've got somebody else doing it for you, haven't you?" [3B III: 152-5]. Which was partly why Valerie could admit, "To be perfectly honest I don't actually think I *teach* music. I don't really teach it as such" [6B I: 150-1]. This surrogacy was probably further enhanced by the tendency of many teachers to run the programme without stopping, rewinding, or following up. However, Michael recognised that he learnt "little bits" from the broadcasts [5B I: 179], so they could be said to have an INSET function for the staff as well as teaching the pupils.

Relating to the already-mentioned emphasis teachers placed on having instrumental skills, Karen considered "teachers rely on *Time and Tune* and the *Song Tree,* because unless you can play the piano, which some people can, then it's not easy" [3B II: 10-2]. Although, for her, that was always second-best because "That's what you're doing if you can't—, if you're not musical. If you can't play piano or guitar or whatever, you put the tape on" [3B II: 142-3]. In other words broadcasts could help compensate for a teacher's lack of instrumental skills by including musical input because "you've got to have something like *Time and Tune* in there ... at this level if it's not that, then the children just regard it as another English lesson ..." [4B I: 207-9]. It was because of her

lack of instrumental skills that Patricia, when planning for music, "would have to look to see if there were any taped musical programmes. I can't play an instrument and I would have to have something to go from, otherwise I would be stranded" [5A I: 103-5].

Broadcasts were appreciated by Caroline for the way they helped with planning difficulties:

> You used to plan music as part of your topic and it would just be a little offshoot [of] things and songs that related to what you were doing. But now it's just another thing, and you think, "Oh I've got to do something about that." It doesn't flow naturally on, sometimes, from what you're doing, even if you try really hard. So I think going to a tape is what a lot of people do — a taped broadcast. [2B II: 121-5]

While constructing his map, Michael acknowledged the time saved when planning·
"the [school] work load affects time spent on planning and the time [allocated to !music] . And, because we don't have a lot of time, yes, we choose to [use a broadcast]" [5B II: 224-6]. Yet a few teachers did exercise some choice over *which* programme they chose, as Valerie described: "I saw it in the catalogue, so I knew it would [fit with our history topic]" [6B I: 146-7].

Hilary implied broadcasts also helped use the limited time available for music during the school day most efficiently because "what you can achieve in thirty minutes, it's quite limited" [4A II: 80-1]. That same time limitation was then used by John to explain the lack of follow up:

> [Y]ou're sort of limited, doing just over the hour a week or something. And I know that one half hour now is singing with [the Head] ...The other one we base it on the BBC *Time and Tune* ... No [follow up. Because] you've got the tape, which, basically, by the time you start and stop it, can go for 25 minutes ... In the oldens, dare I say it, you could follow up. But now you've got such a tight [time table] it just doesn't happen with music. [4B I: 100-6]

Dave was sceptical about whether programmes were used properly: "radio broadcasts sometimes go forward as a tape and people just carry on, and do they press the stop button and go back and look at qualities of things that are being developed?" [DH II: 182-4]. He also questioned whether a diet solely of the broadcast was sufficient:

> We used *Singing Together* in Year 5. But I also did more then that. I mean obviously to cover the curriculum we knew that that was[n't enough], and we were even then wondering whether we were over-using it, because we had three terms of *Singing Together:* could that be afforded within the time limitations? And were we getting the balance right? And how did we cover those classes? Because it was very complex — it was a balance — not just a matter of delivering the music curriculum, which I presume lots of people do not fully deliver, I would suspect. [DH III: 142-9]

One advantage referred to by several people was that the broadcasts could provide a range of otherwise unavailable resources. For example, Emma spoke approvingly of their then current broadcast thus:

> [I]t had *music* from all of these different countries, whereas I wouldn't, in ten weeks, I wouldn't have had ten different countries' worth of music over the last ten weeks. *That's* been good ...I might have done a *few,* but I wouldn't have done ten. And they were all very nice and they were different, and you could actually hear [the different characteristics]. That was *great* because [the children] really picked up on that. [2A III: 222-9]

On the other hand both Valerie and Michael acknowledged their repertoire was therefore *determined* by the BBC, although Michael sometimes rerecorded the tapes, cutting out songs the children did not like:

> [T]he BBC broadcast does affect the range of songs because we use their songs, we don't choose them ourselves. Although, ... again, I choose, although the range of songs is determined by the 1BBC [broadcast], I can edit it, *hopefully,* for the enjoyment of the children [5B II: 67-73]

4: 5 Summary

This chapter has been based on the interviews that were the culmination of the first

stage of this study. The material in those interviews, pulled together in the particular

ways described in the previous and this chapter, provided the basis for the succeeding stages.

Copious examples from the teachers concerned have been used in order to extract and illustrate the main findings and I have intentionally used more than one quote, if possible, to make any particular point. This is not only to show the spread of thinking across different teachers and key stages but also to give the teachers a voice — in general and as individuals. There is not space to provide a description of each teacher apart from the table in Appendix A, and so in this chapter I have tried to give a picture of each individual teacher and his or her thinking and sense of self. These, after all, are at the hub of the study.

The four main areas relating to the important and varied place of enjoyment, the diverse beliefs relating to the nature and value of music, the emphasis on instrumental skills, and the reliance on broadcasts to deliver the curriculum will not surprise anyone who has experience of primary school teachers delivering a music curriculum. However, their identification within this study means they can be examined more closely than is usually the case.

Enjoyment was mentioned by the teachers in a broad range of contexts. As far as music in general was concerned, the term was frequently embedded in their definitions, where it was considered inherent in music. Enjoyment in music was thought to be universal, even though individual preferences led to different choices — of listening and forms of participation — and engagement in music was seen as involving giving as well as receiving enjoyment.

All the teachers could talk about the enjoyment they received from music. All of them listened to music outside school as well as being involved in delivering a music curriculum to their classes in school. Several described extensive recorded music collections and most mentioned favourite kinds and specific performers or pieces across a range of genres. Other ways of experiencing music included concerts and various forms of live music, singing, dancing and church going, while a few played instruments at home or with friends. These activities were chosen by the teachers because of the enjoyment they received from them.

When it came to their professional lives, music was greatly valued in the school setting. Everyone either selected it as one of their top ten reasons for including music in the curriculum or included it in their maps. Most did both. Enjoyment was thought to be a fundamental reason for music's inclusion in the curriculum, both from their point of view and, many considered, from the 'official' standpoint.

When thinking about their pupils, the enjoyment inherent in music was important for several reasons. To begin with, it was obviously more desirable that children should enjoy school than not, and music was a way of doing this. Next, its inclusion — as music education and as music within education — was a pleasurable experience that meant enjoyment in music could extend beyond school in the present and the future. Finally, it was enjoyment in music that gave the subject its power as a learning tool for other subjects and for the wider curriculum. For these reasons music was often used beyond the classroom music sessions in order to enhance other areas as education through music (music within education).

When thinking about their role as teachers of music, enjoyment was important as an integral component in a triangular relationship with confidence and subject knowledge, where each factor was interdependent with the others. This aspect will be discussed further in the following chapter.

When considering **the teachers' views about the value of music** (Appendix F), a wide range of attributes was found, covering cognitive, affective, social, physical, cultural, historical and utilitarian aspects. The most frequently chosen, when selecting their 'top ten' reasons for including music in the curriculum were *Enjoyment,* as already mentioned, *Helps listening skills, A way of expressing yourself* and *Creative.* However, from a research perspective, one needs to be aware that it is possible for individuals to have different understandings about similar terms (see the section about constructivism, 2: 3.1); to use different terms intending similar meanings; or to use a term, for example *Enjoyment,* to subsume another items, such as *Reinforces other subjects/ areas,* a link described above.

Individual teachers all chose across a variety of reasons for valuing music, even though some showed characteristic emphasis, for example Karen's view of music as a discipline, training the brain, and Michael's view of music as conveyor of historical and cultural heritage.

The place of instrumental teaching and learning was another area that stretched across home and school contexts. When considering engagement in music, the teachers frequently distinguished between the taking of music (listening in some form) and making music — usually in the sense of playing instruments, although sometimes including singing. Being musical was commonly perceived as having instrumental

performance skills, which included allied notation skills. Sheila thought all had the potential to learn an instrument — as a child — but one needed the right attitude. Whereas Karen also emphasised the need to learn when young, but believed one had to have aptitude — which not everyone did have — and parental support.

All but two of the teachers remembered instrumental tuition of some kind as a child, and seven still played various instruments, although two of them only played within school. However, the magic wand question (see Appendix B) elicited a wish to play an instrument, or play one better, from all but one teacher. This was for personal enjoyment at home as well as for professional support in school, where teachers saw the ability to play an instrument as giving them independence in choosing songs and other curricular material; enabling them to act as model for the children; and allowing enhancement of the curriculum in general. Lack of such skills affected the balance of the relationship with confidence and enjoyment described above, being considered a major part of subject knowledge.

As far as the pupils were concerned, there were three ways of experiencing instruments in this school: during their class music lessons, with peripatetic instrumental teachers, or in extra-curricular recorder and penny whistle sessions. However, in Key Stage 2, it appeared only Sheila [3A] and Alison [6A] used instruments in class music; only some children had the opportunity to learn with the peripatetic teachers — a source of disappointment to several teachers; and limited numbers were involved in the extra-curricular sessions. In other words, many children would experience little instrumental involvement once past Key Stage 1.

Recorded **schools' broadcasts** were the main form of music curriculum delivery for all except Ruth [N], Fiona [1A] and Jo [1B], and this reliance links with aspects already described. In particular, they were used as surrogate teachers by those who felt lacking in confidence, maybe because they did not have instrumental skills. It was no coincidence that both the two Year 1 teachers who did not use broadcasts were enthusiastic musicians involved in a variety of musical activities, including playing instruments, in and out of school. However, given that the broadcasts were also used by those who did possess instrumental skills, including the music coordinator, there are obviously other reasons for their use. For example, they were valued for saving time at both planning and preparation stages of the teaching cycle. The range of musical material provided was mentioned as a particular advantage, even though a couple of teachers realised that curriculum content was thus determined by the BBC. The built-in progression within and between the different series was also praised, although no one made mention of any linked assessment.

Looking across these four areas it is possible to see that although there was a certain **commonality in the curriculum,** provided by the **broadcasts,** there were **differences between the teachers' various beliefs** about music and music education. There were also **differences in how they felt** about different aspects. These differences will be explored further in the following chapters.

These four areas will be recognisable to many who have experience of primary schools. However, this chapter has attempted to go beyond the familiar to unpick some of the underlying aspects. The implications and links between these findings will now feed into the next chapter's discussion.

5

Discussion

5: 1 Introduction

This study is essentially epistemological, being concerned with the nature of the knowledge of one group of primary school teachers — in particular their knowledge relating to music in education. This chapter discusses some of the implications arising from various stages of the study, including the main findings (described in the previous chapter) relating to the important and varied place of enjoyment; the diverse beliefs relating to the nature and value of music; the emphasis on instrumental skills; and the reliance on broadcasts to deliver the curriculum. There is a further fourfold angle here, in that the main areas are explored in the light of the original research questions, in relation to relevant literature, in connection with other features within the study, and as part of my reflection on the research process. Existing literature not only supports relevant conceptual development, but also provides a backdrop against which the findings can be viewed, showing how these teachers exemplify, confound or extend past findings.

Three hour-long sessions with each of the sixteen teachers involved produced a large volume of data. At several points during the analysis this study could have proceeded down various alternative routes of inquiry. Although some of these possibilities will be touched on in this chapter, the selected main journey supports one particular line of reasoning, leading, in the following chapter, to a specific conceptual model that is intended to help illuminate the nature of teachers' subject knowledge.

Following this introduction, the chapter comprises two main sections. The first responds to the original research questions underlying this study and the second section builds on those answers to move towards the suggested conceptual model contextualising the nature of teachers' knowledge relating to music. The chapter concludes with a short summary of the relevant points.

5: 2 Answering the original research questions

5: 2.1 Restatement of questions

The original research questions on which this study was based concerned the knowledge of primary school teachers relating to music in education (see 3: 2). The main question:

- *To what extent do teachers in one primary school reveal common views of music education?*

was linked in various ways to the related questions:

- *What are the beliefs of individual teachers?*
- *To what extent are their beliefs and understandings shared or different?*
- *Within these shared beliefs and understandings, is it possible to identify the effect of any particular influences?*

The implications within those questions (see 3: 2) means this study investigated the extent to which the teachers were able to articulate their thinking regarding music in education; the nature of their knowledge; the similarities and differences within that knowledge; and the apparent influences on that knowledge. The following section addresses each of these questions with a certain amount of overlap. For example,

illustrations of the teachers' knowledge inevitably demonstrate similarities and differences between the individuals concerned.

5: 2.2 The teachers' response

5: 2.2.1 The interviews

All the teachers responded to each question and task asked of them. Therefore, in that sense, they were indeed able to articulate their underlying 'personally held system of beliefs, values and principles' (Clark & Peterson, 1986, p. 287, as quoted in the research questions, 3: 2) to the extent that my interview schedule allowed and they were able to articulate at the time. I was impressed and humbled by their responses, which were thoughtful and often extensive. Sometimes teachers recounted what must have been unpleasant memories. For instance, Valerie told of her "failed" music lesson during the previous term's Ofsted inspection. She also described a "traumatic" occasion from her own primary school days when she was "chucked out of the choir of angels [in the nativity play] because **I** couldn't sing ... I wasn't the only one who was thrown out but it was still awful" [6B I: 10-14]. Dave spoke of being discouraged from joining his secondary school choir [DH I: 27-34]. Mills has written that, from student teachers' tales of being criticised at primary level music, 'The story most frequently told is one of rejection from a junior school choir' (1989, p. 4). Welch, too, talks of 'negative comments from teachers, public humiliations in front of friends and peers and lifelong perception of musical disability', which may lead to musical potential not being realised (2001b, p. 15). However, in this case, Dave is atypical as he appears to have risen beyond that early negative experience, taking steps to increase his own guitar playing skills while, more recently, using the National Curriculum to further his experience and knowledge of musical works [DH II: 52 *et seq.*].

In general the teachers appeared to talk freely both about themselves and others, so that I could write, even after the first block of sessions, 'Various veiled and not so veiled comments about other staff and [the Head]' [Research diary, 12.11.99]. There was consistency throughout individual teachers' different interviews in that they repeated similar statements at different times and in various ways during the year and their maps were described in ways that fitted with previous and later remarks. For instance, as demonstrated in the previous chapter, Karen's frequently reiterated statements about `proper' music involving playing an instrument, and how one needed to possess instrumental skills in order to teach music effectively were reflected in the bifurcated nature of her map. However, it should be remembered that such recurrence was made more likely by each session building on the previous one.

The teachers were able to talk of what they did in the classroom relating to music, although for all but three of the class teachers [N, 1A, 1B] the broadcasts provided most of the classroom curriculum content, particularly in Key Stage 2. However, it is hard to talk about music and one's response to music in words (indeed, at one level it is impossible, given the essentially non-verbal nature of music) and, even though talking about what they did was sometimes in response to a particular question, it was also used as a means of explaining something that was otherwise hard to articulate. For instance, Sheila began her definition of music with "Sounds that are put together to make people feel, to enhance people's feelings." However, she then immediately continued,

> And you don't always have to hear them through your ears, sometimes you hear it there [taps chest to indicate heart] and sometimes you can feel it, which is what I would do with some children who are not quite understanding rhythm· "Put your finger on the drum, and feel it that way." Or, if there's a loud drum beat you don't always hear it but you feel it in the pit of your stomach. [3A I: 241-246]

Although this might resonate with Small's conviction that 'music is not a thing at all but an activity, something that people do' (1998, p. 2), it also supports Twiselton (2000) who, while investigating the National Literacy Strategy, found that although student teachers could talk of activities and the related learning objectives, they very rarely went beyond that to the underlying 'philosophy'. As far as the current study is concerned, it may have been because such reflection was an unusual occurrence that some aspects were found to be hard. For example, following the third session's rating activities, another teacher reported to Fiona "You have to think" [Research diary, 13.06.00]. On the other hand, some questions were inherently difficult. For instance, when teachers were asked how they would define music, several made comments such as "[This is] really hard ... It's just something you never think about" [RA I: 152]; and "That's quite a difficult question, isn't it? I think they asked my daughter that when she went to Cambridge for her interview" [3B I: 149-150].

A similar lack of conscious awareness of underlying principles had also been demonstrated during the pilot study, when one of the experienced music specialists, used to working with other teachers, commented that the questions relating to the nature and value of music in the curriculum had made her think about aspects she had not considered before. She explained this was because she was a "practitioner" rather than a "thinker". Although one could argue that the two are not dichotomous, this reflects Hennessy's statement that 'Music teachers have traditionally not been used to articulating the theory that forms the basis of their practice' (1998, p. 18). However, this is not, of course, the same as saying there is *no* underpinning theory. In this study, several teachers revealed strong convictions about the nature of music and music education that appeared to influence much of what they said and did [especially 1A, 1B, 3B] .

Despite the challenging nature of some aspects, several teachers appreciated the opportunity to reflect on a subject and "to remember what you *do* do" [1B 1: 219]. Even Patricia, who quickly admitted that music did not play a large part in her life and then joked at the end of that first interview that "You could have brought a postage stamp and written it on the back of there!" [5A I: 127-128], considered:

> It's just nice to sit and talk to somebody about a subject, really it is. We never have time to sit back, away from the subject, and really think about it, because you're just, like, dashing around the whole time... [5A I: 130-132]

Even though several teachers expressed some nervousness at various stages, no one dropped out during the course of the year. In other words, no one found the situation too unpleasant. Although it is possible to argue that there may have been various pressures from the Head or colleagues to continue, such influence was not apparent, and, at one point, the Head spontaneously remarked that no one had expressed any unwillingness to continue. Although some teachers spoke more than others, as one would expect, everyone offered more than a bare minimum of response.

5: 2.2.2 The maps

The mapping task fulfilled the functions listed in the methodology chapter (3: 4.2.3). Most teachers found this activity enjoyable — eventually — and were pleasantly surprised at the finished article, which gave rise to remarks such as the following: "I didn't know I could do that!" [RA II: 249]; "It's lovely, isn't it? It's nice ... I've enjoyed doing that" [1A II: 240-1]; "That was all right!" [4A II: 297]; "Isn't this *amazing?* Like a little *jigsaw!"* [5A II: 73-74]; and later, "I've enjoyed doing this. You never think — when you handed me those cards at the beginning — "Where will I start?" But once you get a start to it, it *does* link in, it *does* come" [5A II: 97-99]. The Deputy Head admitted similar initial uncertainty followed by ultimate satisfaction: "Funnily enough, I wasn't

sure how I'd manage on this, but ... as you pulled the words out I knew exactly where they came from ..." concluding, "It was good fun. I enjoyed that" [DH II: 201-203 and 220].

The exception was Michael who admitted, early on, "I'm completely stuck here, where to start and where to [go]" [5B II: 49]. Although he did persevere, he was not at ease and later complained, "No, this is a complete maze to me — it's called a mind maze, or whatever." I answered that it was supposed to be a map, showing the way *through* the maze, but he was not cheered, retorting, "No, it's not showing me. What is it: 'The more you know, the less there is to—'? 'The more we learn, the less there is—'?" [5B II: 186-189]. Similarly, although Fiona eventually enjoyed the task, she too was initially unsure, explaining, "I'm not very good at this sort of thing anyway, the mapping ... I think it's a spatial thing" [lA II: 158], indicating that not everybody finds it easy to express their thoughts in this visual way.

Nevertheless, it was an achievable task. All the teachers finished something with which they said they felt satisfied, even though, as Rosemary was aware, the product was of that moment, and liable to development and alteration: "I'm happy with what's there, for now, but I somehow feel that if I went away—" [RA II: 250-251].

The maps were considered accurate reflections of what they were thinking at that time. Some teachers expressed surprise at the 'truths' revealed. For instance, John, whose map centred round the teacher/child relationship, with the subject (divided into nature/value and means of delivery) at the edges (see Appendix E: 4B), considered this structure could be adopted for any curriculum subject, and said, "It's strange — you don't intend to do it like that, but it just [happens] ... — it wasn't the intention to bring it

out like that" [4B II: 224-225]. While constructing *her* map (see Appendix E: 6B), Valerie realised that although she valued the potential for personal choice in music, she was not allowing for her pupils' choice:

> [I]t's my choice ... that they've got to listen to because there's no specifics given in the National Curriculum about exactly what music they should have to listen to — so it's going to be my personal choice ... Really, what I'm doing is, now, I see now, I'm imposing my personal choice on the children ... That's quite shocking actually, because I've never thought about it like that before. It's quite shocking. [6B II: 45-64]

It was agreed that the technique had potential for use in school because "It's a good way of giving information. It catches the eye" [3B II: 23-24]. Alison remarked, "This would be a good activity to do with [the children]" [6A II: 182], and Dave related it to seeing mapping used as a technique to aid assessment in science during his recent term's secondment to another primary school:

> [A]t first I didn't have a clue what they were talking about, and then I sort of began to tune in, [to how] people hung their ideas together, and how it actually did reveal the basic knowledge about some things. [DH II: 209-211]

However, as an effective research tool in this study, it is *essential* to use the maps in association with the transcripts. The maps are not sufficient by themselves because they can sometimes be interpreted in different ways. For instance, Rosemary spoke of her map radiating out from everybody enjoys music [RA II: 217; see Appendix E: RA], whereas without that explanation it would be possible to see the map as 'spaghetti' (Pearson and Somekh, 2000, see 3: 8.2) with no feature more dominant than any other. Similarly, Sheila's complex but apparently fragmented structure requires her verbal description to explain the well thought-out and integrated links between teacher, child, subject knowledge and confidence [3A II: 15-20, quoted chapter 4: 1 above; Appendix E: 3A]. Equally, what the teachers said was developed and enhanced by aspects revealed in the maps. For example, their maps enabled both John and Dave to articulate their philosophies in more coherent and cohesive ways than had been apparent merely

from what they previously said (see above for more details of John's and below for further details of Dave's). These maps are thus effective diagrammatic representations of the teachers' thinking, supported by their verbal accounts and my analysis.

As described in the methodology chapter, existing literature had suggested that there was likely to be increased complexity in the maps of more expert teachers (for example, Askew *et al.,* 1997; Winitzky *et al.,* 1994). In this study, although no specific measure or definition of 'expert teacher' was used, complexity was seen in apparently opposite ways.

For example, the map with the most labels (39) was produced by Fiona, the Year 1 teacher who acted as the Key Stage 1 music coordinator; took part in many musical activities both in and out of school; and described a integrated classroom music curriculum that extended beyond the National Curriculum. She started with eleven labels and added 28 — more than anyone else. Her map included herself as teacher, the children, and aspects to do with the music curriculum and its links with other subjects and life outside school (Appendix E: 1A). Her basic premise was expressed as music for all and, although she only added linking visible arrows to one cluster, she described a complex and coherent structure in relation to that main principle.

Dave, the Deputy Head, also spoke of making music in and out of school. Although he did not have the same sort of 'traditional' subject knowledge as Fiona, he gave examples of "stretching the boundaries a bit" in his approach to exploring music with children, extending his and their experience [DH II: 57]. In contrast to Fiona, Dave used the *fewest* number of labels — only his original eleven (not the same as hers) — to produce an equally coherent — albeit very different — map, which he was also able to

articulate verbally (Appendix E: DH). His left to right flow demonstrates the formal discipline of music transformed by the interaction between teacher/child/power of music, via the "catalyst" or "interface" of "appreciation" (that term, for him, involving personal experience of listening to music), to achieve the objective that the children should experience the range and the effect of music. This economy (the average number of labels used was 23) is possibly because of chunking and implicit knowledge (Novak and Gowin, 1984; White and Gunstone, 1992; Glaser, 1999; and see 3: 8.2). More importantly, it suggests that the complexity of expert teachers as revealed in such maps is not necessarily seen in the quantity of individual components and links, but is more connected with coherence. Strahan, using semantic ordered trees (which, in his usage, were similar to these maps) in order to investigate experienced and novice teachers' reflections about teaching, describes coherence as arising from 'more functional relationships among ideas and higher levels of pattern recognition' (1989, p. 54). This relates both to Applebee's (1978) description of the development of narrative form (used by GudmundsdOttir, 1990) and to the SOLO taxonomy (Biggs and Collis 1982), which were both mentioned in the methodology chapter (3: 8.2). It also connects with the notions of expertise proposed by Dreyfus and Dreyfus (1986) and, with adaptations, Berliner (see, for example, Berliner, 1995; Borko and Putnam, 1996, p. 682), where development is seen in increasingly intuitive and holistic ways of viewing a situation. However, the literature relating to expert and novice teachers, while useful in illuminating particular characteristics, is another area that can only be touched on here, where it is included to demonstrate that the data acquired from these teachers indicates they 'fit' with other studies, but that complexity in the maps is qualitative rather than merely quantitative.

One common strategy was the grouping of similar features into clusters (according to various criteria) that were then linked according to how particular clusters influenced other clusters. Although this reflects the essentially pattern-making nature of the acquisition of knowledge (Glaser, 1999), it might also be a reflection of the way in which this activity was introduced and supported. Nevertheless, such a structure gives an interesting insight into those aspects considered important. This helps answer the subsidiary question relating to the linking of features. All teachers were able to make *some* links, although these are not always overt, and sometimes only observable from what the teachers said, or by inference. (However, see below for examples of links that were *not* made within the public knowledge (Eraut, 1994) of the National Curriculum orders.)

As Winitzky and her colleagues (1994) had warned, it was difficult to compare maps produced from different starting points, even though there was some overlap because those points were made in response to similar areas of questioning. Nevertheless, similar clusters were apparent, although again that could have been because of the nature of my involvement and/or because the starter labels were drawn from responses to similar areas covered in the previous interviews. However, using these clusters, it was possible to compare underlying structures, bearing in mind that some labels were implicit or were used in different senses by different people.

Clusters concerning the teacher (including subject knowledge) and music as a subject occurred in all the maps. Given the focus of the study on the teachers' thinking about music in education, these groupings are not surprising. Other commonly seen clusters, either overt or indicated during conversation about the maps, concerned the children [N, 1B, 2A, 3A, 3B, 4B, 5A, 6A, DH], music in general [1A, 2B, 3B, 4B, 5B, 6A, DH] and

perceived external influences [all *except* 1A, 3A and DH]. These concerns thus reflect Schwab's (1973) conviction that the interactions and relationships between the four `commonplaces' of the teacher, the learner, subject and educational milieu could explain all educational experiences (see 3: 8.2).

One map that clearly contained all the above main groups was constructed by John (see above), who thought his structure was not only likely to be replicated by other teachers but also when considering other subjects

> I imagine you would get that: you'll get a core, and then you'll get the way it goes off into the obvious subjects, ... that could be any subject really, I should imagine, that might come out quite a lot. [4B II: 248-250]

However, although a pupil/teacher relationship *was* similarly positioned at the heart of Dave's map, there was a different relationship between the main areas, and other teachers' maps displayed other central aspects, for example the child firmly in the middle of Jo's map and the subject in Emma's, Alison's and Valerie's. Possible links and implications relating to this issue of the central focus of the maps are discussed in suggestions for future research in the concluding chapter (below).

5: 2.3 The nature of the teachers' knowledge of music in education

The previous section shows that the teachers were able to articulate knowledge through the interviews and maps, even though it should be remembered that the knowledge thus communicated, while apparently faithful to the teachers' meaning, represents only that part of the knowledge accessible and expressed at that time. The following section considers more closely the nature of the knowledge they displayed.

As indicated in the methodology chapter, I originally anticipated illustrations of how the teachers conceptualised music in general as well as their conceptualisation of the

relationship between the component parts of the music curriculum — both statutory and `ideal'. However, what the teachers *actually* seemed to convey was a much broader and more complex mixture of the nature and value of music, together with the different occasions in which music was experienced, their attitudes towards music: how they *felt* about it, and the perceived influences on themselves as teachers in general and as teachers of music in particular. In other words, because of the data, the original focus on teachers' subject knowledge became situated within various cognitive, affective, temporal, physical and educational contexts. This may have happened for a number of reasons, one of which is, of course, that all knowledge is contextualised (as summarised in 2: 4.2). However, it may also be because of the questions and lines of investigation pursued during the interviews, or because of the already-mentioned difficulty of talking about music, which meant it may have been easier to talk about those related matters. The affective nature of these teachers' responses echoed that found by Nias, who reported of the teachers in her study 'Certainly, their response to my questions was an affective rather than a cognitive one' (1989, p. 184).

As various sections of the literature review chapter were structured around the works of Eraut, Shulman, Swanwick and Reimer, these authors will be drawn on again in this chapter in order to describe and discuss the nature of the teachers' knowledge revealed by this study. Shulman's (1986a) three main categories of subject matter knowledge, pedagogical content knowledge and curricular knowledge provide the structural framework for the following consideration of the teachers' subject knowledge, with Reimer's (1989; 1997) and Swanwick's (1994) divisions subsumed in the subject matter knowledge category.

5: 2.3.1 Subject matter knowledge

This category is one that shifted title and description over the course of Shulman's writings (see 2: 4.3.3). It variously indicated a teacher's *own* knowledge of the subject concerned (Shulman, 1986a; 1986b) *and* 'the knowledge, understanding, skill, and disposition that are to be learned by school children' (Shulman, 1987a, p. 9). As a category here, therefore, it will include both the teachers' knowledge relating to music *per se* as well as their understanding of the subject knowledge appropriate for pupils.

Beliefs about the nature of music

Some indication of teachers' understandings of the nature of music in their own lives and within the educational context can be found in their definitions. Most teachers, unsurprisingly, included some reference to (organised) sound, either directly or by implication (by including references to listening). Reimer, drawing on the cultural anthropologist Robert Plant Armstrong, states 'Music, universally, is sonic form incarnating affect' (Reimer, 1997, p. 19). The affective angle, in the sense either of music's nature or its ability to influence emotion in the participant was also a dominant response in this study, as already seen in the quotes in the previous chapter from the definitions of Rosemary, Caroline, Hilary and Alison. For Valerie, the evocative and personal response facets of the affective potential were paramount in her definition:

> As an emotional experience [pause]. That's about it really. It has connotations. Certain pieces of music have connotations for you, don't they? ... Personal response to it. Some music makes you want to cry; some pieces of music **I** can't listen to since my father died because I just sort of feel really [pause] and other pieces of music make me feel really happy. [6B I: 115-125]

A mix of cognitive and affective beliefs and attitudes was characteristic throughout the sessions and across all teachers.

Although it was hard for the teachers to talk directly about the nature of music, it is possible to identify aspects of the three main views of music described by Reimer (1989): referentialism, absolute formalism and absolute expressionism (see 2: 5.2.3), although none of the teachers appeared to exemplify a pure form of any of these.

For example, Rosemary's definition, already quoted in the Findings chapter, indicates a referentialist view, when music refers to something outside itself and promotes extra-musical benefits:

> A collection of sounds that can be made by people or things; that can represent a number of feelings and moods or can be representative of places and actions from the past. [RA I: 148-150]

However, a later reference to music's importance to the 'creative, aesthetic side' of a person's 'basic make-up' [I: 170-171] and her choice of 'basic need' as her second most important characteristic [III: 114] are possibly indications of absolute expressionist influences.

The closest to a formalist position was expressed by Karen, who insisted on the importance of music as an elitist discipline, believing "Not everybody can be musical" [3B II: 137]. However, her reasons for including music in the curriculum suggested its value lay in its ability to promote extra-musical, particularly cognitive, aspects, in other words, a more referentialist attitude. For example, her first two choices from the list of 37 attributes were *Encourages critical awareness and response* and *Helps train the brain,* although later on she acknowledged the affective side with *A way of expressing yourself* and *Can affect one's mood.* Her emphasis on learning music through instrumental skills reflects the praxialism of Reimer's later work (Reimer, 1997, pp. 10-13; 2003, pp. 48-51) and, indeed, he argues that 'except in their extreme positions', formalism and praxialism are not 'incompatible' given that products and processes

cannot be independent' *(ibid.* p. 12). This term would best, but not completely, describe Karen's views emphasising performance.

As already mentioned in the valuing section of the Findings chapter (4: 2), Michael was unusual in that he made little mention of the benefit of music on non-musical areas of the children's development. Presumably unaware that he was reflecting Reimer's preferred absolute expressionist view, he advocated the importance of music as a unique and essential art form while acknowledging its cultural context, posing the question "Do we value music because we regard it as an art form, or is it an art form [because] we value it?" [5B II: 248-249]. Even so, he appreciated the emotional effect on himself, describing how "In Assembly this morning I played *Cavalleria Rusticana,* the *Intermezzo ... I* find it very soothing and relaxing and I can wind down" [III: 36-38]. He was also strongly concerned with the notion of music as being part of culture: "an element of human society" [I: 272], and as "part of our heritage" [III: 56-57] and for those reasons an important component in children's education, because "I think that [it] is absolutely *vital* to understand where you are now" [III: 103-104]. This historicocultural aspect of Michael's beliefs seems to reflect what Reimer refers to as contextualism (1997, pp. 15-17), describing how musical products, processes and references are, by necessity, contextualised within time and place, but how an emphasis on a contextualist view focuses on 'the sociocultural functions of music' *(ibid.* p. 15).

The difficulty in distinguishing between intrinsic and extrinsic benefits has already been described (2: 5.2.5). However, even taking that into account, none of these teachers seem to hold a pure view of music in Reimer's (1989 or 1997) terms, although there appears to be a tendency towards referentialist beliefs. This propensity could be for two reasons. Firstly, treating music as referentialist, in the sense of referring to something

outside itself, is an enabling way of helping engage children in verbal discussion because it is easier to talk about music in terms of something other than itself. There is a link here with pedagogical content knowledge (see below) in that a teacher can choose extra-musical aspects likely to be familiar to the children in his/her attempts to approach the subject in ways relevant to the children. Secondly, in relation to music developing extra-musical aspects, primary school teachers have responsibility for a child's total development and are therefore concerned with all these other facets, an issue referred to by Rosemary when she described how "It's not enough just to feed facts in. You're not going to get a whole person at the end of it" ERA I: 171-172]. However, Reimer need have no fear that any justification for music might be undermined by a referentialist approach, which, he argued, could mean that 'the values of music are just as readily available from a great many involvements having nothing to do with music as they are from music' (1997, p. 14). These teachers appreciated the unique quality in music. Ruth declared, "There's nothing else, there's just music" [N III: 160]; while Michael attempted to unpick the concept in the following way:

> I feel it's unique because it is rather special — it just seems different to anything else we do in the curriculum [laugh] ... I think it's just, the *sensory* feeling that you get, it's acting on a part of your brain that other art forms *don't?* [5B III: 66-73, longer excerpt in 4: 2]

So, as John concluded, in a view of the National Curriculum as a microcosm of the outside world, "they cannot *not* include it in the National Curriculum ... Can you imagine a world without music?" [4B I: 191-192]. Reimer has commented that `auxiliary' subjects, such as music, 'are allowed in school as pleasant or useful adjuncts to the extent they do not interfere with the basics in any significant way' (1989, p. 148, also quoted in section 2: 5.2.1). For these teachers, music was encouraged as a way of *supporting* 'the basics'.

Prior to the introduction of the National Curriculum, Janet Mills reported an earlier study's findings that, because of the likelihood of specialist teachers, 'There is no other curriculum area which more [class] teachers think inessential' (Primary Schools Research and Development Group, 1983, cited in Mills, 1989, p. 126). This was not the case for the teachers in this study, who recognised it was their responsibility to provide music education for their classes. No one thought the subject should not be in the National Curriculum, even if some would rather not teach it [3B, 5A, 6B]. Laura considered it one of the most valuable of the National Curriculum subjects for her Reception children (albeit because of its power as a learning tool) and no one considered it the least valuable subject (although Sheila and John each placed it in a final 'practical' group with art and design, design and technology, and PE).

This supports a study carried out as part of the Qualification and Curriculum Authority's Curriculum Development Project in the Arts and Music Monitoring Programme by Lamont and her colleagues (Lamont *et al.,* 2003). They also found music was valued by the primary and secondary Heads and teachers who took part in their study, even though, as the authors point out, the voluntary nature of participation meant that 'the final sample may have comprised schools with more positive attitudes towards the arts, music, and to the QCA itself *(ibid.* p. 232). Positive attitudes may also have been more evident, I suggest, because it seems music coordinators, rather than other class teachers, were interviewed. Nevertheless, their findings mirrored those from my study in that

> Curriculum music was seen as a positive opportunity to complement the logical and cognitive aspects of literacy and numeracy with a more emotional, spiritual or affective side of learning, and as a means of achieving many of the Citizenship aims such as teaching perseverance and patience, an increased appreciation and respect for others, teamwork, and self-discipline. (Lamont *et al.,* 2003, pp. 232-233)

On the other hand, music's perceived official position below the core subjects (Hennessy, 2000) was frequently mentioned by the teachers [2B, 4B, 5A, 5B, 6B]. John explained how

> It has definitely taken back stage to everything else. It's not priority. It *is,* I think, ... something that's just treated as a secondary subject. I think a lot of the time it could be, as well, if you've got the time you do it, [but] if there's something else to do, music might be just pushed out of the way in favour of, say, Maths, Literacy, something like that. [4B I: 146-151]

Valerie thought music's low position was a factor in her lack of teaching expertise, musing "perhaps I haven't tried to develop it because it's *never* been important, has it, really? It's never been important in the curriculum" [6B III: 144-145]. However, its lowly status was a benefit for me as researcher in that teachers admitted they were less constrained in what they said than if the focus had been literacy or maths [3B, 5A, 6B]. Nevertheless, it does indicate a disparity between the importance many of the teachers attached to music at a personal level, and the standing they perceived it to have within the National Curriculum hierarchy viewed from a more public perspective.

The range of aspects selected by the teachers as part of the nature and value of music is echoed in the map of musical outcomes constructed by Hargreaves and his colleagues in the QCA Music Development Task Group (Hargreaves, Marshall and North, 2003, see 2: 5.2.5). This Venn diagram contains three overlapping categories: the musical-artistic, personal and social-cultural. The ultimate aim, where all circles overlap, is the development of individual self-identity. If one compares the ways in which the teachers in the current study valued music with this model and with an earlier version (Knight, 2002), there is a strong emphasis on the Personal category, including its overlapping areas. Hargreaves *et al.* consider there are two main types of outcome in the Personal category, one relating to 'cognitive, learning, and scholastic gains' and the other relating `to emotional development' (Hargreaves, Marshall & North, 2003, p. 160). From the

current study, as well as the literature (see, for example, Pound and Harrison, 2003, pp. 86-87, 88) it is possible to add a third type of outcome, one relating to *physical* development. Music was valued as a practical subject by the Early Years teachers for its potential in this area. Laura, for instance, spoke of music as a tool developing "the physical and control, the gross and fine motor skills" [RB III: 122-123].

In summary, then, these teachers expressed a mixture of different positions regarding the nature and value of music that were interlinked with the pragmatic attitude of a primary teacher, echoing Plummeridge's remarks relating to secondary teachers (2002, p. 5, quoted 2: 5.2.1). Their beliefs about music were contextualised within the school culture. Rather than holding any one particular view of music, they were what could be termed *pragmatic synthesists,* combining, in various configurations, an appreciation of music as unique, as an Art, as both a conveyor and evoker of emotion, and as providing the conditions to further various desirable social, cultural, cognitive and affective aspects. Taking the staff as a whole, reasons for including music covered all the areas identified by Hargreaves and his colleagues (2003). They also covered each aspect of the initial 'mission statement' within the 2000 National Curriculum orders (DFEE/QCA, 1999, see 2: 5.2.7). Reimer (1997) considered any universal philosophy of music education needed to incorporate the four positions of formalism, praxialism, referentialism and contextualism. His later work also advocated a synergy of different standpoints (2003). These teachers seem to do exactly that, albeit largely implicitly. They also bear out Bowman's (1998) point about the difficulty in separating the nature and value of music: how these teachers talked about music and why they thought it was important in education were intertwined.

Knowing music

As well as their views relating to the nature and value of music, it is also possible to identify certain aspects of Swanwick's categories of knowledge. For example, in the same way that Swanwick distinguished between 'propositional or direct' knowledge (1994, p. 25, see longer extract, 2: 5.2.3), some teachers in this study distinguished between first and second hand knowledge. For example, Dave succinctly described the need "to combine the *discipline* of the thing with the *essence* of the thing" [DH III: 135-136] while John divided musical knowledge into practice and theory, both for himself and the children. He mentioned this several times in terms such as the following:

> [In] music: you've got the practical side; you've got the theoretical side. And as long as I was read up on it I could deliver the theoretical side quite easily, but I would feel inadequate because I think music's all about, if you can incorporate the use of an instrument into a lesson — guitar, whatever — I would like to do that but I'm not able to do that. So, in the end, the music lesson becomes a bit like an English lesson — you deliver facts about composers etc. [4B III: 214-219, also quoted above, 4: 3]

Much of the second hand 'theoretical' knowledge is public knowledge in the sense that it is readily available, mostly factual information about, for example, historical and geographical context. However, it is not public in Eraut's (1994) sense of professional knowledge, as it is not codified as a specified body of knowledge required of teachers. The nature and amount of this knowledge is up to individual teachers. Although such knowledge was by these teachers considered 'knowing *that',* it was also frequently associated with instrumental skills (knowing *how)* because it was assumed to be learnt, most usually, alongside such skills, with potential to enhance that practical involvement. Thus, for these teachers, there was often an overlap between knowledge gained through direct experience and that received second hand. A related link here was terminology, since specific vocabulary was also held to be gained from the sort of musical tuition that teachers considered (should have) happened when they were themselves children [particularly expressed by 3B and 6B]. More importantly for their present situation, that

subject-specific terminology was then a gateway or barrier to accessing knowledge concerning music (including the National Curriculum requirements) causing people to "back off from it" [DH II: 108]. On the other hand, Karen described using the second hand knowledge in a recorder tutor in order to develop the necessary procedural skills during her first teaching post: "I did a recorder group. I taught myself. Well, basic music is common sense, isn't it?" [3B I: 47-48]. Although this remark might be considered to weaken her argument about music being a specialist subject that can only be taught by someone "trained as a musician" [3B I: 81], it more likely suggests that, for her, a recorder does not count as a 'proper' instrument, and thus is ranked alongside class music, which she discounts as "not really developing [pupils'] musical interest" [3B II: 216-217].

The teachers' distinction between the 'making and taking' of music has already been referred to in the Findings chapter (4: 1). There it was reported that several of the teachers, when asked if they took part in any musical activity in their current lives outside school, answered in the negative, discounting listening as a form of musical involvement, saying, for example, "I thought you meant me actually *doing"* [4A I: 107-110]. However, interestingly, the two people who *did* mention listening as an activity in answer to that question (Jo, whose answer is quoted in the previous chapter, and Dave) came from the group of four teachers who played instruments outside school for reasons other than school [RA, 1A, 1B, DH], suggesting that those with more integrated experience of playing instruments may better appreciate the role of listening. The well-respected ethnomusicologist John Blacking underlined the importance of listening skills when he wrote that 'The very existence of a professional performer ... depends on listeners who in one important respect must be no less musically proficient that he is. They must be able to distinguish and interrelate different patterns in sounds' (1976, p.

9). From the perspective of the social psychology of music, Hargreaves, Miell and MacDonald, in their exploration of musical identities (see below), point out that `listeners are not passive consumers, but active partners in a cultural process who use music to fulfil different functions according to different social contexts and locations' (2002b, p. 13).

Although, in general, teachers did not rate their own experiences as listeners, there was the interesting anomaly that they valued music for its potential to improve their pupils' listening skills, with twelve out of the sixteen teachers choosing that as one of their main reasons for valuing music within school, making it second only to enjoyment in importance among the staff as a whole.

Music was seen as hierarchically elitist in the sense that instrumental playing — which only some are able to do — was valued over listening, which all can do. As Valerie explained, "You don't *need* specialist knowledge to appreciate music, or at least to know what you like and what affects you" [6B II: 100-101]. However, in a similar fashion, those teachers who found it easy to sing with their class were also inclined to downplay *that* activity. For example, Karen replied to a remark from the Head about John's singing: "Well, that's not *music.* We're talking about playing instruments, reading music, the technical side of it, not just singing — anybody, anybody can sing" [3B II: 87-89]. On the other hand, Sheila thought a sense of rhythm was more likely than an innate ability to sing: "Not everybody has a tuneful voice, but everybody *can* keep a simple rhythm" [3A II: 25]. However, Michael would not agree with her, since, when describing the in-service training session on the school's new music policy, he recounted how "We had to put, say, marks for beats; we had to listen to a piece of music and for a waltz rhythm which has a 123,123, I counted five beats" [5B I: 167-168].

Cook describes *composers* being at the top of the musical hierarchy, explaining 'It is in the nature of things that the activities of composing, performing and appraising represent a chronological sequence', which then 'somehow turns into a hierarchy of value' (1998, p. 16). However, in school settings, instrumental skills are rated highest by both teachers and pupils (Hargreaves, 2004). As far as the teachers in the current study were concerned, such skills were not only what marked out a person as 'musical' or 'being good at music' (also reported by Hargreaves, 2004; also Mills, 1993; Hennessy, 1998; and Glover and Ward, 1998), but were also necessary for themselves as teachers, in order that they could act as suitable models. Hennessy suggests that the predominance of 'the teacher-as-musical-director image' may explain why `constructivist views of learning ... have had less impact on the teaching of music than other curriculum subjects' (2001, p. 246).

Although most Key Stage 2 teachers (except Sheila and Alison) seemed to view the role of music teacher as director (even if, in practice, the broadcast assumed that role), they did consider pupils' practical involvement was essential, because otherwise, "if it's not that, then the children just regard it as another English lesson" [4B I: 208-209]. John also described the limited value of Assembly music, as then experienced, in similar terms: "In the morning when they go into Assembly, we'll have a piece of music ... we'll have the composer and I think after that it becomes a history lesson" [4B I: 120-122]. Music was valued for its potential as a practical subject throughout the school. In Key Stage 1, this was mostly because that was considered the best way for children to learn. Laura described part of her map thus: "The practical ... will help reinforce the theoretical [concepts] to do with music ... But which comes first, the chicken or the egg? It *has* to be experience" [RB II: 181-183]. Of course there was also the

appreciation that the enjoyment from music — partly achieved *because* it was practical — then enhanced its potential in developing other areas. In Key Stage 2, the practical nature of the subject meant that it provided a change from what were perceived as more academic subjects. Hilary explained: "I just think it's important children have *balances* in their lives, it shouldn't all be about so-called academic, I think music — I think it's very important, but I also think it's a bit *lighter* than the *other* things" [4A I: 239-241]. Although this lighter quality meant music was vulnerable to being omitted due to time pressures from other subjects [2A, 4B, 5B], in Year 6, under greater pressure from those same core subjects, that same quality ensured its survival, with Valerie commenting "it was the one thing, probably, that we didn't give up when we were doing SATs practice ... because we saw that as ... a bit of light relief really" [6B III: 198-200].

Swanwick's (1994) category of knowing *this* concerns expressive character and structural awareness. He describes how such knowledge is gained through repeated experiences, as is acquaintance of a person, and he acknowledges much of it is 'likely to be tacit, unanalysed, unarticulated' *(ibid.* p. 17). These teachers demonstrated their experience by showing familiarity with different general styles of music (for example, folk, jazz, rock, western classical) as well as with specific pieces. Sloboda describes how 'The music of a culture has a familiar syntax' and how 'The research literature on music shows that almost everyone in our culture has 'found the structure of music' through exposure to music irrespective of formal training' (1999, p. 450). However, I did not probe further into this layer of knowing, and the teachers might not have been able to articulate the specific elements that enabled them to categorise a piece of music as jazz, for example. Nevertheless, in relation to expressive character, the teachers were well aware of this in the sense of its potential for affecting their own and their pupils' state of mind. Although this is not the deeper sense in which Swanwick describes 'a

sense of individual expressive identity' (1994, p. 18), it does suggest at least a 'tacit, unanalysed, unarticulated' appreciation of the character, as cited above, even if it was then translated into referentialist terms.

We have seen that these teachers valued music for themselves and for the children in their care. Within the music with which they were involved, in differing ways, they expressed particular preferences, both in general, for example Fiona's involvement with folk music, and also specifically, for example Michael's assembly choice mentioned above and Caroline's treasured CDs of music from her teenage years (see below, 5: 2.4.2). This shows a preference for some musics over others. As described in the literature review chapter, Swanwick views the valuing of music, knowing *what's what,* as the culmination of a hierarchical development of knowledge involving materials, expression, form and valuing since 'it is valuing that characterises the deepest levels of musical experience' (1994, p. 25). He considers that 'The possibility of a profound sense of musical *value* exists only because of the development of sensitivity and skills with sound *materials* and the ability to identify musical *expression* and comprehend musical *form'* (1994, p. 20). Although originally developed to provide a conceptual framework for the development of children's compositions (Swanwick and Tillman, 1986), this sequence has since been applied across all three of the main activities of composing, performance and audience-listening (see Swanwick and Franca, 1999; and Runfola and Swanwick, 2002). However, 'the skills, procedures, techniques and experiences of composition, performance and audience-listening are very different' (Swanwick and Franca, 1999, p. 6) and it is not necessarily the case that an individual will be at a similar level of understanding in each activity. The teachers in the current study have an 'accumulation of musical experience' in audience-listening and display

the necessary commitment (Swanwick, 1994, p. 19-20), recognising its 'meaning for' themselves as well as its potential 'meaning to' their pupils (see section 2: 5.2.3).

Although I was not researching specific 'levels' of understanding, it is possible to consider Swanwick and Franca's criteria for audience-listening and identify aspects that seem relevant. For example, 'A feeling of valuing of music comes over through an account of personal involvement in a chosen area of music-making and/or a sustained engagement with particular works, composers or performers' is part of the description of the second highest level, the symbolic (Swanwick and Franca, 1999, p. 8). This implies previous levels are subsumed. For many teachers this knowledge is likely to be intuitive, based on their particular personal experience, and not available for analysis and articulation (see Swanwick, 1994, chapter 2). For Swanwick, intuition is a holistic way of knowing, derived from sensory impressions, that leads on to conceptual knowledge, open to analysis. He suggests that there are two forms of analysis. The primary, or intrinsic, type is 'wordlessly implicit in all musical experience', for example when one recognises features in music, whereas the secondary, extrinsic, analysis `consists of reflective discourse about particular music — the more usually understood definition' *(ibid.* p. 43).

Laura referred to intuitive knowledge, while also reflecting Sloboda's (1999) comments about familiarity with the 'syntax' of a culture's music, when she expressed her belief that children gained such knowledge through everyday exposure, which meant that she, along with Emma, thought it was not necessary for music to be taught, because

> [The fact that] the teacher's told them this is a two four rhythm or whatever, doesn't make them appreciate or like or understand that Boyzone sing different types of song to whoever. They don't need to have to explain it ... they can appreciate it, they have experienced it, even if they don't know the word for it. [RB I: 200-203]

On the other hand, neither wanted to lose music from school life because it was vital for aiding development in other areas.

Thus these teachers exhibit more subject knowledge than they may have thought, even though not all of them have the propositional knowledge to inform the analysis by giving it 'a vocabulary and a framework' (Swanwick, 1994, p. 43).

Pupils' subject matter knowledge

The teachers' recognition that children need practical involvement meant references to their pupils' subject matter knowledge was mainly expressed in terms of musical activity: particularly singing, listening and playing instruments in different contexts, although the more limited range of the curriculum in Key Stage 2 was summed up by Dave as follows:

> I feel that the singing kind of element is one that people do carry out anyway ... it would be the other areas [that] are the ones that are undeveloped ... I would certainly say in [this] school composition ... and maybe also the theory. [DH I: 183-186]

The only composition mentioned in Key Stage 2 was by Caroline [2B] during the previous year when she had taught Year 4; Hilary [4A], who had used the software programme *Notate* when in Year 6 for many years; and Alison [6A], recently moved from Year 2, who described a composing module she had planned over the holidays (see 4: 3).

Despite the emphasis on music as a practical subject, 'theory' was often cited by the teachers, as in the above quote from Dave, particularly as part of a perception that it equated with the content of the National Curriculum:

> It's the music *theory* that's in the National Curriculum ... in terms of which instruments make what particular sounds and then about rhythm and beat and

tempo. Not actually to be able to do that — [but] *about music ...* An awareness and an understanding of what it is ... [RB I: 183-187]

The coordinator considered the term applied to the content of music education in general: "Music education is theory, I think" [4A I: 178]. In some instances, theory also applied to the factual knowledge about music represented by the history of music involving the names, works and lives of the composers, as in John's quote above [4B III: 214-219]. Dave thought it was that sort of theory, together with specialised terminology, which explained the uneasiness of teachers "because they felt that there was this corpus of knowledge, this essential font of knowledge that not all people possess and not all people are familiar with the vocabulary" [DH II: 101-103].

The description of a classroom curriculum based on singing and 'appreciation', together with expressed views from the relevant teachers thus indicate, in Key Stage 2, a curriculum in transition from the traditional initiation into western art music to the particular experiential model required by the National Curriculum (Pitts, 1998; Plummeridge, 2000; Spruce, 2002).

5: 2.3.2 Pedagogical content knowledge

Pedagogical content knowledge involves the overlapping of general pedagogical knowledge of teaching strategies and management with particular subject knowledge, or, as Shulman describes it:

> the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction. Pedagogical content knowledge is the category most likely to distinguish the understanding of the content specialist from that of the pedagogue. (1987a, p. 8)

This area includes awareness of how children develop knowledge in the particular subject area, together with their common misconceptions. It also involves the process whereby the teacher transforms the subject matter into an accessible form from which pupils can gain understanding of relevant concepts (Shulman, 1987a; Wilson, Shulman and Richert, 1987; McDiarmid, Ball and Anderson, 1989; and see 2: 4.3.3) and thus includes knowledge of children's musical development as well as of relevant subject knowledge. Of course, the process of representation requires something to represent, namely subject matter knowledge, and, as described in the literature review, this has led to some disagreement as to whether pedagogical content knowledge exists as a discrete entity. However, I am including it here in order to cover the other aspects indicated above. It should also be noted that the National Curriculum Order for Music (DFE, 1995) was so broad, with only one level of statements for each key stage, that it required much pedagogical content knowledge in order to be realised in the classroom. Given that most teachers were reliant on broadcasts for both content and delivery of curriculum music, it was often difficult to identify aspects of pedagogical content knowledge specific to individual teachers because they were not themselves translating subject knowledge into explanations and learning activities for their pupils. However, there were some examples. For instance, Sheila implied a conscious linking of some of the more abstract concepts in music with visual, kinaesthetic gesture when she described a current activity:

> [A]t the moment I'm doing following a melody and making your hands move to the rhythm: so that if it's a high note it goes up here and if it's a low note [gestured]. And not just going [waved arm up and down] but feeling how it goes. [3A III: 162-165]

She also gave extended accounts of using questions to build up the children's knowledge. However, this seemed more part of her general pedagogical technique, one

she assumed was common among teachers: "I presume that a teacher would use questioning techniques; that they would use open-ended questions; that they would involve *everybody,* at whatever level they're capable of [3A II: 163-165].

Several teachers spoke of how they questioned children about the music they heard. Questions such as "What does it make you feel?" and "What does it make you think of?" are themselves indications of a view that music can cause emotions or can represent something outside itself. In that sense and in a teaching context these are examples of pedagogical content knowledge in practice. Mellor found generalist teachers were more likely than specialists to use mood responses and metaphor when talking about music they had heard with their classes. She concluded this could be an advantage in that this intuitive reaction was more conducive to promoting a 'feeling for the personal value of music' than a specialist's 'more objective, analytical mode of listening' and was also a way of 'more closely' connecting with the children (1999, p. 156). However, this was not an advantage apparently perceived or appreciated by the teachers in my study.

Some teachers talked of using graphic notation [1A, 1B, 2B, 6A]. This can be more than merely a means of representing music in ways that are comprehensible to others as it can also be an effective visible way of illustrating and explaining elements of music such as pitch, dynamics and structure. It is also a stepping stone into more traditional forms of representing music, and, as such, is an introduction to a syntactical aspect of musical knowledge (see Schwab, 1962) whereby the children are connected to 'the communities of the disciplines' (McDiarmid *et al.,* 1989, p. 194). Although Caroline and Alison spoke of it as a way of fulfilling the National Curriculum requirement to notate compositions, both Fiona and Jo perceived the underlying pedagogical benefit.

As a way in to considerations of progression, teachers were asked about musical development in general and in particular how their class had changed during the academic year. As mentioned in the previous chapter, several spoke of development between and within the broadcasts, and for Karen 'the *only* signs of progression is that the broadcasts that we do are graded' [3B III: 183-184, my emphasis]. However, outside the broadcasts, this was an area in which responses were often hesitant and impromptu, as if progression in music had not previously been considered beyond the number of songs learnt and the level of vocabulary within them. Indeed, Rosemary thought that `It's almost impossible in a class music session, *almost* impossible, to identify an individual's progress' [RA III: 157-159]. However, Fiona, who with Jo possibly had the widest appreciation of curriculum content, *was* able to describe the progress she expected to see during the year [1 A III: 195-220, quoted in the Findings chapter]. Mainly the teachers talked in terms of what might be considered the self-identity core of Hargreaves *et al.'s* (2003) objectives diagram (see 2: 5.2.5). For example, Jo identified one main area of progression as involving the increased independence of her Year 1 class when composing, notating and then following the scores [1B III: 438-446] and increased confidence was chosen by several teachers [RA (despite her remark quoted above), RB, 2A, 3A, 4A, 4B and 6A]. There was therefore, general appreciation of progression in the same broad areas that would apply to other subjects, rather than recognition of specifically musical aspects (with the exception of Fiona).

5: 2.3.3 Curricular knowledge

Curricular knowledge requires an awareness of the available resources, together with recognition of when they are appropriate (see, for example, Shulman, 1986b, p. 10).

Schools' broadcasts

As far as these particular generalist teachers were concerned, broadcasts were the source of most of the curriculum content for all except the Nursery and Year 1 teachers. Although teachers generally used programmes appropriate to the age group in which they worked, the Year 2 teachers had tried initially to use a broadcast for older children, while the Year 3 teachers, more understandably, began the year by using one for younger children. Some teachers spoke of making choices within the range on offer in order to fit with other areas of the curriculum, particularly history, in order to enhance both subjects [4A, 6A, 6B].

There was an acknowledgement of considering the children's needs when Caroline said, "You notice things like can they clap in time and stuff like that, so you gear things to teaching *that*" [2B III: 18-19]. Similarly Michael responded to the children's attitudes when he re-recorded the broadcasts to omit certain songs the children did not enjoy: 'So now I rerecord the programmes and I cut [the slow songs] out because it's like pulling teeth getting them to sing' [5B I: 95-96], although this was possibly more for his benefit than the children's.

School policy

There was a mixed response from the teachers when asked about the school policy/scheme. Jo considered it "not brilliant ... not particularly inspiring" [1B I: 207-207] while Michael said "it's quite a good policy" [5B I: 237]. Familiarity with its provisions and the extent to which it was utilised were also varied. Emma admitted, "to be honest I can't even say the last time I looked at that" [2A I: 250-251], while Rosemary and Alison described referring to it every time they were involved in medium term planning: "I refer to it. Probably the last time I looked at it would have been the

beginning of this year, to remind myself' [RA I: 165-166]. Among the Key Stage 2 teachers Karen said the staff used the school policies (including scheme) "for everything" [3B I: 137], although as her class took part in joint sessions led by her colleague, using broadcasts, this may not have applied in her case with music!

The National Curriculum

Although knowledge of the National Curriculum comes under this curricular section, its content extends over Shulman's other two areas as well when, for example, it requires subject knowledge when referring to the musical elements and when using subject-specific terminology; and pedagogical content knowledge when suggesting activities for the different key stages.

Because the National Curriculum is statutory for all schools, its requirements can be considered to represent part of the public codified knowledge described by Eraut (1994, and see 2: 4.1). This section therefore includes some of those areas of public knowledge that the teachers might be expected to hold in their personal knowledge. It thus responds to aspects of all the original research questions, describing the views of individual teachers as well as similarities and differences across the whole staff, along with identifying the influences of the music coordinators (past and present) and the National Curriculum itself.

This is an area where the teachers might have been expected to possess common knowledge. The National Curriculum requirements in force at the time of this investigation (1999-2000) had been current since 1995 (DFE, 1995) and had been used, with minor adaptations, as the basis for the school's policy. Yet, although the National Curriculum was perceived as a strong influence on what the teachers did, seen, for

example, in its appearance in various maps [1B, 2A, 3B, 4A, 4B, 6B], this was more in the sense of the requirements of the curriculum as a whole, rather than the music requirements in particular. In the Methodology chapter I wrote of expecting the National Curriculum orders to provide 'much of the terminology' in the teachers' accounts (3: 8.2). Askew and his colleagues, for example, reported some of their teachers appearing to reflect the content of the maths resources used (Askew *et al.*, 1997, p. 55). However, I was surprised at how little reflection there was of the content of the Music document in what the teachers said, although Caroline's map was an exception and, when I remarked on its similarity to the National Curriculum document, she replied "That's probably what was in my head [laugh]" [2B III: 23-24].

Nevertheless, there was some demonstration of the statutory requirements relating to music, although this was usually not explicitly related to the document itself. This may have been because it had been assimilated unknowingly but sometimes it seemed less an awareness of the National Curriculum connection than a reflection of accepted and accustomed school practice. In Fiona's case, she did what she did because she considered it part of good practice: "I do it anyway, I've always done it before the National Curriculum" [lA II: 123].

As already mentioned in the literature review, Cox and Hennessy (2001) report mixed evidence relating to common understandings of the National Curriculum. There was certainly a diverse awareness in this school of specific points in the National Curriculum requirements (at that time, DFE, 1995). When John was asked about the main areas in music, he replied,

> Remind me [laugh]? I'm trying to think! My mind's going through the back of my folder, thinking what the — I can't honestly, off the top of my head, it's all to do with — [pause] *Performing and composing, listening and appraising.* That's it — you've reminded me! [4B III: 234-236, italics my prompt]

Those two main sections in the programmes of study, *Performing and Composing* and *Listening and Appraising* (DFE, 1995, pp. 3, 5, and 7, for Key Stages 1, 2 and 3, respectively), were not specifically referred to by any teacher, although several mentioned activities connected with the four separate areas. For example, Alison gave a fair summary of the required curriculum:

> [T]he National Curriculum covers all of those things: there has to be singing, you have to rehearse and share and practise; they have to do listening and appraising of music; they have to use instruments, play them, compose with them, and notate the pieces; and they also have to share in each others' performances; and discuss each others' performances. [6A II: 72-76]

Similarly, the 'in school' layer in Caroline's map (Appendix E: 2B) contains many of the main activities identified in the National Curriculum orders. For instance, the words `composing', 'performing' and 'listening' are included, although appraising is implied within the cluster rather than specified.

It has already been noted, when discussing the use of broadcasts in the Findings chapter (4: 4), that although the term 'appraising' *was* occasionally used by some teachers [specifically 2A, 2B, 3A, 4B, 6A and DH], the traditional word 'appreciation' was more common. In fact it can be seen from the above list that neither the current music coordinator, Hilary, nor Fiona, the main 'music person' in Key Stage 1, used the word `appraising' at all, although Fiona's accounts of her practice did imply that was an omission of terminology rather than of substance.

Although attempts were made to extend the conventional knowing 'about' music to the more reflective and responsive interpretation of appraising, there was little two-way interaction between the main areas. Such links were advocated at the beginning of each Key Stage details:

> Pupils' understanding and enjoyment of music should be developed through activities that bring together requirements from both **Performing and Composing** and **Listening and Appraising** wherever possible. (DFE, 1995, pp. 2, 4, 6)

However, this sentence had *not* been transferred into the school policy, and possible links, beyond superficial topic-based ones, were not mentioned by the teachers. This may be unsurprising, given the lack of specific knowledge of the requirements. Even in Key Stage 1, the sections were often treated in isolation. For example, Emma explained that, for music other than the broadcast, "Fiona takes [the children] up [to the Hall] for singing at a different time and the rest has just been music that we bring into the class to listen to for the appraisal part!" [2A III: 64-66]. Although links between the two areas *are* built into the broadcasts, there was little opportunity to put insights from one area into practice in the other, because participation in the broadcasts was mostly limited to singing the songs. Both Hilary and Dave questioned whether the curriculum was covered sufficiently. However, their recent Ofsted inspection had not reported any omissions.

Although the Ofsted overview of music for the year in which the school was inspected is, of necessity, broad (Ofsted, 2000b), there are areas in which comparisons can be made. For example, the review comments unfavourably on the passive use of radio and television broadcasts in those schools that 'have failed to promote music in the curriculum'. Although this school did not come into that category, their inspectors did comment adversely on the lack of energy in lessons where teachers 'felt unsure about the subject' and so relied on radio programmes. There is an implication in the overview (Ofsted, 2000b) that composing in Key Stage 1 was a general identified area of weakness. In that respect this school was, apparently, *not* characteristic. Applicable comments in the Ofsted subject report covering the year in which this study took place

refer to the need for 'more practical music-making within lessons', and increased 'use of music technology and software', since that area was 'less than satisfactory in one school in three' (Ofsted, 2001). The only mentions of activities in this school that might come into that category during my study involved the use of a small electric keyboard in the Year 1 classes, and the Notate software (which enables composition using traditional notation) in Year 6.

From my data, knowledge of the National Curriculum requirements among the teachers appeared superficial, particularly in respect of the teachers' understanding of the connections within the subject. From what they said about what they did, there appeared to be sections of the curriculum that were not covered adequately in Key Stage 2. This was admitted by several teachers, particularly the music coordinator and the Deputy Head. However, the previous term's Ofsted inspection considered the subject to be `satisfactory', apart from the complaint concerned the quality of Key Stage 2 singing. There are thus various implications (unless the data or my interpretations thereof are faulty): the teachers' subject knowledge is sufficient to fulfil the requirements of the National Curriculum, implicitly or explicitly; Ofsted's snapshot did not reveal the whole picture; the schools' broadcasts used delivered a satisfactory curriculum in relation to National Curriculum requirements; or the Ofsted inspector concerned was limited in his understanding of the requirements and/or the situation in the school (an opinion voiced by Karen).

Knowledge of curriculum resources owned by the school was limited, probably because so many teachers relied on broadcasts. As already mentioned, several teachers admitted to little, if any, knowledge of the school policy or of the National Curriculum document. Most knew where school resources, such as CDs, were kept, and Dave mentioned a

"useful" series of recorded music with pamphlets. A few teachers described using teacher resource books [N, RB, 2A, 2B, 6A], but most of these were privately owned. There was a list of seven such references in the back of the school policy (none being the ones mentioned by the teachers above), but the only books in evidence while I was there were songbooks on the piano. Again, the broadcasts acted as resource providers, and were appreciated for that. There were different sets of instruments in various locations and these were presumably considered sufficient, since a lack of instruments was never mentioned as a reason, or excuse, for not including instrumental activities.

5: 2.4 Influences on the teachers

The previous sections have included similarities and differences in the teachers' knowledge. Although on the surface there was a common curriculum throughout the school, this was mainly because of the use of broadcasts as providers of that curriculum. However, this curriculum consistency has been seen to mask some individual differences within the teachers' beliefs regarding the nature and value of music as well as within their subject knowledge.

In the research questions, it was suggested that similarities in the teachers' thinking might be explained by the common influences of, particularly, the music coordinator and the National Curriculum. Similarities and differences in relation to the National Curriculum have already been covered above and some links with the previous coordinator have also been made. This section will start by considering a few further points concerning the coordinator that connect with existing literature and relate to other aspects of this study, before moving on to other influences identified by the teachers themselves.

5: 2.4.1 Music coordinator

This section concerns Marion, the coordinator who had been responsible for writing the school music policy and delivering the most recent music INSET (four years previously), and who had retired at the end of the preceding term. She had been highly respected as a teacher, music specialist and pianist who "just made the piano talk" [4A II: 39]. Several people remembered enjoying her training session on composing and her influence via the policy/scheme has already been described.

However, she did seem to have had a somewhat unfortunate effect on her colleague in Year 1 (Emma, now teaching Year 2), who, in the term following Marion's departure, commented of her musical knowledge and expertise:

> I would say now poorer than it ever has been, because for the last four years I worked alongside the music coordinator [Marion] and she did all of my music for four years. [2A I: 51-53]

This deskilling effect has been mentioned by Hennessy (1998). Nevertheless, it did not mean Emma resented Marion's proficiency: in fact she commented positively on it, even while acknowledging the detrimental effect on her. However, by the next term, Emma painted a different picture: "It's different now — the whole situation is very different now: the person I'm working with ... The whole structure of music has changed since Marion left" [2A II: 31-33]. She described planning with her new colleague, Caroline, and described a widening range of classroom activities from the diet of mainly singing in the first term.

Caroline also recognised how, after Marion had retired, they took more part in choosing music for assemblies when she described how

> [W]hen Marion was here she always used to play the piano as [the children] came in the Hall, and since she's gone we've started using the tapes and CDs. In fact I've had Eric Clapton in assembly! I've had African music: we've had

> Ladysmith Black Mambazo, just to try and vary it. We're trying to be more interesting now, but that's up to the individual teachers because we take turns to do this Key Stage assembly, so it's up to us to choose our own. So I think that's nice because you feel like you've got more ownership of it and you bring your own personality as well. [2B I: 240-246]

It was perhaps the same issue of ownership that explained the Head's comment that although the Key Stage 1 teachers used to complain about the amount of time spent on learning words before concerts, in the term after Marion left, they chose a Christmas show that necessitated 15 new songs but occasioned no complaints [H: 79-82]. Emma and Jo had indeed mentioned the previous Christmas shows in less than glowing terms. However, during the session after the new show, Emma enthused "It happened! It happened! ... It was *marvellous*. It was lovely. Wicked ... It was really good" [2A II: 19-20]. This issue of ownership will be returned to below.

However, Marion's piano skills may have had a longer term effect, reinforcing people's belief that to be a music teacher one needed to be a good instrumentalist, a belief remarked on by Glover and Ward (1993/1998a), Hennessy (1998) and Mills (1993). Her competence may also have contributed to general feelings of inadequacy since Mills, in an overview of the first year of Ofsted inspections, has described how 'Class teachers who under-rated their music teaching were often found particularly in schools which had recently lost a teacher with specialist qualifications in music' (1994, p. 193). In this sense, therefore, Marion had had a common effect on the teachers' thinking

In a study of primary student teachers as musicians (using various measures), Mills found that 'the profile of musical expertise of the notional median student ... [was] substantially richer that that of all but a small minority of children in primary schools in England' (Mills, 1995/6). Most of the teachers in this study also possessed varying levels of traditional musical skills concerning notational and instrumental skills.

However, measuring themselves against one they saw as an 'expert', these skills were usually discounted and downplayed.

5: 2.4.2 Perceived contextual influences

The teachers themselves identified various other contextual influences on their thinking and practice.

Clark and Peterson considered that 'A complete understanding of the process of teaching is not possible without an understanding of the constraints and opportunities that impinge upon the teaching process ... Teachers' thought processes may be similarly constrained' (1986, p. 258). 'Constraints and opportunities' were thus an important component in their model of teacher thought and action *(ibid.* p. 257, fig. 9.1).

In the current study, the teachers frequently seemed more aware of the constraints than the opportunities.

As well as those influences that they linked with their personal previous experiences, for example learning an instrument or receiving effective support as student teachers, they also identified several that now impinged on their professional lives and which featured in various forms and to different degrees in their maps.

Hargreaves, Marshall and North identify four levels of social influence: 'the individual, the interpersonal, the institutional, and the cultural' (2003, p. 148, see 2: 5.2.7)) and similar contexts within which the teachers' learning has been, and continues to be, `shaped and influenced' are identified by Welch in two publications for the British

Educational Research Association (Welch, 2001a; Welch and Adams, 2003, p. 4 this quote). In a connected fashion, albeit referring to school music rather than the teachers *per se,* Bresler distinguishes between three interactive levels of context (meso, micro and macro) 'shaping' the 'genre of school music' (1998, see 2: 5.2.7 above). The teachers in my study were also aware of levels of influence, but seemed to perceive them as circles of general *professional* context, which involved social, cognitive and physical aspects.

The outermost level was determined by what John referred to as "The powers that be, the faceless ones" [4B I: 14-15], later defined by him as "whichever government's in power" [4B II: 90]. This then was a **national** level of influence, but not completely the equivalent of the 'cultural' level mentioned above, since the government level of policy making is itself influenced by the culture within which it operates. Aspects the teachers referred to at this level included the National Curriculum, the Office for Standards in Education (Ofsted), Standard Assessment Tasks (SATs) and league tables [by 6A]. In this instance, as already mentioned, the National Curriculum was seen as influential for the effect it had on time rather than on the content of the music curriculum itself. Time constraints affected every stage of the teaching process: planning, balance of subjects within the school day, and assessment (as also described by Munby, 1986; Brown and McIntyre, 1993; A. Hargreaves, 1994).

The **LEA** level was personified in the local music advisor, a hard working and 'visible' presence who was respected and admired throughout the school: "He's very supportive and he just has such enthusiasm *for* it ... We're very lucky to have him" [4A I: 281-282]. He regularly visited the school with his instrumental demonstration group and had also led in-service training (INSET) courses. In addition, the peripatetic instrumental

teachers (violin, guitar and percussion) were appreciated for providing an additional opportunity for the children, although several teachers were unhappy about the restricted number of children who benefited and the narrow range of instruments on offer [RB, 2B, 3B, 5B]. However, only very few teachers remembered seeing the LEA scheme of work, a copy of which was shown to me by the Head, and even the coordinator admitted "This may sound dreadful, but I haven't seen [it]" [CI: 9]. Although this, then, was a positive sphere of influence, it may have reinforced the idea held by some teachers that only some people were musicians — in the sense of instrumental players — rather than mapping everyone on a common continuum.

At the **school** level were various issues to do with colleagues (the Head, other teaching and non-teaching colleagues, and the coordinator); the use of music outside the classroom (for example, in the entrance hall at the start of the school day, in the dining room during lunch, and as part of Assembly and hymn practice); the school policy and scheme; and the physical structure of the school (Key Stages 1 and 2 on separate floors, Hall too small for whole school assemblies). Resources were mentioned as something to be taken into account (1B, 2A, 2B, 3A, 4A, 5B, 6A), although were perhaps not so much of an issue as in, for example, the study by Lamont and her colleagues (2003, p. 239) because of the reliance on the broadcasts and the lack of compositional and other instrumental work in Key Stage 2.

At the **class** level came considerations relating to the Key Stage within which one worked (there were considerable differences in approach and content), as well as the specific age group involved; the physical nature of the parallel classes having openly connecting rooms, therefore, for example, giving rise to issues of noise (and see GudmundsdOttir, 2001, regarding the influence of the physical set-up of a classroom);

the colleague with whom one planned and worked; and, to an apparently much lesser degree, aspects relating to the children — as a group and, even more uncommonly, particularly further up the school, as individuals.

At the level of the self came recognition that one's professional self (see above, 2: 4.2.3, and below, 5: 3.2.3) was influenced by previous experience, both personal and professional. As Goodson reports 'teachers constantly refer to personal and biographical factors. From their point of view, it would seem that professional practices are embedded in wider life concerns' (1992, p. 16). All the teachers in the current study could remember something of music experienced as children: school and home. Several teachers recognised the influence of their own past home backgrounds on their current involvement. For example, Fiona recognised her positive experience at home, where "my dad's family particularly were quite musical ... they were dead keen on music and there was always people coming in and singing round the piano" [1 A I: 41-44]. On the other hand, Patricia regretted that

> I think I was brought up in a family where music didn't play a very big part in the family and I suppose that's transferred to me. Whereas my husband, he's much more interested, and he plays a lot of CDs at home. But ... music didn't play a big part in [my] family. Sad in a way. [5A I: 144-147]

As far as earlier life was concerned, many listening preferences dated back to their teenage years, with CD collections, even recent acquisitions, often reflecting this:

> My husband's just bought me Led Zeppelin 4, the *Stairway to Heaven* one, because I had that as an LP and now I've got it on CD, and it's just so nostalgic listening to it. It's all that era of my life, early teens. It's great. [2B I: 107-109]

Just as home experiences varied, so too did school ones and several could remember individual teachers, for better [RA, 1A, 2A, 4B, 6A] or worse [RB, 2B, 5B].

The current teachers' experience of initial teacher education was also mixed in terms of musical content, relevance and effect [positive for N and RA, negative for RB, 2A, 2B and 6A]. Those with less positive memories of ITE seemed to feel that although deficits meant one was ill-equipped when beginning teaching, deficiencies could be made up on the job. For example, Caroline described how the music component of her PGCE course had given her lots of ideas for activities but no conceptual framework, so that "when you found yourself in school, you found yourself thinking well what do I do next?" She continued

> [Y]ou need something to follow, some sort of scheme or plan to see where this activity fits in. So I didn't find it terribly useful. I think, once you start teaching, you try and read up as much as you can and find the right sort of booklet to follow and that kind of thing. [2B I: 67-72]

These influences on the teachers' thinking are summarised in diagrammatic form as Appendix I.

Although there was general awareness of the potential effect of these contextual influences, one interesting aspect was their spontaneous division by several teachers into those over which they had some control, and those where they felt they were powerless (Wood and Bennett, 2000). Emma's map is a particularly clear example (Appendix E: 2A), but others who distinguished in this way include Jo, John, Alison and Valerie. The second category was mostly comprised of aspects from the national level of influences (see above) to do with the National Curriculum, SATs, league tables and the effect all these had on time. However, there were also factors from other levels, for example, the Head's introduction of a singing session for Key Stage 2, affecting the time spent on music in the classrooms; and the physical properties of the school building, which influenced what and where musical activities could be carried out at

particular times. This has implications for the teachers' feelings of autonomy, discussed further below.

Differences between the Key Stages

As has already been intimated, the most striking discrepancies occurred between the key stages. Although this appears to be confuted by the differences between Sheila and Karen in parallel Year 3 classes, it is actually epitomised there because, up until the end of the previous term, for many years Sheila had worked in Key Stage 1 and Karen had taught Year 6.

These differences were also perceived by the teachers themselves. Jo described Key Stage 2 as "heads down" [1B II: 76] so that "It's like another world downstairs" said Caroline, who had also recently returned to Key Stage 1 after teaching Year 4. She explained "You feel they should have more *free* time — not free time as such but free: not *directed* as much. You know, everything else is very directed and you want them to have a bit of — [exploration space]" [2B III: 61-66]. For this reason, several of the Early Years and Key Stage 1 teachers spoke of having music corners or tables available for the children to pursue their own musical investigations. The greater use of percussion instruments in Key Stage 1 has already been described in the Findings chapter (4: 3).

Differences were also seen in how the school day, and therefore curriculum provision, was structured. Key Stage 1 teachers were more likely to have 'extra' music times during the day, partly because they were more likely to link music to other areas, for example including number rhymes, which harnessed both the enjoyment potential and the inherent musical properties of pulse and rhythm. However, even so, there were

differences in approach within Key Stage 1. For example, Rosemary spoke of it no longer being possible to link subject areas, because the requirements for each subject made that not viable. On the other hand, it was *because* of those pressures of time and "targets" that Caroline took the opposite view, describing how it was impossible to "do art for art's sake" so that "you've got to marry it into other subjects ... You're looking for connections all the time" [2B I: 176-170].

Key Stage 2 classes had specific times set apart for music lessons and music was not likely to happen outside those times in the classroom, except in Sheila's, Hilary's and Dave's classes. One particular disadvantage of these discrete sessions was that there was greater possibility of music being dropped altogether in the face of time demands or for other reasons. For example, one teacher, who asked to remain nameless over this, even with a pseudonym, spoke of not being able to "face" doing music "when you've had a hell of a morning".

There also appeared some differences in the ways in which the teachers thought about music education and Emma reacted to the list of 37 aspects about music (Appendix F) by saying, "You can *definitely* pick out *key stage* things though, I think, definitely." She correctly identified *Encourages critical awareness and response* as an example of a Key Stage 2 statement and explained "We would *say* that, but in a different way probably, more responding to music or something like that" [2A III: 10-13].

It was often mentioned that teachers needed more subject knowledge in Key Stage 2, which was partly why Key Stage 1 teachers expressed more confidence. Some teachers spoke about having enough for their level: "going back to feeling that I haven't got enough knowledge and expertise: with the little ones I'm safe" [RB I: 167-168];

whereas, "at the end of Key Stage 2 the curriculum is a bit more academically rigorous" [3B II: 234]. Hennessy agrees that 'in Years 5 and 6 ... teachers may begin to be anxious about their own subject knowledge' (1998, p. 15), but here Karen and John at the lower end of Key Stage 2 were also uncomfortable. Hilary pointed out that teachers often felt more self-conscious when teaching older children who might be more critical [III: 247-255] and several other teachers also thought the changing attitude of the pupils as they matured was an inhibiting factor [RA, 1B, 2B, 5B, 6A, 6B, DH].

Laura summarised the difference by saying "It's more child-centred downstairs with the younger ones, of course" [RB III: 154-155]. The emphasis on teaching the child rather than teaching the subject was considered by Mills (1997a) to be a possible explanation of why the quality of class teaching in music lessons was higher in primary than in secondary schools. The greater flexibility of primary teachers in adapting their teaching to pupils' responses led her to ask 'In short, should secondary teachers give less emphasis to teaching music, and greater emphasis to teaching pupils?' *(ibid.* p. 76). There appeared to be a similar shift in emphasis between the two key stages involved in the current study.

In this school, the key stage in which the teacher worked seemed more influential than age or gender differences. Length of career was not necessarily an indicator of confidence or expertise in music [3B, 5A, 6B], although Sheila did credit the fact that she felt able to deliver all subjects of the curriculum to the length of time she had been teaching and the experience she had therefore gained: 'Well I think probably because I've had a good *background* and because I've been teaching a long time — it's experience, isn't it? Or age!' [3A III: 119-120].

5: 2.5 Interim summary

This first half of the chapter has discussed aspects relating to the original research questions about shared and different views relating to music in education. The following interim summary pulls together aspects salient to subsequent sections of the thesis.

The **research approach,** based mainly around interviews and concept mapping, proved effective in that the teachers responded freely, some even extensively, about their thoughts, beliefs, memories and experiences, with the concept maps providing an enjoyable (except for Michael) and effective tool, reinforcing and often enhancing the initial accounts. However, as used in this study, it is essential to use the maps in association with the transcripts in order to understand the teachers' thinking behind them.

The **teachers' beliefs** relating to its nature and value of music covered a wide range of features, both as a whole staff and within individuals. Although it was possible to see differences between teachers' overall stances (with Sheila, Karen and Michael revealing particularly well-defined and disparate standpoints), no individual mirrored exactly any of Reimer's (1989; 1997; 2003) positions in relation to music and music education. When it came to valuing music within school, the teachers reflected, in practice, areas identified theoretically by D. Hargreaves *et al.* (2003) and in the statement at the beginning of the revised National Curriculum Orders (DfEE/QCA, 1999).

Although some people described various negative feelings in relation to certain aspects and experiences in the past, nevertheless everyone spoke about the enjoyment they gained currently from the musical activities in which they engaged in their **lives outside school.** Positive feelings were not so evenly found across music experienced *in* **school,**

where several teachers spoke of feeling unconfident with certain aspects — particularly those involving instruments and composition. This was particularly problematic given a widespread acknowledgement of the need for pupils' practical involvement.

Most of them could describe different types of knowledge, although the key one was **instrumental skill.** Because there was widespread equating of 'musicianship' with the ability to play musical instruments, many teachers felt lacking in musical knowledge and skills, which were considered desirable, sometimes even essential, for them best to fulfil roles as teachers of music. For some teachers this perceived lack of expertise meant they opted out of teaching music if possible [3B, 5B].

However, in terms of Shulman's (1986a; 1986b; 1987) categories of subject knowledge and Swanwick's (1994) categories of musical knowledge, teachers possessed **more, and more varied kinds of — mostly intuitive — knowledge** than they realised. This was seen, for example, in their ability to describe listening to a range of different music, both generically and specifically, and to talk about the aspects of music included in the school curriculum. Nevertheless, in relation to music education, there was less influence of the codified subject knowledge (Eraut's (1994) public knowledge) than might have been expected, given the length of time the then current orders (DFE, 1995) had been in place. There was, in particular, a general lack of understanding of the internal links between the different aspects.

Music was important to these teachers, both for themselves and their pupils. They thought it an essential component in the curriculum, both as far as music education and music *within* education was concerned. However, they perceived it to have a low status, officially, within the **subject hierarchy,** which did not, generally speaking, mean there

was sufficient incentive to enhance their subject knowledge, although Dave was an exception here. Within music itself, alongside the emphasis on needing instrumental skills mentioned above, there was a tendency to underrate those aspects that came easily. So, for instance, those who felt confident singing assumed everyone could do it.

Finally, the teachers were aware of different **constraining influences** on their knowledge and practice, which can be conceptualised at different 'levels', working out from the class(room), to colleagues (including the music coordinator), the school, Local Education Authority (now redesignated Local Authority) and national (including the statutory requirements). Their attitudes towards such influences often seemed to depend on the extent to which they, as teachers, were able to exercise control over them, an aspect discussed further in the following section.

5: 3 Moving beyond the research questions

Having responded to the original research questions, the following section pulls together some of the aspects that have arisen in order to move towards developing a model conceptualising different facets of the teachers' subject knowledge.

The potential influence of teachers' beliefs has already been described (2: 2.2 and 2: 5.2.1). Thus it is not so much subject matter *as such* that is influential, but rather teachers' *beliefs* about subject knowledge (Pajares, 1992; Shulman and Quinlan, 1996) and, in this case, wider beliefs about music in education (Jorgensen, 1997; Plummeridge, 2002). The following section therefore considers what the *teachers* considered relevant subject knowledge and why they thought it was important. This

emphasis on teachers' beliefs inevitably involves an affective angle concerning their attitudes towards the different aspects.

5: 3.1 Relevant knowledge from the teachers' point of view

5: 3.1.1 Content of subject knowledge

As already noted, the subject knowledge considered most relevant by the teachers involved

- practical skills, usually acquired as a child, involved in knowing *how* to play an instrument — preferably the guitar or piano;

- knowledge of music as phenomenon, what they called 'theory' — particularly involving the elements (pitch, duration, dynamics, tempo, timbre, dynamics and structure) and associated with the National Curriculum;

- information *about* music — for example, details about composers and their works — which, although considered to be connected with instrumental learning, could also be looked up.

No wonder, then, that this was the knowledge against which they measured themselves. Their implicit view of the music teacher as competent instrumental practitioner meant they would, as Mills put it in relation to student teachers, 'measure their musical competence by what they cannot do' (1993, p. 4). However, as she continued, `Measurement of what they *can* do would be more to the point.' For example, Mills found that nearly all of her students 'enjoy listening to some particular styles of music' and that many 'have some experience of playing one or more instruments, perhaps by ear' *(ibid.)*. As already noted, this was also the case with the teachers in the current study. Yet what those teachers with less developed instrumental skills lacked, Mills suggested, was musical self-esteem, and she made the point that 'If self-esteem is good

for children, then it seems likely that it is good for teachers teaching music' *(ibid.* p. 5). As seen above, the teachers in this study underrated what they took for granted. Therefore, any attempt to increase self-esteem involves revealing the existence and relevance of teachers' current knowledge and experience.

5: 3.1.2 The perceived importance of subject knowledge

All the teachers mentioned needing subject knowledge in order to be an effective teacher. This was most often expressed in the negative, as in Valerie's assertion: "I can't teach it because I don't know enough" [6B II: 87]. Even those who did not include it in some form in their maps (RA, 2B, 4A and, possibly, DH) spoke of it during our conversations and Caroline described as a "nightmare" the position of a class teacher who was expected to be "a master of all trades" covering the whole curriculum [2B III: 83-84].

Karen, from her belief position of teacher-as-specialist, distinguished between enough knowledge to facilitate activities and that required to teach for understanding:

> [I]t depends what you're [meaning by] teaching music: you know, singing a few songs, or do you want them to understand about music, you know, reading music, playing music, appreciating music, knowing what the difference between all sorts of things are ... [You] can teach them some songs ... But ... for the children to get more from it, I think you've got to have some—, be able to teach them a bit more than that. [3B III: 127-141]

This point relating to teaching for understanding was also made by John. In this, they reflect researchers who have found that superficial knowledge lacks conceptual awareness and internal connections (for instance, Grossman *et al.,* 1989; McDiarmid *et al.,* 1989; Bennett *et al.,* 1994; Newton, 2000).

The teachers' comments covered product and process, declarative and procedural knowledge. For example, the following quote from Hilary, talking in her capacity as music coordinator about Key Stage 2 teachers trying to tackle 'appreciation', incorporates all three of Shulman's main categories, as well as Swanwick's declarative and acquaintance knowledge:

> [O]nce they've actually played the piece and the children have listened, they're a little bit lost — "What do I do now?" And we do have some resources to help them, but it's difficult. It is difficult ... Plus you have to take the music home with you, you need to listen to it — you need to be familiar with things as well, don't you? ... because so often they don't know what they want, they don't know what we've got. [4A II: 105-112]

Comments about the need for subject knowledge came both from those who considered they *did* possess such knowledge [RA, 1A, 1B, 4A] and those who thought they did *not* [3B, 5A, 6B]. Jo explained why she appreciated her knowledge in the following way:

> I think possibly [for] a lot of teachers, if you haven't got a musical background, you haven't got the confidence ... Because I know what music is, I can do it at a basic level ... I can see where it fits in. So probably my background understanding of music is the most important thing for me so that I do know how to teach them at their level. [1B I: 244-248]

In the already mentioned three-year ethnographic study of the arts in elementary schools in the United States (Stake, Bresler and Mabry, 1991), Bresler similarly reported that `Most teachers did not feel comfortable teaching music because they lacked a formal music background and experience' (Bresler, 1993a, p. 3).

In the current study, Jo's link between subject knowledge and confidence was one frequently made. In the recent Ofsted report, inspectors had noted that many teachers at this school seemed 'unsure about the subject' and, although my study was not looking specifically at teachers' confidence, the latter was often referred to, with several teachers describing an interactive relationship between subject knowledge, confidence and enjoyment:

confidence

subject knowledge ←_____ enjoyment
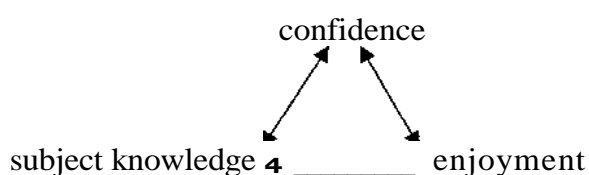
Fig. 5: 1 The relationship between three recurring aspects in the teachers' thinking

Sheila considered "It's easier to teach skills that you know and feel confident with" [3A III: 130]. Karen was characteristically forthright: "Teachers are not confident teaching music because ... it's a very specialist thing, to read music, to play an instrument" [3B I: 243-244]. Alison attributed her lack of confidence to the fact that "I feel I don't have enough what I would call subject knowledge" [6A I: 143]. For many teachers, such knowledge was synonymous with experience in the subject (often equated with instrumental and allied skills), so that Emma explained her greater confidence when teaching English by saying "I don't feel I have the experiences that I have in English in music" [2A III: 177-178]. Jo also linked confidence with previous experiences in all subjects, describing how it was necessary to feel you have had some experiences "before you can teach it. And that again is the same, isn't it, for all subjects? Unless you feel confident *yourself* you cannot deliver it confidently to the children" [1B III: 21-24]. Patricia described a mutually reciprocal link between confidence and enjoyment and her colleague, Michael, made the connection with knowledge: "Knowledge, that leads to confidence" [5B II: 172]. On the other hand, Ruth, who had spoken in glowing terms of the support received during her initial teacher education, connected all three aspects (and terminology) to give a picture of her 'good enough' capability as teacher:

> I would say definitely no confidence [laugh]. And it's back to the terms and ... I don't feel—, I haven't got a good singing voice, but I think well, I've got enough to get by. So not confident with my *own* music level, but do enjoy teaching it. [N I: 266-269]

Despite any perception of lack of subject knowledge, all the teachers enjoyed doing with the children those aspects of the curriculum that they *did* include. This may be because they only included what they felt happy teaching, since, as Hilary explained, "You tend to teach what you are happy with" [4A III: 93). The converse point was made by Jo: "Hand on heart, you know, people don't do it if they haven't got the confidence and they don't like it" [1B II: 31-32]. In this they are backed up by Hennessy who, discussing the coordinating of music in the primary school, wrote, 'we will all teach to our strengths and passions' (1998, p. 51). Nevertheless, that shows that all the teachers enjoyed, and therefore felt sufficiently comfortable with, some aspects of the curriculum. However, connected with Valerie's already quoted remark about music not being important enough in the hierarchy of subjects to warrant developing one's teaching expertise, it also explains why, despite length of teaching experience, some teachers may not have received enough relevant music teaching experience to enable them to feel confident in the subject.

Even though one might have expected that teachers' experience of learning instruments when younger might help their confidence, this was not the case here for any who did not still play an instrument, even though several of them spoke of having retained sufficient vestiges of notational skills to support them during the broadcasts [RB, 3A, 3B, 6B]. Hennessy (2000) reported similar findings in confidence levels among student primary school teachers. In a study where seven out of ten students had learnt to play at least one instrument — so were chronologically closer to the experience than the teachers in my study — they all considered music to be the subject in which they had least confidence *(ibid.* p. 188). She concluded that 'There is no evidence from the data that subject matter knowledge acquired through playing an instrument had any impact on their initial level of confidence or their later motivation to teach music.' She,

interestingly, suggested that it was even possible that 'the experience of learning and then giving up at a fairly elementary stage' might lead people to believe they were `inadequate as musicians' *(ibid.* p. 189). Gifford (1993), in Australia, and Barrett (1994), in Tasmania, found practical experiences within the music curriculum were more conducive to enjoyment and thus confidence in *student* teachers than increases in traditional subject knowledge. An emphasis on practical curriculum involvement during ITE may indeed empower those previously lacking confidence to engage in musical activities with their classes — as indeed can be seen in Ruth's case in the present study. However, in the interests of teachers' independence, ability to play an instrument could well be beneficial to teachers — especially if they believe it to be so. The Hay McBer report (2000) defined confidence as 'the belief in one's ability to be effective and to take on challenges', thus linking with self-theories (Dweck, 2000) and self-efficacy (Bandura, 1997) and confirming the potency of an individual's beliefs.

Authors and publishers of curriculum resources for teachers often stress that no instrumental skills are needed in order to use the material successfully (for example, Holdstock and Richards, 1995; Feldberg and Atkinson, 1997; Cain, 1998). This may be true, in so far as the suggested activities do not require the teacher to be able to play an instrument or read staff notation in order to enable their pupils to take part in those particular activities. However, all the above examples in circulation at the time of these interviews, together with the QCA/DIEE scheme of work published during that same year (2000), include instances of staff notation, thus possibly reinforcing, however unintentionally, teachers' views that such skills *are* required. As far as the teachers in this study were concerned, instrumental skills were not just desired to match an image of 'teacher-as-musician', but were recognised as desirable to access and select new material, thus increasing independence; to present activities in a musical way; and to

enable the teacher to act confidently as a model of musical behaviour. They liked to feel on top of a subject: to know what they were talking about. As already reported, some form of instrumental playing was the magic wand choice for all but one of the teachers.

This may be a case where what the teachers concerned think about an area is more important than what others may argue about it. In other words, if teachers believe they need instrumental skills, then that belief colours their actions, and thus should be taken into account in initial teacher education and continuing professional development (see Conclusions chapter).

5: 3.2 Other influential factors

However, there must be more to the equation than the *amount* of subject knowledge, or teachers with similar amounts of similar types would feel empowered to similar extents. One factor, of course, relates to individuals constructing knowledge from different experiences within different contexts. Another factor is teachers' beliefs about the nature of music and music education.

5: 3.2.1 Beliefs about the nature of music and education

The importance of beliefs about the nature of music and music education can be seen, for example, in the differences between the two Year 3 teachers. Although Sheila and Karen had received, from their descriptions, what might be considered similar amounts of musical experience as children, Karen's beliefs about what music education should be prevented her feeling able to teach music. This meant, that even though she admitted she had "a good voice", had some musical skills (including a basic knowledge of notation), "tinkled" on the piano at home, and believed that some aspects "anybody" could do, she maintained adamantly and repeatedly her belief that only those with

instrumental skills could be effective teachers. However, it is of course possible that her devaluing of the classroom curriculum might be, at least in part, an excuse for her non-engagement.

On the other hand, Sheila's social-constructivist belief that it is in the "togetherness" of teacher, child and subject that the learning occurs, meant that she was able to participate alongside the children, using her pedagogical skills to help construct their knowledge through practical experience. This is demonstrated, for example, in her scaffolding questioning techniques and in linking musical concepts with physical gesture (see above, 5: 2.3.2). For her, the music outside the classroom curriculum was almost more important than that within. When giving examples of practice she drew more frequently from occasions outside the 'official' *Time and Tune* session than from it, giving details of, for example, including musical activities in assembly, using musical activities to support maths and literacy and incorporating background listening in the classroom.

If teachers believe instrumental skills to be important, they may not consider they are capable of providing effective teaching if they lack such skills (see Hennessy, 2000, pp. 183-184). In this school, a few teachers seemed to be rendered incapable when their view of music and music education could not accommodate their lack of these perceived necessary skills. Their beliefs regarding the need for that specific aspect of subject matter knowledge outweighed even considerable general teaching experience and apparent pedagogical skills [especially for 3B and 6B].

However, subject knowledge itself is not necessarily related to pupil achievement (GudmundsdOttir, 1990, p. 116, quoted 2: 4.3.4), nor specialist qualifications in music to

high quality music teaching (Mills, 1997b). Mills described how the use of pedagogical skills can counterbalance a lack of specialist skills:

> What the successful class teachers brought to their music lessons was their ability to observe pupils, work out what they could do, and plan an activity which would move them forward. (1994, p. 193, quoted above, 2: 5.1)

As the final item in a list of the 'abilities required of the class teacher in handling music in the classroom' Glover and Ward include a very similar aspect, namely, 'to assess progress, identifying developmental needs and matching provision to them'. The preceding item reads 'to plan and provide for music learning of an ongoing kind within the whole curriculum for each child' (1993/1998a, p. 10). However, both these are difficult to achieve without knowledge of children's musical development and a wide repertoire of potentially appropriate activities.

5: 3.2.2 Forms of subject knowledge

Subject knowledge has various components. The specialist qualifications referred to by Mills often involve high-level performance skills and/or knowledge about music: part of Shulman's subject matter knowledge (1986b; 1987a). However, what the above quotes from Mills and Glover and Ward describe is what Shulman called pedagogical *content* knowledge: the pedagogical knowledge particularly pertaining to the subject itself, containing knowledge of possible representations of the subject alongside knowledge of pupils as learners. It was this aspect that also seemed lacking among several teachers in this school, particularly in Key Stage 2: the knowledge of what is involved in children's music-making, and of pupils' development in music, together with the curricular knowledge of a range of suitable activities from which to draw. They might feel less dependent on their traditional view of musical knowledge if they had more awareness of the pedagogical content knowledge relating to children's musical development.

The teachers seemed more able to fulfil other, personal aspects in Glover and Ward's list mentioned above, especially 'to be a demonstrably careful, perceptive listener, responsive to sounds and to their qualities and to music', which, as the authors point out, is a way of demonstrating musicality (1993/1998, p. 10), even if not recognised as such by several of these teachers.

5: 3.2.3 Self and musical identity

The importance of a teacher's 'self' was described in the literature review (2: 4.2.3). It is included here both as a generic expression covering various connected issues either identified by the teachers or by other aspects in the literature and also as support for the importance of acknowledging that the teachers' beliefs are critical. Nias, for example, argues 'it is perception ... which lies at the heart both of the teaching process and of the teacher's self-image' (1989, pp. 45-46).

An aspect identified by the teachers as an important factor in what they and other teachers did was what was by them most usually termed **personality,** but which also, in its amalgam of personal qualities, reflected Nias's (1989) concept of 'self together with part of Hay McBer's 'professional characteristics' (2000, section 1.3). This aspect was seen, for example, in Fiona's map cluster relating to the teacher's personal characteristics, which included skills attributes and enthusiasm (see Appendix E: 1A). In a similar way, Jo described how a good music teacher needed to be "a confident person, but you've also got to be happy to experiment" and to give the children enough freedom to try out things for themselves [1B III: 27-35]. In an earlier interview, she had also used the notion of personality to help explain individual tastes in music:

> I know that everybody's tastes are different and therefore you can enjoy sounds according to your personality and your background, I suppose. It's what makes you tick, I think, that decides what you like and what you don't. [I: 198-200, also quoted 4: 1]

Caroline considered her lack of confidence as a natural trait:

> If you were from any other department asking me questions about PE or Art or any other subject I would give you the same answers: that I'm not very confident, no matter how much training I've had, or what courses I've been on ... I'm not a very confident person ... I try my best to do what I can, but if somebody asks me "Are you confident teaching this?" I would always say "No!" [2B I: 199-203]

Perceptions of **autonomy and control** were also relevant. For example, the division of perceived influential factors into those over which the teachers had control or not has already been pointed out.

Nias has described the need for teachers to act consistently with their beliefs and values, particularly as they tend to interpret the meaning and purpose of their work in terms of its effect on their selves (1996). Jeffrey and Woods (1996) report teachers feeling deprofessionalised in response to an Ofsted inspection. In the literature review (2: 2.2.2) it was noted that Flynn and Pratt (1995) described how the National Curriculum was forced upon teachers, who then had no sense of ownership. Teachers' increased lack of control over both curriculum content and styles of teaching was reported by the PACE project (Pollard *et al.,* 1994; Osborn *et al.,* 2000; McNess *et al.,* 2003; see 2: 4.2.1). This lack led to feelings of 'loss of personal fulfilment and autonomy' and of 'a disjunction between policy and preferred practice' (McNess *et al.,* 2003, pp. 249 and 255). This is supported by Gipps, McCallum and Brown, in their Economic and Social Research Council (ESRC) funded research investigating Year 6 teachers' views on stereotypical models of pedagogy in relation to assessment, when they reported that `some teachers conveyed the feeling of having lost control of the curriculum' (1999, p. 133). Although the teachers in that study professed different preferred models of pedagogy dependent on subject, pupils and school ethos, many reported feeling pushed

into a transmission of facts mode because of the pressures of the National Curriculum —
particularly the amount of work to be covered *(ibid.* 1999, p. 132). Despite the fact that
several of the teachers in the current study remarked on similar time pressures pushing
them to cover the prescribed curriculum [especially 4B and 6B], it was difficult to
assess whether they felt a similar influence on their styles of teaching in music,
especially since the Key Stage 2 teachers were so dependent on the schools' broadcasts.
However, if that *was* happening with some of the teachers here — in any subject — then
any perceived lack of suitable subject knowledge would have a more detrimental effect
than in a more child-active, interpretive style of teaching and learning where there
would be less emphasis on the teacher as the font of knowledge. This is therefore a
vicious circle, because when, for whatever reason, the emphasis is on a transmission
model of teaching, then the opportunity to try out and gain confidence from a more
interpretive approach is not experienced, and the teacher remains feeling incompetent in
a didactic role, hence Hennessy's (2001) remark above (5: 2.3.1) about the lack of
constructivist influences on teaching in music.

In their survey relating to primary schools and music following the introduction of the
National Curriculum, Lawson, Plummeridge and Swanwick (1994) identified three
necessary roles for a teacher of music which they say are `presuppose[d]' by the
`objectives and content of the National Curriculum': musical model, music critic and
curriculum developer.

> The teacher is necessarily a musical model when presenting, directing and
> rehearsing activities. As a music critic he or she is constantly active in
> selecting music to play, in feeding back impressions during rehearsal and in
> responding to the compositions of children and professional performers. As
> curriculum developer the teacher of music needs to know when to move to
> some other activity, what is appropriate for individuals and groups, how to
> sequence work and how to relate composing, performing and listening. (1994,
> p. 12)

All of these emphasise the teacher as subject leader. More realistic and less threatening for those lacking in confidence, for whatever reason, is Hennessy's advocacy of 'the role of teacher as facilitator, mediator and monitor' (1998, p. 79), although she does also tackle ways of coping with the role of 'director'. In this same book, discussing how to work effectively with colleagues as coordinator or consultant, she advises that `People need to feel valued for what they do, and in control of it' *(ibid.* p. 33). As well as the sense of control over the curriculum in general, we have also seen here that the teachers' need to feel on top of the subject in order to feel happy teaching it: they need to 'own' the necessary knowledge. They also need to own access to specific material, and several teachers expressed a lack of satisfaction about being dependent on other teachers for accessing new (song) material [especially 3A, 5A, 6B].

The concept of ownership involving choice and implementation has already been mentioned in the context of the choice of music for Assembly and in the Key Stage 1 Christmas show. Following the previous coordinator's retirement, this shared responsibility — and ownership — also extended to other areas of music making-

> Because it used to be [that] the onus was on Marion and [she] was happy to organise everything. But now we're doing it all together: we've chosen songs together [that] we want to learn — we're all practising ourselves, and then we're all practising together, and it's very different the way music's being coordinated now ... It wasn't negative at all [with Marion] — she was very good and we enjoyed what she did ... [2A II: 53-58]

As far as the content of the National Curriculum is concerned, the PACE report described how the National Curriculum exemplified Basil Bernstein's 'collection' type curriculum, where there are few links between tightly specified subject areas. Such tight `classification' is matched by the strength of 'framing', which reduces the teachers' options over what should be taught (Bernstein, 1971). For music there is less prescription than in the core subjects (Spruce, 2002). However, although this is a benefit

for those, such as Fiona, Jo and Hilary, who are confident about providing music education to their classes, it may not be an advantage for teachers who feel unable to draw on their own knowledge, and thus cannot take control of the subject except by means of the surrogacy of a radio programme [3B, 4B, 5A, 5B, 6B].

The Hay McBer report into teacher effectiveness defined 'professional characteristics' as `hav[ing] to do with self-image and values; traits, or the way the teacher habitually approaches situations; and, at the deepest level, the motivation that drives performance' (Hay McBer, 2000, para. 1.3.1). Self-image is one of a group of related terms, such as self-concept, self-image and identity, for example, which are defined and used in education in various, sometimes overlapping, ways.

In the case of **identity,** this inconsistency in definition is seen in and is noted by, for instance, Nias (1987; 1989), Wenger (1998) and Woods and Jeffrey (2002). In their review of research on professional identity, Beijaard, Meijer and Verloop (2004) found the concept of identity was often not explicitly defined, but could be tied to images of self or to role and included social as well as individual opinions. Identity as a focus of study stretches across different psychological, philosophical and sociological fields with a correspondingly diverse literature. For the purposes of the current argument it is sufficient to recognise the existing widely held acknowledgement that a person develops concepts, sometimes idealised, of him/herself in various (social) settings — personal and professional — which may or may not accord with the identities constructed of that person in such settings by other individuals or society in general. Dolloff summarises the concept of identity as 'a socially constructed view of self(1999, p. 192).

Within the field of music psychology there is increasing interest in **musical identity** (see, for example, Hargreaves, Miell and MacDonald, 2002a; Hargreaves and Marshall, 2003), helping to increase understanding of 'the individual's musical behaviour 'from the inside" (Hargreaves *et al.,* 2002b, p. 7). We have already seen how the model of Hargreaves, Marshall and North (2003) includes 'the development of individual self-identity' as the 'ultimate outcome' of music education *(ibid.* p. 160). Within the concept of musical identity are two main threads formed within particular social and cultural contexts: how we see ourselves in relation to music (identities in music: IIM) and how we use music to support and express our self-image (music in identities: MID. How the teachers in the current study perceive themselves, often negatively, as 'musicians' and `music teachers' are examples of the first concept (IIM), while Jo expressed her perception of the second (MID when she commented

> But the music — it allows us to find a little bit about other people, doesn't it? It's a good thing ... if you don't know somebody very well, and then you go to their house, and you listen to what music they like. It immediately gives you a dimension to their personality. [1B III: 191-194]

Hargreaves, Miell and MacDonald (2002b) describe the 'self-system' as made up of a number of self-concepts or self-images: the different ways in which we see ourselves in different contexts or situations. They explain self-identity as 'the overall view that we have of ourselves in which these different self-concepts are integrated' and self-esteem as 'the evaluative component of the self, ... [with] both cognitive and emotional aspects: how worthy we think, and feel we are' *(ibid.* p. 8). The different concepts of 'entity theorists', who believe their 'abilities are fixed and innate', and 'incremental theorists', those who believe their 'abilities can be changed through practice and effort' *(ibid.* p. 14; and see Dweck, 2000), may help explain the differences between those teachers in the current study who made efforts to build up their knowledge and skills — most notably Dave — and those who did not. However, the social constructivist concept of

self-efficacy, described as 'beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments' (Bandura, 1997, p. 3), is also relevant here. Karen's repeated assertion that 'teachers' (and therefore she) cannot teach music unless they are 'trained musicians' is an example of low self-efficacy. This then becomes a self-fulfilling prophecy because 'If people believe they have no power to produce results, they will not attempt to make things happen' (Bandura, 1997, p. 3). The tendency towards lack of musical self-esteem among primary generalist teachers who equate musicianship with instrumental skills (IIM) has already been noted (Mills, 1993). Interestingly, Lamont (2002) reported that children in schools where formal instrumental teaching was provided were more likely to describe themselves as non-musicians if they did not have that formal tuition than were children in schools where there was no such provision. This shows the effect of the surroundings against which we compare ourselves. Identities 'are constructed and reconstructed by making comparisons with other people, and this continues into adult life' (Hargreaves *et al.,* 2002b, p. 15). This means that 'Being 'unmusical' is only tenable as a concept in relation to behaviours that are assessed against the rule system inherent within a particular musical genre' (Welch, 2000, p. 2). Those teachers who considered themselves 'unmusical' were reflecting a widely held, almost implicit belief, building on their past experiences, where 'the model of music education for most adults has been of the teacher playing an instrument, singing and leading the group' (Odam, 1995, p. 5). The piano skills of the recently retired coordinator, Marion, provided the most recent musical identity against which the teachers compared themselves as teachers of music, so no wonder they saw themselves as deficient.

Teachers may be part of different groupings within their personal and professional lives, in each of which — discrete or overlapping — they may have developed different selves

or identities. Different authors give these groupings different names, and define them in various ways: for example, the 'reference groups' of Nias (1989), Wenger's `communities of practice' (1998), Lamont's `microsystems' (2002, using Bronfenbrenner's model) and Jorgensen's 'spheres of musical validity' (1997). Such groups may be general (for example, Lamont, 2002; Wenger, 1998); related to one's role as teacher (for example, Nias, 1989; Day, 1998; Woods and Jeffrey, 2002); or concerning musical experiences (for example, Jorgensen, 1997; D.J. Hargreaves *et al.,* 2002a). As an example, Ruth not only talked of her role as Nursery teacher in her professional life; but also stressed the importance in her home life of her role as an active member of her local church — within which she also ran a Sunday School/crêche. In this instance, each of these roles, and thus her different identity within each role, included music. Every one of the teachers in this study possesses an identity as a primary (class or deputy head) teacher as well as a musical identity (both IIM and MII). Nias describes how these different social contexts lead to an individual's construction of `multiple selves' (1987, p. 181). However, while there is acceptance that these contexts exist at differing levels of generality and of (in)formality, there are different opinions as to the extent to which the different (situational) selves can be discrete or overlap, perhaps with an inner, relatively unchangeable, core (the substantial self). Wenger describes how 'At home, at work, at school, in our hobbies — we belong to several communities of practice at any given time' (1998, p. 6). Thus

> we engage in different practices in each of the communities of practice to which we belong. We often behave rather differently in each of them, construct different aspects of ourselves, and gain different perspectives. *(ibid.* p. 159)

In her development of the concept of spheres of musical validity, Jorgensen makes a similar point in regard to music when she writes that 'Individuals may be members of several spheres of musical validity simultaneously and in different relation to each

sphere' (1997, p. 40, also quoted above, 2: 5.2.7). The diverse identities we form as members of these various groups or communities mean that, according to Wenger, `identity is not a unity ... neither is it simply fragmented', but rather what he terms 'a nexus of multimembership', where 'multiple trajectories become part of each other, whether they clash or reinforce each other' *(op. cit.* p. 159). Acker, for example, observed how teachers' personal lives could affect their professional work (1999).

Reimer notes that 'our group identities play a large role in defining who we are' (1997, p. 6). If one can belong to different communities, then there is potential for dissonance between one's different identities and such conflict has been noted between teachers' selves as teacher and as musician among elementary specialist music student teachers in Canada (Dolloff, 1999); among elementary specialist teachers in the USA (Bernard, 2004); and among secondary music teachers in the UK (Cox, 1999; Hargreaves and Marshall, 2003). However, as Roberts pointed out in his account of (secondary) music education students in Canadian universities constructing their identities, music teachers seem to feel the need to identify themselves as musicians more often than, for example, science or history teachers see themselves as scientists or historians (Roberts, 1991, p. 32). Nevertheless, there are links here with the already-mentioned tendency of primary school teachers in this country to discount their potential abilities as teachers of music by undervaluing their musicianship when equating it with performance skill.

From a more general perspective, Woods and Jeffrey (2002) describe how, in response to the various educational changes since the mid 1980s (particularly Ofsted inspections), primary teachers' identities have shifted from the generally integrated `personal and occupational self noted by Nias (1989), to accommodate 'a more instrumental and situational outlook' (Woods and Jeffrey, 2002, pp. 90 and 89).

Although it is possible to dispute their summary of Nias's findings, given her frequent illustrations of different levels of commitment and identification as teachers (see Nias, 1989, ch. 2, for example), it is certainly true that the landscape (Connelly, Clandinin and He, 1997) of schools has changed radically since the era she was describing (as, indeed, Nias herself foresees in her Conclusion). Although Nias found 'a few teachers' who had `learnt how to, what they called, "safeguard my own life"' (1989, p. 39), Woods and Jeffreys depict a far wider recourse to various defence mechanisms utilised by teachers to protect their personal identities by 'reserving and cultivating what to them were more important aspects of the self for their private life outside the teacher role' *(op. cit.* p. 100; and see Nias, 1989, ch. 3: *Defending the self in teaching).* In other words, teachers' professional identity is now often separated from their more important personal identity, with varying degrees of reconciliation.

5: 3.3 Different contexts of musical experiences — home and school

`Teachers are people too', wrote Fullan and Hargreaves, reminding us that teachers have a life outside school (1994, p. 67, also cited above, 2: 4.2.3). One interesting aspect about this study was the recurring discrepancy between the enjoyment teachers felt when engaged in music at home and the frequent lack of confidence expressed about music in school. Although, when asked, teachers replied that they enjoyed music in school, this was often tempered by insecurity about their ability. This was expressed even by those with self-acknowledged musical knowledge and skills. For example, although Jo participated widely in musical activities outside school and spoke enthusiastically about music in the classroom, declaring "I love doing music with the class" [1B I: 130], she still described limitations in relation to her instrumental skills: "I'd like to be able to just sit down and play a piece of music for Assembly. I'd like to have the skills" [1B I: 252-253, also quoted 4: 3].

This discrepancy between the private and professional attitudes to music among primary school teachers is not uncommon:

> [M]any teachers have little or no sense of musical self when considered in a teaching context. Yet this contrasts dramatically with the actual role of music in these same people's non-professional lives. (Glover and Ward, 1993/1998a, p. 11)

If our knowing is in our action (SchOn, 1983), then how we know music is shown in how we use music (DeNora, 2000). One of Shulman and Quinlan's four identified strategies 'for addressing the question of how to define the subject matter' involved studying 'how the ideas of the discipline are actually employed in everyday life' (1996, p. 418). In this instance that would involve examining how music is used by these teachers in their personal home life and their professional school life. For choice, the teachers in my study most frequently seemed to use music emotionally — to relax, to energise, to support, or otherwise 'to regulate [their] own everyday moods and behaviours' (Hargreaves *et al.,* 2002b, p. 1). They also often used it in affective ways with their pupils [especially 3A and DH] (found also by Bresler, 1993a). As Sheila said, "I play relaxing music as a background ... that's what you would do at home, wouldn't you?" [3A I: 97-98]. Several used it as a social medium outside school (music making with friends, background recorded music with visitors, trips to concerts and shows), but it was equally appreciated for its potential in solitude — in the home or car.

However, there was a common perception that music in school was different from that outside school both for them and their pupils.

Although it was realised that the children *"all* have experience [of music] from home, every one of them" [2A I: 198-199], several teachers described these as disconnected

from school music. This distinction between school and non-school knowledge is neither new, nor peculiar to the subject of music (Bernstein, 1971; Young, 1998). In the music education literature, Jorgensen talks of the `decontextualized' nature of school music (1997, p. 30; see above, 2: 5.2.7) and Swanwick explains how music can be perceived as 'a quaint musical sub-culture' (1999, pp. 36-37; and above, 2: 5.2.7). In this study it was recognised by John, for example, who described how "children look at music in school as something totally different from Top of the Pops. They don't associate" [4B I: 166-167]. Karen was more specific: "I've had Year 6 who *hated* the kind of music that was in the National Curriculum but, you know, who would love to get on the drums and play out" [3B III: 62-63], while Dave summarised it as the difference between Boyzone and Bach [DH I: 206-218], thereby also, probably incidentally, indicating how 'legitimate' music in school tends to be tied to the western classical tradition (Spruce, 2002). This distinction between home and school has also been found in secondary pupils by Boal-Palheiros and Hargreaves (2001) who reported that although music at home was associated with enjoyment and positive emotions, school music was linked with information and learning. In other words, music is perceived from different viewpoints and, maybe, in different ways.

In his fascinating book linking research into the brain — particularly laterality — with effective musical experiences in the classroom, George Odam describes how this distinction might be apparent when listening to music:

> For the majority, a musical experience is taken in through appreciation of overall shape and contour, pulse and pattern and is enjoyed in a very general and unenquiring way. As we listen we are free to form images or metaphors which are personal and our feelings can be affected. Listening to music for structure, sequential thought, logics and predictions, for instance, requires a differently concentrated mental set, and many people have simply never experienced this. (1995, pp. 5-6)

This also links with Swanwick's (1994) already noted distinction between intuitive and analytical knowledge (2: 5.2.3).

Although it might not be surprising that music in school should be linked with learning, the Boal-Palheiros and Hargreaves study (2001) 'highlights the importance of *contexts* of music-making' (Lamont *et al.,* 2003, p. 231). As Lamont and her colleagues explain, `Involvement in music listening and activity can take place easily in informal as well as formal contexts, and the relationship between music-making in and out of school is becoming increasingly complex' *(ibid.).* From my study it appears that this 'complex relationship' may apply to the teachers as well. Music engaged in through choice out of school was a more informal, intuitive kind of experience than the more analytical approach to curriculum music in school. At home the emphasis was on the emotional and social aspects of music, whereas the formal school curriculum was perceived as cognitive knowledge about music and its elements. This clashed with the teachers' wider perception of music's nature and potential and may explain why there was frequently more of an emphasis on the emotional and social attributes of music when it was used in school outside the class 'lesson', for example as background music in the classroom or at lunch times, in the joint Foundation Stage action song sessions, or in an informal Christmas singsong reported by Michael.

Hargreaves and Marshall add another setting to home and school in their investigation of the contexts in which young people's learning takes place, defining the 'third environment' as any 'contexts in which music learning takes place in the absence of parents or teachers' (2003, p. 266). Just as we saw the importance of ownership of the curriculum for teachers, they report the importance for engagement and motivation of the 'autonomy and *ownership* on the part of the learner' involved in music outside

school *(ibid.).* One might also posit a 'third environment' for the teachers when they choose venues outside the home for involvement (albeit not necessarily intentional learning) in music: as participants at concerts, shows, musicals, parties; as instrumentalists with friends or at folk evenings; as singers at church; or in any of the other varied contexts in which they described accessing the power of music.

Yet the division between school and home music was not always clear cut. Several teachers spoke of trying to make links between home and school: either for the children's present benefit [N, 3A] or for helping prepare the children for their future life [4A, 4B, 5A]. Hilary mentioned the advantages of musical links with the outside world when talking about taking children out on visits to local hospitals [4A I: 128-9], an example of the type of benefit also appreciated by the schools in Lamont *et al.'s* study (2003, p. 233).

Glover and Ward urge that

> [S]chool must be a musical microcosm, giving music its real-life contexts within which to locate the teaching of its skills and knowledge and establish continuity with the outside world at every layer from that of professional performer to that of the everyday. The teacher must have musical self esteem and let musical responses show. The teacher must develop his/her musical self. (1993/1998b, pp. 3-4)

One way of doing this would be to encourage teachers to include their own musical preferences during assemblies and in the classroom. There was nothing to stop these teachers doing that, and indeed the coordinator spoke of encouraging them to do so (although she was disappointed the response was not more sustained). Sheila's use of calming background music in the classroom has already been noted and several teachers had brought in CDs for Assembly. For example, Dave spoke of being introduced to opera, which he then, in turn, had introduced to the children in school:

> Relatively recently I started to listen to a little bit of opera through my father-in-law who likes *Tosca* and so on. But I've actually introduced that into Assembly ... A few years back I would have thought that would have been "Oh no, I couldn't." But now I can find that children [are] able to entertain these thoughts, they're getting used to the thought that it might be something unusual, it might be stretching the boundaries a bit. [DH II: 52-57]

Patricia, notwithstanding what could be described as the least well-developed 'musical self' among these teachers, had asked for the extract from Prokofiev's *Romeo and Juliet* used by a local football team. There was sometimes an air of self-consciousness about this — perhaps because it did not happen very often, or maybe because there were implications regarding perceptions of legitimate or worthwhile knowledge (Young, 1971; 1999). This is implied in Emma's account of bringing in her own CDs

> ... much to [the children's] amusement. It's interesting to see their reaction because they're used to hearing all of the classical music from the Hall. If you bring something different in, especially if it's something they've heard of, they kind of see you in a different light, I think, they don't think you live in the cupboard any more! [2A I: 84-88]

However, the direct link she envisaged between school knowledge and one's future life meant she was unclear about the benefits of school music:

> I mean, I don't know, I know that we're doing it because we have to, but then what is it supposed to lead to? ... because I don't *know* many people that have gone on to become musicians ... But it's been useful for me because now I'm actually doing a job which does combine music. But a lot of the people I know don't do a job that's anything to do with music any more. And I don't know as they'll ever think of any of their experiences they had at school. [2A I: 203-212, part cited in 4: 1]

As already described, for her, the ubiquitous nature of music meant everyone experienced it outside school so that tuition inside school was unnecessary because `Even if you didn't go to school you'd hear music and you'd say, "Oh I like that" or "I don't like that" [I: 215-216]. However, even so, this did not mean music should not be included in the curriculum because 'I think it helps us in other ways ... for literacy and

everything' [I: 236-237].

Fiona described the difference between the music she was involved in at home and in school: "It's very different, the things that I do at home and through the weekends and so on are very different to what I'd be doing in school" [1 A II: 49-50]. However, both she and Dave had taken steps to develop their guitar playing skills outside school, in order, partly, to be able to play *in* school. Conversely, she had been on a Folkworks educational course in order to gain ideas to use in school, but which had also enhanced her enjoyment of folk evenings outside school.

Although the types of knowledge the teachers considered relevant in the school context were identified by the teachers in that professional connection, they were acquired from a wider range of sources. Similarly, knowledge acquired within the professional setting might then be used outside that setting. This somewhat blurred area may be accentuated when the area concerned — music — plays such a big part in life outside school, as well as being a subject within school. With the possible exception of reading, what other school 'subjects' are engaged in, to such an extent, by choice, by so many teachers in their lives outside school?

5: 4 Summary

This second half of the chapter developed aspects that arose during earlier stages of the research. In particular, given the research evidence about the importance of teachers' beliefs, various aspects relating to what the teachers themselves considered relevant about subject knowledge and the nature of music have been explored, with a subsequent discussion about how identity may be structured in relation to music.

As far as subject matter was concerned, there was evidence of each of Shulman's (1986a; 1986b; 1987) three main categories of subject knowledge and of Swanwick's (1994) four layers of musical knowledge. However, the teachers themselves did not distinguish in those ways, with *their* overall divisions being between **practical, instrumental skills** (including allied notation skills), **knowledge of music 'theory'** (involving the musical elements, and particularly associated with the National Curriculum) and **propositional information** *about* music. We have already seen the importance the teachers attached to the first of these forms of knowledge — for various reasons — and this section has noted their tendency to measure themselves against what they perceived they could *not* do, linking with the previously mentioned propensity to underrate what they *were* able to do.

Several teachers made links between **subject knowledge, enjoyment** and **confidence,** any one of which could have a positive, or negative, effect on the others. Experience was an important factor here and lack of sufficient instrumental tuition when younger, alongside the 'official' low position of music in the subject hierarchy, meant that, professionally, several teachers had had neither sufficient incentive nor experiences (for example via INSET) to strengthen their subject knowledge.

The overwhelmingly common feature was the crucial role of enjoyment within all facets of teachers' thinking regarding music in education. 'Enjoyment' is a broad term, used in different contexts to cover a continuum from superficial entertainment to satisfying a deep and fundamental need, and it was used in various senses by the teachers in reference to the nature of music itself, the value of music, music's value in the curriculum, and music's position in the curriculum, as well as to their and their pupils' response.

This emphasis on enjoyment is not unusual. For example, Cox and Pitts were able to begin their editorial for an issue of the British Journal of Music Education in the following way: 'A common thread running through the articles in this issue is that enjoyment is a vital but somewhat elusive criterion in shaping effective and engaging experiences of music education' (2003, p. 227). This is despite an infamous Ofsted report that criticised the emphasis on fun in a secondary school's music department (Learner, 2001). In an article discussing the implications of that report, Cope suggests that not only is enjoyment important in implicit learning, in motivation and in commitment, but that it is by no means the 'easy option' (2003, p. 313). Nevertheless, one wonders whether enjoyment would be such a prominent feature in teachers' thinking related to other subjects. Yet the work of the neuroscientist Antonio Damasio, who not only describes the important role of the emotions in thinking and learning, but also the neuro-biological effect of joy (and sorrow) on the brain (see, for example, Damasio, 2003), suggests that this might be advantageous.

A perceived **lack of subject knowledge,** especially instrumental skills, sometimes meant certain teachers [3B and 5A] opted out of teaching music as far as possible. This could happen to a certain extent in this school because of an accepted strategy of combining parallel classes for music sessions, with one of the two teachers leading the session. Yet the amount of subject knowledge, however measured, was not the only influential factor here, since otherwise any teacher without such skills would have done similar. The **importance of a teacher's beliefs** concerning the nature of music, education and music education was also found to be important, supporting the academic literature (for example, Pitts, 2000; Plummeridge, 2002; Reimer, 2003). This was particularly evidenced in the difference between the two Year 3 teachers, Karen and

Sheila, where Karen's beliefs about music training the brain through the discipline of learning an instrument, rather than through the class music curriculum, meant she, without vital instrumental skills, could not function as an effective music teacher. On the other hand, Sheila's insistence that learning was a constructive process in the experiences shared between teacher and pupil meant she could use her general pedagogical skills in enabling such experiences.

Sheila seems to support those authors who suggest that teachers can use their **general pedagogical skills** to provide an effective curriculum experience (for example, Mills, 1994; Glover and Ward, 1993/1998a). However, this study suggests this is not possible if a teacher's beliefs about the nature of music and music education imply a role incompatible with general pedagogical knowledge, especially when combined with a lack of subject content pedagogical knowledge (see 2: 4.2.2 for Shulman's conceptualisation).

Such differences between teachers were partly explained by them in terms of **personality** in ways that reflected aspects of the generic term of **'self'** as described by, for example, Nias (1989). An important concept here is the need for teachers to act consistently with their beliefs. This may not be possible if there is a mismatch between the teachers' beliefs about a subject and their perceived abilities to fulfil the educational consequences of those beliefs [Karen], or if external pressures, of whatever kind, seem to be forcing teachers into particular ways of working. Several teachers in this school mentioned time pressures due to the National Curriculum compromising how they worked [see for example 4B **I:** 223-5, quoted 4: 3]. There are links here with **autonomy** and agency in the sense of being in charge of what one is doing as well as having ownership of it.

This area of self also links with various other terms, including that of **'identity',** constructed in comparison with other people in particular contexts, so that people have different, sometimes overlapping, identities in and for the different contexts in which they function (see, for example, Wenger, 1998). This chapter has drawn on the notions of **music in identity** (MID: how we see ourselves in relation to music, and **identity in music** (IIM): how we use music to support and express our self-image (Hargreaves *et al.,* 2002a), with some examples from the teachers in this study.

It is important to remember that teachers have **identities beyond** those associated with their **professional selves.** In their out-of-school lives, all the teachers engaged in musical activities, albeit to varying degrees. All enjoyed listening to the radio or to recorded music and made active choices within that activity. Several described recent performances they had attended of dance, musicals and concerts of a wide variety. Some played instruments at home or beyond, for example at folk evenings. One [4B] had sung on a CD produced with a friend. One teacher [N] and the Head cited their association with the Church as a source of musical involvement. If we accept the concept of spheres of musical validity (Jorgensen, 1997), then each of these teachers belonged to more than one such sphere, while some moved between several, and these contexts for music were important for the teachers, not least, I suggest, because of the opportunity to exercise choice in their personal involvement in music.

However, in the teachers' *professional* lives, in school, issues relating to autonomy, agency and ownership became more problematic, and the emphasis on enjoyment summarised above was sometimes manifest by reference to its absence, or at least reduction, as several teachers spoke of feeling lacking in skills and confidence when

dealing with the requirements of the National Curriculum. Teachers' beliefs about themselves and their knowledge, based on past and current experience, were important in that they helped shape the teachers' identities as 'musicians', as teachers and as teachers of music. For some teachers these were not always in accord — particularly when lack of subject matter knowledge and skills were perceived to reduce their independence as teachers. School music was also generally perceived to be different from music outside school, with music at home involving a more intuitive and informal approach than the cognitive, heuristic subject in school music education. However, there were also various other occasions beyond the class 'lessons' when music was experienced in the school and, for some teachers and children — especially those in Key Stage 2 — there was almost more contact with music in school outside the class music curriculum than within it (see Appendix G). This music within the wider curriculum (music within education) was an area where the home values could more readily cross over into the professional sphere, as seen in, for example, Sheila's use of relaxing recorded background music.

Music plays a large part in many teachers' and pupils' lives outside school, with much knowledge gained intuitively from experiences outside the school curriculum context. In this study this is particularly relevant when considering that past and current experiences, in and out of school, helped form the teachers' beliefs about themselves which, in turn, helped shape the teachers' identities as 'musicians', as teachers and as teachers of music.

This study concerns teachers' thinking about music. However, there was not one concept 'music', since most of these teachers demonstrated, as individuals, different ways of thinking about **different musics** in **different contexts.** Therefore, in the next

chapter I put forward a model that connects the main features that have arisen from the findings, or from the discussion of those findings. The particular aspects involved comprise:

- the varying levels of enjoyment in different musical contexts, formal and informal;

- the perceived position of instrumental abilities;

- the different selves of the teachers, in particular their 'home' and 'school' selves, including their identities as musicians and as teachers;

- the importance of choice and, therefore, the skills and knowledge required to exercise that choice.

6

Conclusion

Although in one sense a conclusion obviously marks an ending, the contents of this chapter contain considerations of past, present and future aspects, although not necessarily in that order. I start by looking back over the study, pulling together some of the issues that have arisen, in order to construct a conceptual model that summarises and illustrates certain aspects of the teachers' thinking about music in education. A section describing the importance of the study provides a present perspective, while implications for practice and suggestions for further research look to the future. In closing, although I have commented on various aspects relating to the research throughout this thesis, there is a final retrospective view over the whole research process.

6:1 Constructing a conceptual model

The previous chapter has shown some links between the previously identified four main findings relating to teachers' thinking.

In particular it is possible to say that:

- music was important to these teachers, who demonstrated a wide range of beliefs relating to its nature and value;

- enjoyment was a fundamental feature for themselves and their pupils;

- the teachers possessed more knowledge than they appreciated (partly because of their various conceptions of the nature of musical knowledge and partly because

of the intuitive nature of much of the knowledge acquired from everyday experiences of music).

However, I sought a way of combining those findings in a framework that not only illustrated those aspects, but also helped explain some of the differences in attitudes revolving round issues connected with home and school: *musical contexts;* and with the making and taking of music: *musical activities.*

6: 1.1 Model building

Edwards contributed a chapter on model building to the first *Handbook of research on music teaching and learning* (Colwell, 1992). He described how, in a model, 'We strive to construct something that captures the essence of a process.' However, he distinguished between a model and a map, deeming that, despite the fact that each could be described as 'a neat, simplified means of representing, understanding, storing, and communicating information', a map corresponded to 'things', while a model stood for `actions and processes' (Edwards, 1992, p. 39). Nonetheless, he did accept, somewhat reluctantly and at a broad level, 'a particular sticky group of qualitative ones sometimes called "conceptual models" that may 'fill a representational need" *(ibid.* p. 42). The following model comes into that category.

Walford has described models as 'essentially simplifications of complex realities', which, by examining 'one particular aspect of the complexity', make it 'possible to construct a way of looking at that aspect which allows a story to be told.' He points out that focusing on another aspect might have led to a 'different and even seemingly contradictory model' and that other researchers might have developed different models, even if exploring the same aspect (2001, p. 148). These models are 'human constructs'

intended to illuminate understanding *(ibid.* p. 149). That the following model is only one way of illustrating a particular interpretation of certain aspects of teachers' thinking is hereby acknowledged.

Following Glaser and Strauss (1967), although acknowledging the limitations of their `prescribed formula', Eisenhardt draws on examples from business management in order to promote the 'intimate connection with empiric reality' when developing 'a testable, relevant, and valid theory' from case study research (1999, p. 135). She advocates the importance of having a 'close fit' between theory and data in order to yield 'an empirically valid theory' *(ibid.* p. 147) and maintains that 'One strength of theory building from cases is its likelihood of generating novel theory' by moving round and juxtaposing different aspects and data *(ibid.* p. 154). A potential disadvantage is that the use of the mass of empirical evidence means such theory can often be 'overly complex', when the 'hallmark of good theory is parsimony' *(ibid.* p. 155). Thus I sought a straightforward model, making close links between theory and data. A further disadvantage of the bottom up approach, Eisenhardt declares, is that 'the specifics of data produce the generalizations of theory', which can lead to 'narrow and idiosyncratic' theory which do not apply beyond the particular phenomenon studied *(ibid.).* Therefore, a model potentially relevant beyond the boundaries of this enquiry was also sought.

In their chapter *Making good sense: Drawing and verifying conclusions,* Miles and Huberman advise of the need 'to tie the findings of our study to overarching, across-more-than-one-study propositions that can account for the "how" and "why" of the phenomena under study' (1994, p. 261). They describe how this might be achieved, either working from the top down 'from a conceptual framework to the collection of

information testing its validity', or progressing 'from the bottom up — from the field to the concepts' *(ibid.* p. 262). It is the latter route that is relevant here and their four steps *(ibid.)* are now listed, illustrated with details from the current study, in order to show how this particular construct evolved.

6: 1.1.1 'establishing the discrete fmdings'

In general terms, these concerned the all-pervading place of enjoyment; varied views as to the nature and value of music in education — within the same as well as between different teachers; issues relating to instrumental skills; and the widespread use of broadcasts to deliver the classroom curriculum.

6: 1.1.2 'relating the findings to each other'

There were multiple links between the above. For example, although the teachers all enjoyed music in their personal, home, lives, they tended to distinguish between making and taking music, particularly in their equating of being 'musical' with playing an instrument. Singing, although an instance of making music, usually did not count as such because it was considered natural, even innate. Aspects of enjoyment were frequently linked with the possession or absence of instrumental skills, a tie which often became problematic when connected, in teachers' professional lives, with perceptions of music education and the teacher's role. Differences in these perceptions meant teachers responded differently to the challenges of providing musical experiences for their pupils, although there was a common distinction, under the umbrella heading of 'music education', between the statutory classroom curriculum, for all pupils, provided by themselves, and instrumental skills, available only to some pupils, typically provided by peripatetic specialists. A perceived lack of instrumental capability was one reason for the widespread use of schools' broadcasts in this school. However, although the

broadcasts were seen as compensating for lack of subject knowledge, aspects linked to the broadcasts' role as surrogate teacher were also appreciated by more confident teachers, even some of those with instrumental skills, who valued the broadcasts' potential for saving time in planning and for providing a range of activities and listening resources.

6: 1.1.3 'naming the pattern'

The teachers felt differently about different areas, relating to both context and activity, of musical engagement. Although all engaged in some forms of musical participation within their *home* lives, there were aspects of *school* music that were problematic for some teachers — even though they all professed to enjoy the areas they *did* include.

There are issues here to do with the nature of self (Nias, 1987; Brown and McIntyre, 1993) — in all its manifestations — but one main pattern, I suggest, relates to choice, autonomy and agency: the ability to make choices and act on them. Several teachers here talked about needing to feel on top of a subject: to know what they were talking about with the children. The words 'ownership' and 'in control' were mentioned several times. With enough of the right kind of knowledge they considered they could teach in the way they wanted, bearing in mind that they had differing perceptions of the teacher's role as music teacher.

Nias has described the need for teachers to act consistently with their beliefs and values, particularly as they tend to interpret the meaning and purpose of their work in terms of its effect on their selves (Nias, 1989; 1996; see also Hargreaves, 1998, and the previous chapter). How the teachers in this study engaged in music at home was through choice. What they did not like or could not do, they did not generally choose. This was not

necessarily the case for music in school — particularly classroom curriculum music. All the teachers identified contextual influences of different kinds and at different levels (national, LEA, institutional, key stage, class, self) on their professional lives and behaviour, and several, of their own accord, divided these influences into those that could be changed (by them) and those that could not.

However, what the teachers wanted to be able to do in relation to school music — music education and music within education — depended on their views relating to music and music education, and these, as we have seen, were varied.

6: 1.1.4 'identifying a corresponding construct'

In a study of teachers attending masters degree programmes in England and Northern Ireland, Day and Leitch explored 'the tensions within and between four inter-connecting areas of teachers' lives: the cognitive-emotional and the personal-professional' in the context of teachers' developing and maintaining a sense of self (2001, p. 403). Although the particular issues identified in that study were not specifically relevant to the current one, the underlying general concern with professional selves and the emphasis on the role of emotions suggested common connections, so that the personal/professional dimension seeming applicable here, matching the discrepancies relating to musical experiences at home and at school. However, given my use of 'personal' in Eraut's (1994) sense of 'personal knowledge', which is the particular knowledge of an individual in comparison with public knowledge, I have renamed that end of the dimension 'non-professional.' On the other hand, Day and Leitch's cognitive-emotional distinction did not work so well as a dimension for my study, given the interlinked nature of the two aspects throughout knowledge and music, as well as teaching.

A closer fit came from the literature I encountered which used a formal/informal dimension.

These terms are used by different authors in different ways. For example, Eraut, using the terms with reference to learning, has described the use of informal 'to describe any kind of learning which does not take place within, or follow from, a formally organised learning programme or event'. 'Formal learning' involves any or all of 'a prescribed learning framework', 'an organised learning event or package', 'the presence of a designated teacher or trainer', 'the award of a qualification or credit' and 'the external specification of outcomes' (Eraut, 2000a, p. 114). However, because 'most human learning does not occur in formal contexts' and because informal as a term can refer to other features of the situation, such as 'dress, discourse, behaviour, diminution of social differences, etc.' in that publication he prefers the term 'non-formal' *(ibid.)*. Within such non-formal learning, involving tacit or explicit knowledge, there is a continuum, depending on 'the level of intention to learn', between 'implicit learning' and `*deliberative learning* in time specifically set apart for that purpose' *(ibid.* p. 115). However, a few years later he reverts to 'informal' in a discussion of such learning in the workplace, where, in a relevant reflection of findings in the current study, he remarks that 'Informal learning is largely invisible, because much of it is either taken for granted or not recognised as learning; thus respondents lack awareness of their own learning' (2004, p. 249).

In their survey of music education from a psychological perspective, Hargreaves, Marshall and North suggest a 'globe' model structured round the dimensions of formal/informal and statutory/elective to illustrate 'the opportunities open to pupils across the broad spectrum of music education' (2003, p. 158). The formal/informal

dimension involves a mix of context, relationships between teacher and learner and the learner's perception of his/her role (2003, p. 156), not dissimilar to Eraut's formal/non-formal distinction. However, in a study that noted the distinction between home and school music for secondary pupils, Lamont and her colleagues, possibly unintentionally, imply a restriction of that usage to location alone when they say of the Hargreaves, Marshall and North model that it 'gives informal music-making outside school as much potential status as formal music-making at school' (Lamont *et al.,* 2003, p. 231), whereas it is, of course, possible for informal learning to occur within the formal school setting. This is, indeed, indicated by Hargreaves *et al.* in their globe model (2003, p. 158). However, to me it seems somewhat confusing to describe the respective poles of the statutory/elective dimension as 'in school' and 'outside school' since, for example, extra-curricular activities in school (informal/statutory quadrant) are usually chosen by the pupils; and instrumental lessons, here part of the formal/elective quadrant, often occur within school.

Although this formal/informal dimension is increasingly common in music education literature, it has varying connotations. Elliott (1995) uses the terms formal and informal music knowledge in the sense of propositional knowledge, including notation and terminology, and practical common sense, gained from experience. Green's (2001) investigation into popular musicians' acquisition of knowledge and skills uses the distinction to refer to the learning *process,* albeit linked with context. Then again, when Welch used this dimension (together with that of novice/expert) in an orthogonal model illustrating young children's musical development, it referred to the degree to which a child's behaviour contained 'certain defining features of the dominant musical culture(s)', where one example given is 'the skilled ability to play a musical instrument' (1998, see pp. 29 and 30). For Welch, therefore, the terms refer to how particular

behaviour — that is, usage of what has been learned: the knowledge itself — reflects the surrounding culture, rather than to the actual context in which the knowledge was acquired.

The Musical Futures project combines activities and setting when the formal, non-formal and informal *contexts* for music learning are described in terms of who runs the activities (Price, 2005, p. 5). So that while formal activities are 'organised through statutory provision — schools, colleges, music services' (although one might debate the use of the term 'statutory' to describe 'music services'), non-formal activities 'take place outside the formal settings' but are 'usually supervised by adult professionals or volunteers', and informal activities are organised and led by the young people themselves. However, it is acknowledged that 'these delineations cannot be fixed. Informal learning processes, for example, can take place in formal contexts' *(ibid.).*

Thus the terms formal, informal and non-formal have been used to refer to learning or knowledge as well as to context, relationships, and intent within them. Drawing on the above usages, I will be using formal and informal to describe the nature of musical activity and any ensuing teaching and learning processes, inevitably connected with the broad contexts within which those experiences occur.

Although listening was seen by the teachers in this study as an activity everyone could do naturally — hence its general downplaying — with much knowledge acquired informally from everyday contact, instrumental skills were considered to be the result of a particular kind of formal tuition during childhood. Similarly, in the school context, the National Curriculum requirements were the statutory components that had to be

included, while there was a range of other forms of musical experience in school that did not have the same formal status (Appendix G).

6: 1.2 The model

My study is about teachers' thinking about music. One of the dimensions described above relates to the teacher; the other to music, hence giving two intersecting continua: the teacher's non-professional/professional spheres of engagement and the formal/informal nature of music learning and application, which are nested within a teacher's beliefs about the nature and value of music and music education.
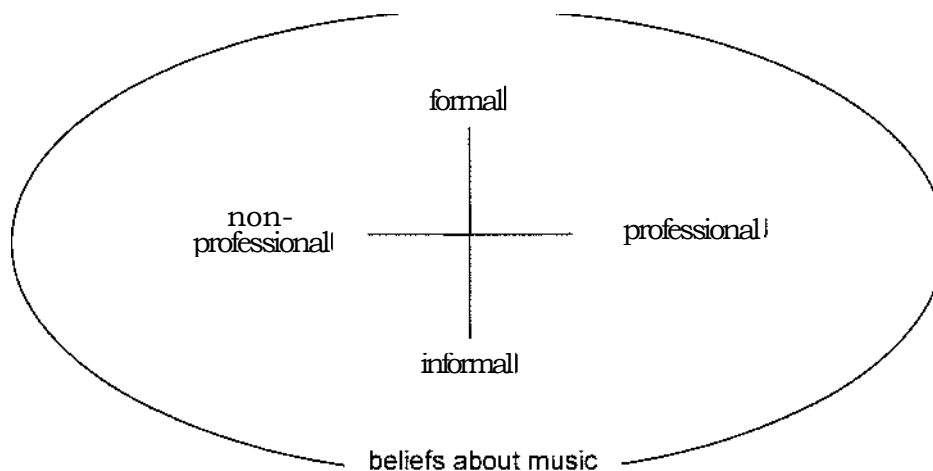
Fig. 6: 1 Model illustrating the contexts of music subject knowledge

This is thus a 'human construct' (Walford, 2001), which represents my interpretation of some of the issues concerning subject knowledge that arose from the empirical data gathered during this study, in conjunction with some of the research literature relating to teachers and teaching in general and music education in particular. However, bearing in mind the warning that 'qualitative analyses can be evocative, illuminating, masterful —

and *wrong'* (Miles and Huberman, 1994, p. 262, my italics), the original transcripts were revisited to ensure the model and each teacher corresponded.

The following section describes how this model reflects the teachers' thinking within the subject and how it can be used to situate the music experienced by the teachers, as well as to illustrate their various roles or identities: how they view themselves in relation to the subject.

These teachers' thinking about and knowledge of music seem to relate to different, albeit often linked, **areas of musical experience.** On the **right hand side** there is the music they are connected with in their professional lives: the mandatory National Curriculum music (perceived by these teachers as about the 'theory' of music) in the **professionaUformal** quadrant. Karen distinguished between this *'class* type music' and `*school* music', which, for her, comprised the music experienced in assemblies and hymn practice (3B I: 100-101] and these, together with all other experiences of music in school, fit down the right hand side of the vertical formal/informal continuum. For example, hymn practice comes relatively high up, being a timetabled (formal) session required by the headteacher. The peripatetic teachers are also seen as operating in this quadrant, by virtue of the perceived formal type of tuition, and the timetabling pressures impinging on the class teachers' situation. However, the position of music (recorded and live) in assembly on this continuum varies — depending on the extent to which it is `chosen' by the teacher concerned. The instances of music played as background music [3A] or as "therapy" [DH] fit in the **professional/informal** quadrant, where the class teacher provides or experiences music as s/he sees fit, using music to support the wider curriculum — in all interpretations. This represents the music within education category of the original research focus into thinking in relation to music in education.

Then, on the **left side,** comes the music that the teachers access in whatever way, making and taking, outside school, as non-professional individuals. This would include, in the **non-professional/informal** quadrant, listening to music in the car [2B], while doing the housework [6A], or with friends [1B], as well as singing in the car [6B] or the bath [6A]. The **non-professional/formal** quadrant involves the more formal situations such as singing in choirs or playing in orchestras (hypothetical suggestions, because none of these teachers appeared to be involved in such activities). Because this sort of involvement is likely to have been preceded by some form of specific tuition (notation and instrumental technique), this sector is where the teachers position themselves as musician/instrumentalists in the traditional sense, reflecting Welch's (1998) use of the formal/informal dimension. Although the informal is most commonly associated with the taking of music and the formal with making music, nevertheless, those who already possess instrumental skills could equally well pursue them in the non-professional/informal sector. For example, Fiona spoke of playing the piano in the evenings at home:

> And if I'm in the middle of playing a piece and my husband shouts at me I get so *cross!* I want to finish this that I'm playing ... It doesn't matter if my tea's ready; it doesn't matter if the phone's rung. [lA II: 183-186]

As well as providing a framework for the different musics the teachers are involved with, this model also illustrates the corresponding different types of role and **identity** the teachers have in relation to music. That as **musician/instrumentalist** has already been noted in the non-professional/formal quadrant. This is an example of seeing oneself in relation to music (IIM, see 5: 3.2.3). On the other hand, it is in the non-professional/informal quadrant, containing what one might term a teacher's **personal self,** where one sees, in particular, the use of music to support and express self (MII). In the formal/professional area the teacher is acting as **music teacher,** while in the

informal/professional one the teacher's identity as **class teacher** allows a broader perspective: music within education rather than music education *per se.*

Gillian Stunell has suggested that teachers position themselves differently in relation to their different roles within different societal areas of discourse (Stunell and McCullough, 2004). Something similar happens in this contextual model of experience; even though the teacher's different roles are not necessarily this discrete or distinguishable in practice. This is a representational illustration of the various facets of teachers' musical experiences and subject knowledge.

How teachers relate to, and feel about, the activities and roles in the different quadrants seems to depend on the degree to which they are able, within the particular situation, to exercise choice to the extent they want. This links with statutory/elective dimension in the Hargreaves, Marshall and North (2003) globe model mentioned above. This is not as simple as possessing a certain *amount* of subject knowledge (of whatever kind), despite what the teachers in this study thought, because there is a connection with teachers' particular beliefs concerning the nature and value of music and music education. We have seen that teachers experience negative emotions if there is a mis-match between their beliefs and what they do (Nias, 1989; 1996). Therefore, in this instance, if a teacher considers her role as music teacher (professional/formal quadrant) to be that of a model and thinks that music education should be about enhancing instrumental skills, then if that teacher cannot play an instrument (non-professional/formal), she cannot model those skills [Karen]. Similarly, if a teacher sees her role as essentially transmitter of knowledge then, equally, a perceived lack of knowledge, from the same non-professional/formal quadrant prevents her carrying out her role in the professional/formal arena effectively [Valerie]. If, on the other hand, a teacher

perceives her role as more that of a facilitator, considering it important that children receive a range of experiences that enable them to feel confident in different areas of music-making, then the fact that she cannot play an instrument is not an insurmountable barrier, given the support of appropriate resources [Alison]. If the main objective is to provide confident children who enjoy what they do, and the preferred way of doing this is to use one's relationship with them while accessing music in the professional/informal quadrant, then a perceived lack of skills in the non-professional/formal quadrant, or lack of specific knowledge of the National Curriculum requirements (professional/formal) is not relevant to one's dominant identity as class teacher [Sheila]. Sheila was the teacher who used music to provide a calming background to craft activities because "that's what you would do at home, wouldn't you?" [3A I: 97-98]. Here, therefore, is a cross-over from the non-professional/informal to the professional/informal quadrants, giving an example of Bresler's finding that non-specialist teachers (her term) tended 'to share with their students their "personal" knowledge ... the things that sustained and nourished them in their private lives' (1993a, p. 7).

It will be remembered that one of the main 'findings' concerned the widespread use of broadcasts. It is perhaps relevant that two of the three who did not use broadcasts, Fiona and Jo, were the two who seemed most at ease in all four quadrants. Their home music-making and music-taking overlapped into school, where their enjoyment came from seeing children involved in musical activities that excited and absorbed them. In other words, the three points of the confidence, knowledge and enjoyment triangle *(Fig. 5: 1)* were balanced so that they were able to do what they wanted to do within each quadrant area. The third teacher not using a broadcast was Ruth, the Nursery teacher. Although she laughingly downplayed her musical skills, she too gained much enjoyment from her

own and the children's involvement, so that the confidence-boosting experience she had received while training enabled her to override her lack of knowledge — at least for this level, although she had used a broadcast in her previous school, when teaching slightly older children.

Therefore, it is necessary to take into account not only teachers' views of what it means to be musical and the aims of music education, but also their views of their roles as class and music teacher. There are links here with the work on numeracy of Askew and his colleagues (Askew *et al.,* 1997), who reported that teachers' beliefs about the nature of numeracy were an essential component in an interactive relationship with practice and pedagogical subject knowledge. Indeed, the current model could therefore be seen as a further layer within the area of *teacher's beliefs* in their extended model (1997, p. 21).

These aspects also connect with the theories underpinning this study (see 2: 3.1), in that teachers such as Jo, Fiona, Sheila and Dave, in particular, described social constructivist ways of helping children build up their musical knowledge through the teacher-pupil relationship in structured activities. On the other hand, Karen and Valerie, for example, seemed to assume a more traditional role as transmitters of objective knowledge — at least as far as music education is concerned.

6: 2 The significance of this study for research

This section begins with an assessment of the significance and originality of different aspects of this study as it relates to *existing* research literature, while the second half

consists of implications for *future* research. Each half is structured in relation to different aspects of the study.

6: 2.1 The present

6: 2.1.1 Focus and fmdings

By helping to make the nature of teacher thinking in this subject area explicit, this study contributes to the professional knowledge base (Calderhead, 1987; Swanwick, 1994). It also provides material that could be valuable for the research community.

As has already been described, there is a paucity of studies in this country concerning music and primary school teachers, particularly in regard to their thinking and subject knowledge. Although there are notable exceptions that include aspects and references to thinking and attitudes, as detailed and drawn on in this study, there is little literature underpinned by empirical data that focuses *specifically* on this area. Therefore, although the four main areas of findings regarding enjoyment, the value of music, instrumental skills and broadcasts will come as no surprise to anyone working in the field of primary music, this study provides specific and empirical data to underpin the hitherto mostly anecdotal descriptions of primary teachers' thinking about music. In particular, this study helps inform the issues surrounding teachers' lack of confidence in music, reported consistently over the years, by linking it with their beliefs as to the nature of music as well as music education (rather than to subject knowledge *per se).* Again, although the connection between what one thinks about music and how one teaches has been acknowledged in theory, particularly in relation to secondary music teachers (Swanwick, 1988; Reimer, 1989; and Plummeridge, 2002, for instance), this study provides concrete examples, as well as revealing the teachers' own perceptions of the reciprocal links between confidence, enjoyment and knowledge *(Fig. 5: 1).*

Due to the protracted nature of part-time study, it is now several years since the data were collected during the academic year 1999-2000. It should also be acknowledged that new National Curriculum curricular requirements came into force in the term following my final visit (DFEE/QCA, 1999). Nevertheless, although this study provides a snapshot of the beliefs of the staff in that particular primary school at that point in time, recent discussion with colleagues and my own connections with various schools and teachers suggest that the words of those teachers are still reflected and relevant in primary schools today (summer 2005). However, due to staff changes and the passage of time it is likely that the situation in this particular school is no longer the same (indeed, no reliance on broadcasts was noted during an Ofsted inspection in January 2005).

On the literature side, because music education research has often been isolated from mainstream educational research, this study intentionally makes strong links between music education literature and general education literature, including research into other subject areas. Leach and his colleagues (2002) have drawn attention to the lack of interaction between different subject areas. The lack of research relating to teachers' subject knowledge and thinking in music may therefore, in this instance, have been an advantage because it necessitated a search through the literature for other subjects.

The philosopher of education Joseph Schwab advocated developing a practical philosophy to help inform practical situations. As part of this, and because of the provisional nature of knowledge, he advocated communication between practitioners, policymakers and researchers (see Westbury and Wilkof, 1978). Although Fenstermacher (1986) considered constraints from the world of practice did not

necessarily improve research, nevertheless the current study links practitioners with the research community, in the course of which there are implications for policy makers (see below). Kushner advises 'We need better knowledge of music education as it currently is so as to reshape it for the next generation, and we need to work with teachers, not simply tell them what to 'deliver'' (1999, p. 216).

6: 2.1.2 Methods

Although the use of a qualitative methodology is now widespread in investigations of teachers' thinking, it is a more recently accepted paradigm for music education research, given that less than a decade ago Bresler could write 'qualitative research in music education is a recent phenomenon' (1996a, p. 5; also cited 3: 3 above).

More unusually, however, although a whole staff case study approach has been used with a general focus (for example, Acker, 1999), **I** am not aware of the method used in subject knowledge studies. Similarly, although concept maps have been used in studies of other subject areas (for example, the work in mathematics by Leinhardt and Smith, 1985; and Askew *et al.,* 1997), they have not, to my knowledge, previously been used in music education research. This study is thus, currently, unique in the combination of a case study research strategy using concept maps as a method of data collection relating to primary school teachers' subject thinking in the field of music education.

6: 2.1.3 The model

This model answers Kushner's call for the generation of theory 'in collaboration with teachers' (1999, p. 217), so that 'our admiration of the form [of music]' should not `displace or conceal the human dilemmas underlying it' *(ibid.).* The dimensions were derived from the data provided by the teachers and although both dimensions have been

used separately in other studies, as described above, I have not found them used in this conjunction before.

This is both a straightforward model (albeit one representing a complex situation) and one potentially relevant beyond its immediate focus, given that that this conceptualisation could possibly apply to any school subject. It therefore fulfils Eisenhardt's (1999) recommendations described above (6: 1.1).

It also complies with Edwards' opinion that 'The ultimate purpose of any model is some form of utility' of which one form, among those he describes, is representational (Edwards, 1992, p. 39). As a representation of teachers' thinking in relation to their subject knowledge, this model helps promote the view of teaching as a profession by informing the subject knowledge content of a professional knowledge base (Calderhead, 1987; Eraut, 1994).

6: 2.2 Suggestions for further research

The lack of work in this area means *any* further research could be valuable. However there follow some specific examples directly relating to this study which, being a relatively broad one, can thus potentially be used as the foundation and springboard for many and various lines of research. For clarity, I have divided the suggestions into ones that originate from the overall focus of the study; ones connected with the methods used; ones arising from the main findings; and ones that build on the concluding model.

6: 2.2.1 From the focus

This study was essentially a case study concerning the thinking and knowledge of teachers in a single primary school. As such, there is potential for replicatory studies

investigating teachers' thinking relating to music in other schools. Although every person and every school is unique in some respects, nevertheless, based on my observations and on the then recent Ofsted report, I consider these teachers and this school fell within the range of what might be considered a reasonably typical inner city primary school of that size. Therefore, it would be interesting to see to what extent the study of another primary school echoed or refuted the various findings from this study, and to what extent that might vary should the school concerned be, say, a small rural school.

Leading on from that is the link between theory and practice. In this context and in relation to the current study there are two strands. Firstly, there are issues about the extent to which espoused beliefs reflect deeper, possibly tacit ones. Secondly, there are issues regarding the effect such beliefs have on the teachers' professional practice, that is, the music experienced by the pupils. Although in this school there was a common curriculum, that seemed to be more because of the widespread use of schools' broadcasts rather than a commonly held underlying philosophy. Nevertheless, teachers' beliefs did seem to have an impact on how comfortable they felt with the required curriculum, as well as on their use of music within the wider curriculum, which in turn affected the pupils' experience.

This study into teachers' thinking used the link between thinking and practice as described in the research literature in justification, but it was not, itself, designed to investigate those links. Any information about the teachers' practice or deeper beliefs could only be gathered from their accounts of what they did and the inferences that could be drawn from the resulting transcripts and maps. Therefore, there would seem to be a natural extension towards studies investigating the links between teachers'

espoused thinking and their practice, possibly linking with existing studies on how people experience and use music in everyday life (DeNora, 2000; Sloboda, O'Neill and Ivaldi, 2001). I have suggested some ways in which teachers' beliefs might influence their actions within the professional side of my model, but these have not yet been tested or confirmed in any way.

6: 2.2.2 From the methods

Various tasks included during the three interview sessions were used primarily as aids to conversation rather than as specific research tools. Some of these have potential in other ways. For example, the list compiled from the teachers' beliefs regarding the nature and value of music could be refined and developed into a more rigorous tool reflecting a particular teacher's belief emphasis, perhaps using some of the techniques from personal construct theory (Kelly, 1955; Mellor, 1999). The relative ratings of the National Curriculum subjects from the point of view of the teacher's perception of their value to pupils and of the teacher's confidence in teaching, although not detailed here, could also be useful.

I have already described (3: 8.2) showing the maps to an experienced colleague, who was able to deduce some general information about each teacher. This potential could be explored. In connection with that, although in this study issues of confidentiality excluded the possibility, it would have been interesting, and useful as a form of triangulation, to show the maps to other members of staff to see if they could identify the owners. During the third interviews, some terms from the list relating to the nature and value of music were correctly matched with their originator by other teachers. For example, Karen spontaneously and correctly identified *Part of (cultural) heritage* as one of Michael's choices, saying, "You can pick out what people have said [laugh] You

know who've said the things — which is good! ... I can hear him saying it [laugh]" [3B III: 68-71].

The value of the maps themselves as a research tool has already been described and they are recommended as an interesting and sometimes revelatory tool for both researcher and researchee. In fact, one of my professional colleagues has been stimulated by this study to utilise the same method in a recently started project investigating the beliefs of Muslim teachers (see Harris, 2000; and Harris, in preparation, for examples of her work). For the aid of other researchers, I have included a map showing some of the methodological issues that occurred during the use of concept mapping (Appendix J).

One aspect I would particularly have liked to pursue was that concerning the central feature of the maps (one of the by-roads mentioned at the beginning of the Discussion chapter). Some teachers had an obvious centre, for example the child firmly in the middle of Jo's map, or the subject in Emma's, Alison's and Valerie's (see Appendix E). However, other cores were less readily identifiable: in Michael's map, for example. The focal points chosen appear to be those of the child, teacher or subject, some relationship between any of these, or a belief relating to one or other. Although this could be a reflection of Schwab's (1973) 'commonplaces' (see 5: 2.2.2), since it would be possible to have a contextual centre point — for instance, the National Curriculum — there may also be some connection here with the work of Frances Fuller. She suggested teacher development moved from concerns that were primarily self-centred to ones centring on subject-matter and student. These comprise a survival stage where the focus is on one's adequacy; a mastery stage concentrating on the teaching task; and only then a concern with the impact on one's pupils (see Fuller and Bown, 1975; Campbell, 1999, p. 16; and Feiman-Nemser and Floden, 1986, p. 522). Strahan (1989) also found experienced

teachers were likely to have a more student-centred view, while the novice teachers were more teacher-focused; and Nias, drawing on Fuller's work, describes how

> Teachers' personal concerns in relation to their work change, from preoccupation with survival and a search for occupational identification (`self' concerns) to the consolidation and extension of work-related skills (`task' concerns) and then to a search for greater influence (`impact' concerns). (Nias, 1989, p. 3)

In the music education field, Yourn drew on Fuller's stages in her study of beginning specialist (primary and secondary) music teachers 'learning to teach', and reported that her students did seem to 'display similar features of the sequential steps' of self, teaching situation concerns, concerns about pupils, although not necessarily in the implied irreversible sequence (2000, p. 186). More generally, Linda Hargreaves and her colleagues found a shift from a focus on task towards one on children's learning needs in their study of small schools' cluster development (Hargreaves, Comber and Galton, 1996). They noted that this shift was similar to that between the reliance on principles and maxims at the competent stage to a more improvisatory reaction to pupils at the expert stage noted by Berliner in his model of pedagogic expertise (for example, 1995). This issue arose from analysis of the maps. It was not originally considered in the research design; was not therefore built into the way in which the mapping task was presented; and the teachers were not asked to confirm it (although they did each agree with my general interpretations of their maps, which sometimes included the focal area). Therefore, any connection between the central focus and either experience or expertise cannot be verified from this study. However, it would be an interesting target for future research, especially as it has implications when explaining teachers' attitudes towards a subject. For instance, a teacher who places the subject at the centre of a conceptual map may be more bothered by his or her perceived limitations in that subject than one for whom the child is a more important emphasis. It may also be linked with preferred

teaching styles. For example, it may be the case that a teacher with the child at the centre, for example, Jo, has a constructivist stance towards learning. On the other hand, Valerie described a transmissionist style of teaching that is clearly seen in the flow of her map, where her perceived lack of subject knowledge is the constraining filter through which she channels her personal knowledge onto the central area of curriculum music. "That's what I deliver", she said of that classroom curriculum area [6B II: 189]. Given that she had earlier declared, "any class doesn't have any affect at all on what's going to happen" [6B II: 133], it may also be significant that there is no specific child cluster in her map.

6: 2.2.3 From the findings

It is possible to make suggestions regarding each of the four main findings as described in the relevant chapter (4) above.

One of the findings concerned the fundamental nature of enjoyment in music, leading one to wonder to what extent enjoyment is embedded in teachers' descriptions and use of *other* subject areas and what the implications are for the subject, the teachers and the pupils?

There is still much to be learnt about how people in general and teachers in particular conceptualise and relate to music. In particular, I wonder if it would be possible to develop Reimer's orientations (Reimer, 1989; Reimer, 1997) and maybe even link with the objectives model of Hargreaves, Marshall and North (2003). Is there a connection between particular orientations in Reimer's terms and a particular weighting in the latter model? This could be of benefit to those working to support teachers in ITE and CPD (see below).

curriculum music, especially in Key Stage 2. One of the questions I wished I had asked concerned the use of broadcasts in other subject areas, in order to ascertain whether any other subject was so dependent on broadcasts for delivery of the curriculum. Although other broadcasts were mentioned, these were both in connection with music: specifically a music and *movement* one (Year 2) and a *maths* enhancement one (Year 4). I could not tell whether reliance on broadcasts was part of the general practice within the school, but suspect not, particularly as the previous year's Ofsted report did not mention them except in relation to music. There are other issues here to do with resources, but this was also part of the school music culture, accepted and endorsed by traditional and widespread use. More generally, this study raised questions as to the nature of the music curriculum and its contents, with several teachers considering there were limitations of provision. I have already discussed (5: 2.3.3) various points relating to music being judged satisfactory by Ofsted and so will not repeat them here. The National Curriculum provides common subject content for all schools following it. Requirements for music have always been broad, with much scope for individual schools' and teachers' interpretation and delivery. Consequently, even after more than a decade, the most recent Ofsted subject report for music in primary schools paints a picture of varied provision and quality (Ofsted, 2005). Despite the wealth of information accumulated by Ofsted inspectors, these inspectors have their own agenda and, in my experience, primary music subject inspectors frequently exhibit the same differences in musical experiences and, hence, knowledge as the teachers they are inspecting, a point made by Karen during the current study. The Leverhulme Primary Project, which included music, (see, for example, Wragg, Bennett and Cane, 1989) was carried out at the beginning of the implementation of the National Curriculum; and Lawson and her colleagues covered the early years (Lawson, Plummeridge & Swanwick, 1994), with

observations and interviews in 39 schools. More than a decade later, perhaps the time is

ripe for another survey of what is actually happening in primary schools. The current study found that music was present on many occasions other than the classroom curriculum. Ofsted, too, sometimes reports on this, often including such occurrences under the 'spiritual development' umbrella. Just as school is not the only context for music education (Hargreaves, Marshall & North, 2003), there are debates as to whether school is the most appropriate place for music education (Sloboda, 2001). Current and valid findings are necessary in order for this to be an informed debate.

6: 2.2.4 From the conclusions

Although the model evolved from the findings of this study, and has since been recognised as a possible way of illustrating the contexts of subject knowledge by various colleagues, there is potential not only for further work on its representational validity and potential in music education, but also with reference to other subject areas, (thus answering Leach *et al.'s* (2002) complaint about lack of interaction between subject areas). In particular, one might ask whether other subjects can be viewed according to the same two dimensions and, if so, whether there are similar potential discrepancies between the four quadrants.

6: 3 Implications for practice

Part of the significance of this study comes from its potential as regards practice. I have divided the following implications into the support of student and practising teachers; suggestions for schools; and some more general aspects with relevance for policymakers.

6: 3.1 In ITE, INSET and CPD

Although I am aware that there are currently time and financial restrictions on (any remaining) music components within initial teacher education as well as on any form of in-service education and training and continuing professional development, it is important that this study, concerned as it is with teachers' thinking about subject knowledge, is linked with the professional support of teachers.

As described in the earlier literature review chapter, knowledge of teacher thinking is relevant and has implications for those involved in delivering any form of teacher education at any stage of a teaching career (Calderhead, 1993). It is particularly pertinent given recent and current initiatives that place more emphasis on schools' involvement in ITE, when it is essential that trainee teachers encounter good models of teaching in schools (Hennessy, 2000).

Nevertheless, teacher education frequently ignores students' existing personal knowledge (McDiarmid, Ball and Anderson, 1989; Dolloff, 1999), taking their possession of subject knowledge for granted. However, in the same way that teachers are recommended to build on the starting point of their (prospective) pupils, it is surely necessary to know where teachers are starting from in order to support them most constructively. At the least, in practical terms, this involves acknowledging that people may have different experiences, which have led to the development of different views about the nature and value of music, as well as different types and amounts of knowledge and skills relating to music, as seen in this study. In addition, Golby considers teacher development must also involve the teachers themselves being aware of their understandings:

> Understanding the structure of teachers' experience is a necessary condition for any professional development worthy of the name since there is nothing else in

> terms of which teachers can be 'developed' other than through their own understandings of their own work. Development, like education, implies starting from where you are. (1996, p. 425, also partially quoted 2: 2.2.2 above)

These 'understandings' do not relate only to cognitive based knowledge because 'one cannot help teachers develop their classroom and management skills without also addressing their emotional reactions and responses and the attitudes, values and beliefs which underlie these' (Nias, 1996, p. 294). Ultimately, therefore, 'teacher development is, at root, the development of the person who is the teacher' (Nias, 1989, p. 2), and this includes and itself promotes self-esteem (Nias, 1989; 1996). In turn, this can have an impact on pupils' self-esteem since 'Teachers, and the values they transmit within the classroom and beyond, ... play a role in influencing children's attitudes towards music' (Lamont, 2002, p. 56). Hargreaves and his colleagues make a similar point when they stress the importance of social context, in particular the effect of other people, on building identities (Hargreaves, Miell and MacDonald, 2002b, p. 8).

In order to acknowledge teachers' existing positions, as far as knowledge and attitudes are concerned, it may be necessary to help teachers appreciate and understand the knowledge they already possess, as well as its relevance to their professional role(s).

The authors who provided the non-professional/professional dimension in my model have advised that 'opportunities must be presented for teachers to map and understand the patterns of their lived experience, both in their personal and professional lives, in order that they may better understand their current purposes and practices' (Leitch and Day, 2000, p. 188). Eraut (1994) has pointed out that people often do not know what they know (also 2: 2.2.3) and certainly in this study the teachers tended to focus on what they knew they did *not* know — in itself, of course, a form of knowledge. This model can help teachers reflect on their practice (Eraut, 1994; SchOn, 1987) by giving them a way

both of conceptualising their thinking and of analysing and reflecting on it (Calderhead, 1987). This self-knowledge is important because it helps give teachers control over their developing practice (Carlgren and Lindblad, 1991).

All these teachers had experience of and knowledge about music — whether or not they were able to articulate it. Christopher Small has written that 'If everyone is born musical, then everyone's musical experience is valid' (1998, p. 13). Thus those supporting teachers through ITE, INSET or CPD may need to help them access the probably considerable, albeit often mainly intuitive, knowledge they have and give them ways of articulating that knowledge. All have experience: as the teachers in this study said, music is everywhere, and

> Experience of music *of any kind* is valuable in developing musical expertise. Even if it does not appear to be developing intellectual appraisal skills, it is developing the internal aural structures necessary for deep understanding of music. (Hallam, 2001a, p. 70, my italics)

Bresler, despite her interest in and sympathy for non-specialist elementary music teachers, tends to refer to their knowledge in a negative way. Hence, for example, she describes as 'musically illiterate' not only those who cannot read or write music, but also those not used to 'thinking in musical categories' (Bresler, 1993a, p. 5). This deficit model is, as we have seen, part of the knowledge teachers may hold. But only a part. For those generalist class teachers who do not perceive themselves as musicians, it may be necessary to help them explore the various forms musical knowledge can take in order to broaden their view of the concept and incorporate their own 'musicianship' as, at the least, experienced and skilled listeners of music, able to choose between different pieces or styles. This would help them move 'beyond the merely intuitive towards analytical frames of reference' as advocated by Swanwick (1994, p. 43).

In the Discussion chapter, I cited Mellor's opinion that the more holistic and intuitive reaction of a generalist teacher to music could be 'more conducive to promoting a `feeling for the personal value of music' than a specialist's 'more objective, analytical mode of listening' and was also a way of 'more closely' connecting with the children (Mellor, 1999, p. 156). In other words, not only do teachers possess more knowledge than they sometimes think they do, but a less specialist approach can actually be an *advantage.* These are messages that need disseminating in order to help boost the self-esteem and confidence of teachers.

Linked with the need to help teachers acknowledge and use their own knowledge, come considerations relating to helping teachers use their own music, either directly, or, more constructively, by making common links between different genres of music.

Mills has written that if music is for all pupils (which it is, at least in maintained schools, given its inclusion in the National Curriculum), then 'Music is for all teachers' (1993, p. 2). This study has shown that, indeed, music *was* for all these teachers in so far as they all enjoyed music out of school. Nevertheless, it was also apparent that `school music' was often perceived as something different, usually associated with the western classical tradition. However, as Sloboda says, 'The barriers of 'high art' or `elitism' `do not reflect to most people the values and identities that they bring to music' (1999, p. 455). This division between school and home music is most usually reported in relation to the various cultures experienced by pupils outside school (York, 2001). However, in this study, that same mismatch also applied to several of these teachers. As Emma explained,

> I listen a lot but it's not, it's all really contemporary ... I was just thinking the only time I ever listen to anything like classical is here ... I think I need to escape when I leave here. It's all really different when I go home. [2A I: 39-41]

This was not the case for all teachers, however, and there were attempts to bridge the gap, with several teachers bringing in CDs from home. This use by teachers of their own music (in whatever way) also links with the important issues of choice and ownership discussed in the previous chapter.

Shulman and Quinlan asked "Should understanding be based on how scholars hold knowledge in a domain or be defined by how ordinary people use knowledge in everyday life' (1996, p. 399), illustrating their question with a hypothetical professor of mathematics and with a gambler. (Although here there is no reason why one person could not be both!) In the professional music education context, Glover and Ward come down on the side of everyday life when they advocate that

> [S]chool must be a musical microcosm, giving music its real-life contexts within which to locate the teaching of its skills and knowledge and establish continuity with the outside world at every layer from that of professional performer to that of the everyday. The teacher must have musical self esteem and let musical responses show. The teacher must develop his/her musical self. (1993/1998b, pp. 3-4, previously quoted 5: 3.3)

However, the quote from Emma, above, does indicate an important caveat: not everyone wants his or her personal private life linked closely with the professional context and this should be respected. Given the close emotional links many people have with specific pieces of music, this is understandable, even though, on the other hand, it can be very rewarding to introduce someone else to a favourite piece of music. What is important in this context is that children are aware that individual preference is normal and encouraged. Several teachers in the current study spoke of how the children saw this in the choices of music for assembly, citing particularly Valerie's opinions of some of the music chosen by Michael or by Dave.

That is the sort of everyday engagement with music that Glover and Ward are advocating and, as such, provides a valuable modelling of musical behaviour. Rather than regretting that they cannot model the role of musician as skilful instrumentalist, perhaps it would be more constructive for teachers to be encouraged to model other types and extents of engagement with music. There is no one ideal mode. What matters more is commitment, interest and enjoyment in whatever sphere, at whatever level, however defined. In this study, that sort of involvement was seen in Fiona and Jo, who acknowledged their levels of musical experience and expertise, but also in Sheila and Dave, for example, who were less confident in their abilities as music teachers, but knew that they wanted for their pupils the same level of enjoyment they had from music.

This is not to say that teachers cannot develop their knowledge and opinions — and Dave was an example of someone who had made a great effort to do exactly that — or that it is fixed because of previous, now unchangeable, experiences (as Karen sometimes seemed to imply). Indeed all forms of teacher education are, of course, predicated on the assumption that teachers *can* develop their knowledge and skills.

Many courses in ITE, INSET and CPD concentrate on helping teachers feel relaxed and confident when engaged in the sort of musical tasks that can be used in the classroom (Jeanneret, 1997; Beauchamp, 1997). If this school was in any way typical (and I maintain it was), there was an apparent lack of pedagogical knowledge relating specifically to music. Therefore, it would be of most use if any courses suggesting suitable activities did so in a pedagogical context of children's musical development, for example, including aspects of assessment.

This study has also suggested that teachers need to feel confident in their own music-making. As far as these teachers were concerned, instrumental skills were seen as desirable to access and select new material; to present activities in a musical way; and to enable the teacher to act confidently as a model of musical behaviour. As already reported, some form of instrumental playing was the magic wand choice for all but one of the teachers. Again, considerations of time and finance feature, but ways of helping teachers develop instrumental skills to a functional level (three chords on a guitar is a start) would be empowering in all those ways.

Beauchamp, in his survey of primary teachers and forms of teacher development found that teachers preferred 'support in the classroom, thus representing a *real* situation' (1997, p. 83). He therefore concluded that 'for many, the best method of supporting their development as music teachers is to provide opportunities for them to learn alongside the children during Music lessons' *(ibid.).* In this context, the *Wider Opportunities* initiative, where primary school children have been given the chance to learn musical instruments, is potentially valuable for teachers as well. As a report on the pilot studies commented, 'The programmes enabled class teachers to build upon their general musicianship expertise linked to the requirements of the National Curriculum' (Davies and Stephens, 2004, p. 13; and see Ofsted, 2005). I suggest this way of working would help teachers see connections between the different quadrants of my model *(Fig. 6: 1).* Ideally, we also need a more structured application and extension to teachers' participation, as it would promote teachers' self-esteem and their musical identities, especially for those who believe such skills are vital (as well as just important or useful).

Making links between home and school music is important for teachers as *themselves,* in order to help validate their existing skills and knowledge and thus support self-esteem; and as *teachers,* so as to help them draw on the skills and knowledge they possess, further boosting self esteem. Making this connection is also valuable as a way of modelling the possibility of similar, although not the same, links for pupils.

6: 3.2 In schools

Any developments in teacher education have potential implications for schools, but there follow some specific implications from this study.

Firstly, in a specific point relating to curriculum provision, this study found that most teachers had only a very general awareness of the National Curriculum requirements. This is not surprising given the volume of material with which primary generalist teachers are expected to be familiar and thus may be the case in other schools, too. In addition, in this school, the most common means of delivering that required curriculum, schools' broadcasts, were not always used in the most effective ways. Doubling up of classes, omitting sections of the broadcasts, ignoring opportunities for practical creative activities, for whatever reasons, all reduce the likelihood of individual children receiving the broad and balanced music curriculum intended. There are thus implications for headteachers, music coordinators and school-based INSET.

Luckily for the children here, there were many forms of musical experience outside the classroom curriculum (Appendix G). This was acknowledged by the Head who described how he would not at first have said there was a lot of music in the school but how, when thinking about it in relation to this research, he had came to realise there

were many instances and that "Music pervades" [untaped interview, my notes: 51-53]. This indicates that an informal audit regarding formal and informal musical experiences might be an interesting undertaking for other schools, too, providing information that could be utilised further.

For example, this study found the staff demonstrated a range of preferences, skills, knowledge and understandings. This is likely to be the case in other schools. With the common system whereby children change classes and teachers as they progress up the school, there is an opportunity for children to experience a range of experiences, strengths and preferences (although this may be more limited in smaller schools with classes extending over several year groups). As Glover and Ward explain:

> music plays a part in almost everyone's daily life and it is this widespread engagement with music in one or other of its forms that should take its place in the picture alongside the more formal aspects of musical composition and performance. The curriculum must allow for the breadth of the role that music plays within the 'ordinary' life for everyone. (1993/1998b, p. 1)

It may also be possible for these strengths and preferences to be used in other ways in the school as a whole, something also advocated by Mills (1993), Glover and Ward (1993/1998a) and Glover and Young, who write

> The pooled resource of music skills, interests and knowledge possessed by staff members as a group is likely to provide a reserve of music skills, enthusiasm and creativity which is seldom drawn on as fully as it might be. In a single school, staff musical strengths and interests may include opera, travel and world musics, guitar playing and folk groups, several orchestral instruments, choral singing, musicals, and dance ranging from tap to Arabic dance and salsa. (1999, pp. 6-7)

In the previous section, reference was made to the need for teachers' commitment, interest and enjoyment. The benefits for teacher and pupils that come from the ensuing enthusiasm are described by Rosemary thus:

> Enthusiasm , well, I think that's so important, both on a personal level and how it affects anybody that you're trying to encourage to take part. I mean it is

The teachers in this study were not unusual in defining themselves as musicians with reference to instrumental skills. This area links, as we have seen, with work being done in the area of musical identities. The model constructed to illustrate the contexts of subject knowledge at the beginning of this chapter *(Fig. 6: 1)* demonstrates that teachers can view themselves in different ways in different contexts relating to music. By means of a longitudinal questionnaire study and a series of case studies, the *Teacher Identities in Music Education* (TIME) project, funded by the Economic and Social Research Council (ESRC), investigated secondary teachers' development of identities (Hargreaves, Welch, Purves and Marshall, 2003). This project gathered information regarding the teachers' musical and educational backgrounds; their self-efficacy in music and in teaching; their relative identification as musicians and teachers; and their attitudes towards the aims of music education, linked with necessary skills for musicians and teachers. Despite the fact that one of the conclusions was that 'the profession is still largely judged in terms of musical performance skills, and that this public perception needs to be broadened', it is interesting to note that this project *also* defined 'musicians' according to high level specialisms, given that all those involved had music qualifications, usually involving performance skills. However, one of the findings was that the trainee and beginning teachers increasingly emphasised interpersonal rather than performance skills, an area more usually associated with primary teachers (although I wonder to what extent they were taking a certain level of expertise for granted, as Rosemary did in my study). There is thus room for an extension of this study into the development of primary teachers' identities.

 The fourth main findings area related to what the teachers *did*, particularly in school. In this school, broadcasts provided the most common means by which the pupils accessed

absolutely no good being in a situation where music is going on and looking as if you're either not interested, or totally bored. It sends out negative vibrations, completely. [RA II: 67-70].

However, again, there needs to be sensitivity towards those teachers who do not want to employ specific skills in school, either because of preferring to keep them as part of their private lives or for other reasons. For example, Fiona told of her initial reluctance to take on the role of Key Stage 1 music coordinator:

[I]t was "Well, who's going to play the piano? Who's going to do it?" And ... it was like the little pointer just kept coming back to me, you know? Because I know that when I do anything with music, or anything like that, I want it done well, and I'll put my whole heart into it. So I was a bit reluctant to take it on at first because I *know* what a mammoth task it is. [1A I:124-128]

It should also be acknowledged that linking private knowledge or skills is not always possible, or easy. For example, Michael, although strongly committed to music in his private life, found his beliefs relating to the continuation of cultural, particularly local, heritage in conflict with both school policy — he spoke bitterly about the change over from traditional hymns — and the children's own musical preferences.

6: 3.3 For policymakers

The National Curriculum is currently the means by which formal education is delivered to children in maintained schools in the United Kingdom. It is strongly, although not exclusively, subject based. Within school settings there are reciprocal relationships between teacher, child and subject (or wider area). Therefore, the teacher plays an important role in such education.

Consequently it is necessary to understand teachers' thinking, because, as Fullan has stated, school improvement 'depends on what teachers do and think. It's as simple and as complex as that' (1991, p. 117). Music being one of the subjects included in the

National Curriculum, there is a need for further studies such as this one in order to investigate the nature of teachers' thinking as regards music. Primary generalist teachers do not always share the same issues as secondary teachers, even within the same subject areas, and therefore primary teachers' thinking and knowledge may need specific focus.

Given the importance of the teacher's role, there are also implications for the professional support of teachers (and thus, time and money). In particular, in the light of this study, primary teachers need support in understanding the nature of subject knowledge; in using the subject knowledge that they (all) possess; and in developing that knowledge in ways that will increase their confidence and effectiveness.

Music is important in everyday life as well as in school. These teachers have described some of the many ways in which they value it — for themselves and their pupils. To repeat their head teacher's observation: "Music pervades."

However, particularly in light of the frequently problematic nature — for teachers and pupils — of aspects relating to music encountered in different contexts, there are links with wider issues regarding different forms of music education and the most appropriate and constructive places for those different forms. This is not to say that there should not be music in school, but we should debate *why* music is in school and therefore *what* music, formal and informal, is most appropriate in school.

While discussing the emphasis on musical expertise as equivalent to possessing high-level instrumental skills John Sloboda muses

> The notion that music could be engaged in purely for personal fulfilment, for the building up of community and friendship, for the sheer joy of making beautiful sounds together, is a strange, almost reprehensible, concept in many people's minds. (1999, p. 455)

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He therefore advocates new 'living and socially relevant forms to replace the church choir and the village brass band', although he admits he has 'no idea what these social institutions might be, what they might build on, or how they can be encouraged' in order to help people be engaged in music in what they can perceive as achievable and satisfying ways *(ibid.)*. We need to recognise the myriad of contexts wherein music is experienced because, as Kushner has pointed out,

> The boundaries of education spread far wider than those physical boundaries of the school, these days more than ever, perhaps. Correspondingly, the knowledge base of music is changing, and is changing music education, while [the] music curriculum itself is frozen in legal aspic. (1999, p. 214)

This, he maintains, is leading to a 'growing gap between music education and music curriculum' *(ibid.* p. 215).

These aspects relating to the changing nature of music education and the professional support of teachers involved appear to come together in *The music manifesto* (DIES, 2004), described on its website as 'a shared strategy and set of priorities for young people's music education' and 'a living, interactive resource'. It comprises a commendably inspiring range of aims that could develop and link an extended provision of opportunities both in and out of school. Although aimed at young people, there are mentions of support for teachers, including classroom teachers:

> Working together we will create a music education system where:
> > Ongoing, high quality continuing professional development is available to classroom teachers, LEA music staff and community musician and delivered locally, regionally or nationally. *(ibid.* p. 13)

Let us hope this will indeed be the case.

6: 4 Final thoughts

Although reflective comments have been made throughout this study, it is appropriate to conclude with an overview, particularly since the focus of the study has been on teachers' thinking with a recurring consideration of the 'self in various forms.

In general, I consider myself immensely privileged to have been able to undertake this research. The actual process of the study has followed what is probably the usual roller-coaster cycle of highs and lows but, overall, both content and process have been absolutely fascinating. In contrast to Eraut's (1994) remark about people not knowing what they know, I have become all too aware of what I did not know beforehand and even more so of what I still do not know. The vast literature relating to teacher thinking and allied areas was completely new to me and, of course, the more I read, the more I realised there was to read. However, at least now I possess a framework within which new reading can be positioned. Nevertheless, various of those who have acted as my supervisors at different times will attest to the difficulty I had in coming to terms with the concept of what might be termed, with apologies to Winnicott (1971/1991), the `good enough' thesis, as opposed to the one that included *Life, the universe and everything* (Adams, 1982).

The most enthralling aspects have come from the teachers who so generously shared their thoughts with me. The contested nature of education is seen from underlying epistemological and ideological debates onwards throughout the field of educational theory and practice and these teachers have shown some of the variations possible as far as music is concerned. Although I have worked with a large number of teachers over many years, I have never before had such extended conversations about our shared

undertaking. The complexity of angles, connections and influences has been mind-expanding albeit, at times, overwhelming.

Although my experience was not quite the 'messy, frustrating and unpredictable' process described by Wellington (1996), it certainly involved the 'compromises, shortcuts, hunches and serendipitous occurrences' of Walford (1991). After the second set of interviews — the mapping ones — an entry in my research diary reads: "Research in the field is a compromise between the theoretically ideal and the practically possible" and the whole research process was at least as complex as Miles and Huberman indicate in their illustrative map (1994, p. 308).

During the analysis phase, I struggled to move from the denotative to the connotative and inevitably thought of questions I wished I had asked and areas I regretted not having covered during the earlier data-collection stage. This was partly because my view of the research focus changed from a focus on knowledge concerning the National Curriculum towards a more global one concerning their thinking relating to music in general. This, in turn, means that the aspect I consider one of this study's greatest strengths — its breadth — is also its greatest weakness, in that some areas are inevitably covered in less depth than ideally necessary. Self-efficacy is one example of this.

Although, during the sequence of interviews with the teachers, I reflected back in different ways aspects of what the teachers had said together with some of my interpretations, I am aware that I have not fed back my 'final' conclusions, nor inquired about any long-term effects their experience of the research may have had on their thinking (although several spoke of its value at the time). The headteacher — my initial contact — left at the end of that academic year. The protracted nature of part-time study

meant that several years had passed before I was ready to suggest specific findings. However, during that time, I noticed various advertisements in the *Times Educational Supplement* for new headteachers, as well as for other members of staff. An Ofsted inspection carried out in January 2005 (the next after my study) reports that the current head, in post for two terms, has been 'the school's sixth headteacher or acting headteacher in less than five years' and there are various references to recent improvements and changes, implying there has been an unsettled time in the interim.

I have therefore sought more theoretical feedback from the research community in a series of papers at various conferences: the international Research in Music Education (RIME) conferences at Exeter University in 2001, 2003 and 2005; one under the auspices of the Society for Education, Music and Psychology Research (Sempre) at the University of London Institute of Education in 2004; and, as an invited speaker, one held by the European Association for Music in Schools (EAS) in Prague, 2005.

This study is intended to illuminate aspects of subject knowledge, with an ultimate aim of supporting those who draw on their subject knowledge to educate others. In that context, Fiona's aim for the children in her care is also applicable to my aim for teachers:

> I think where we fail children is that — and a lot of adults have been failed — that they come out and they think they're not musical, and they can't make music. *All* people ... they can. And I think that would be my aim: to make everybody feel that they were musical and they *can* do it, they can do it. [1A I: 221-224]

Bibliography

(1990) Metaphors we live by, *Theory into Practice,* 29, 2.

Abbs, P. (ed.) (1987) *Living powers: The arts in education,* London: The Falmer Press.

Abbs, P. (ed.) (1989) *The symbolic order: A contemporary reader on the arts debate,* Lewes: The Falmer Press.

Abbs, P. (1994) *The educational imperative,* London: Falmer Press.

Acker, S. (1999) *The realities of teachers' work: Never a dull moment,* London: Cassell.

Adamczyk, P., Willson, M. and Williams, D. (1994) Concept mapping: A multi-level and multi-purpose tool, *School Science Review,* 76, 275, 116-124.

Adams, D. (1982) *Life, the universe and everything,* London: Pan Books.

Ahern, K. J. (1999) Ten tips for reflexive bracketing, *Qualitative Health Research,* 9, 407-411.

Alexander, R. (1994) The classteacher and the curriculum. In Pollard, A. and Bourne, J. (eds.) *Teaching and learning in the primary school,* London: Routledge.

Alexander, R., Rose, J. and Woodhead, C. (1992) *Curriculum organisation and classroom practice in primary schools. A discussion paper,* London: DES.

Altrichter, H., Posch, P. and Somekh, B. (1993) *Teachers investigate their work,* London: Routledge.

Applebee, A. N. (1978) *The child's concept of story,* London: Cambridge University Press.

Armstrong, R. P. (1975) *Wellspring: On the myth and source of culture,* Berkeley and Los Angeles: University of California Press.

Askew, M., Brown, M., Rhodes, V., Johnson, D. and Williams, D. (1997) *Effective Teachers of Numeracy,* London: King's College.

Aubrey, C. (ed.) (1994) *The role of subject knowledge in the early years of schooling,* London: The Falmer Press.

Austin, J. R. and Reinhardt, D. (1999) Philosophy and advocacy: An examination of preservice music teachers' beliefs, *Journal of Research in Music Education,* 47, 1, 18-30.

Ausubel, D. (1968) *Educational psychology,* New York: Holt Rinehart & Winston.

Ball, D. L. (1991) Research on teaching mathematics: Making subject-matter knowledge part of the equation. In Brophy, J. (ed.) *Advances in research on teaching: Vol. 2: Teachers' knowledge of subject matter as it relates to their teaching practice,* Greenwich, Connecticut: JAI Press.

Ball, S. J. (1990) Self-doubt and soft data: Social and technical trajectories in ethnographic fieldwork, *Qualitative Studies in Education,* 3, 2, 157-171.

Ball, S. J. and Goodson, I. F. (eds.) (1985) *Teachers' lives and careers,* Lewes: The Falmer Press.

Bandura, A. (1997) *Self-efficacy: The exercise of control,* New York: W.H. Freeman and Company.

Bannister, R. (1992) Difficult but sensitive: Participant observation research in music education, *British Journal of Music Education,* 9, 2, 131-141.

Barnes, L. R. and Shinn-Taylor, C. (1988) Teacher competency and the primary school curriculum: A survey of five schools in north-east England, *British Educational Research Journal,* 14, 3, 283-295.

Barrett, J. R. and Rasmussen, N. S. (1996) What observation reveals: Videotaped cases as windows to preservice teachers' beliefs about music teaching and learning, *Bulletin of the Council for Research in Music Education,* 130, 75-88.

Barrett, M. (1994) Music education and the primary/early childhood teacher: A solution, *British Journal of Music Education,* 11, 3, 197-207.

Bartel, L. R. and Radocy, R. E. (2002) Trends in data acquisition and knowledge development. In Colwell, R. and Richardson, C. (eds.) *The new handbook of research on music teaching and learning,* New York: Oxford University Press.

Beattie, M. (1995) New prospects for teacher education: Narrative ways of knowing teaching and teacher learning, *Educational Research,* 3, 1, 53-70.

Beauchamp, G. (1997) INITIAL TRAINING + INSET = Confident teachers. A formula for success? *British Journal of Music Education,* 14, 1, 69-85.

Becker, H. S. (1958) Problems of inference and proof in participant observation, *American Sociological Review,* 23, 6, 652-660.

Beijaard, D., Mijer, P. C. and Verloop, N. (2004) Reconsidering research on teachers' professional identity, *Teaching and Teacher Education,* 20, 2, 107-128.

Bell, C. (1914/1958) *Art,* London/New York: Capricorn Books.

Bennett, N., Summers, M. and Askew, M. (1994) Knowledge for teaching and teaching performance. In Pollard, A. (ed.) *Look before you leap? Research evidence for the curriculum at Key Stage two,* London: The Tufnell Press.

Bennett, S. N., Wragg, E. C., Cane, C. G. and Carter, D. S. G. (1992) A longitudinal study of primary teachers' perceived competence in, and concerns about, National Curriculum implementation, *Research Papers in Education, 7 ,* 1, 53-78.

BERA (1992) *Ethical guidelines,* available at: www.bera.ac.uk/guidelines.html (Accessed: 08.10.00).

BERA (2004) *Revised ethical guidelines for educational research (2004),* available at: www.bera.ac.uk (Accessed: 16.04.05).

BERA Music Education Review Group (2004) Mapping music education research in the UK, *Psychology of Music,* 32, 3, 239-290.

Berger, P. and Luckmann, T. (1966) *The social construction of reality: A treatise in the sociology of knowledge,* New York: Doubleday.

Berliner, D. C. (1986) In pursuit of the expert pedagogue, *Educational Researcher,* 15, 7, 5-13.

Berliner, D. C. (1987) Ways of thinking about students and classrooms by more and less experienced teachers. In Calderhead, J. (ed.) *Exploring teachers' thinking,* London: Cassell Educational.

Berliner, D. C. (1995) Teacher expertise. In Anderson, L. W. (ed.) *International encyclopedia of teaching and teacher education,* Oxford: Pergamon.

Bernard, R. (2004) A dissonant duet: Discussions of music making and music teaching, *Music Education Research,* 6, 3, 281-298.

Bernstein, B. (1971) On the classification and framing of educational knowledge. In Young, M. F. D. (ed.) *Knowledge and control: New directions for the sociology of education.* London: Collier-Macmillan.

Bernstein, L. (1976) *The unanswered question,* Cambridge, Mass.: Harvard University Press.

Best, D. (1989) Feeling and reason in the arts: The rationality of feeling. In Abbs, P. (ed.) *The symbolic order: A contemporary reader on the arts debate.* Lewes: The Falmer Press.

Best, D. (1992) Generic arts: An expedient myth, *Journal of Art and Design Education,* 11, 1, 27-44.

Beyerbach, B. A. (1988) Developing a technical vocabulary on teacher planning: Preservice teachers' concept maps, *Teaching and Teacher Education,* 4, 4, 339-347.

Bibby, T. (2002) Shame: An emotional response to doing mathematics as an adult and a teacher, *British Educational Research Journal,* 28, 5, 705-721.

Biggs, J. B. and Collis, K. F. (1982) *Evaluating the quality of learning: The SOLO taxonomy (Structure of the Observed Learning Outcome),* New York: Academic Press.

Blacking, J. (1976) *How musical is man?* London: Faber & Faber.

Bloom, B. S. (ed.) (1956) *Taxonomy of educational objectives: Book 1: Cognitive domain,* London: Longman.

Blunkett, D. (1998) Facing the music, *The Times Educational Supplement,* May 22, p. 13.

Boal-Palheiros, G. M. and Hargreaves, D. J. (2001) Listening to music at home and at school, *British Journal of Music Education,* 18, 2, 103-118.

Boler, M. (1999) *Feeling power: Emotions and education,* New York & London: Routledge.

Borko, H. and Putnam, R. T. (1996) Learning to teach. In Berliner, D. C. and Calfee, R. C. (eds.) *Handbook of educational psychology,* New York: Simon & Schuster Macmillan.

Bowman, W. D. (1998) *Philosophical perspectives on music,* New York: Oxford University Press.

BrandstrOm, S. (1999) Music teachers' everyday conceptions of musicality, *Bulletin of the Council for Research in Music Education,* 141, 21-25.

Bresler, L. (1993a) Music in a double-bind: Instruction by non-specialists in elementary schools, *Bulletin of the Council for Research in Music Education,* 115, 1-13.

Bresler, L. (1993b) Teacher knowledge in music education research, *Bulletin of the Council for Research in Music Education,* 118, 1-20.

Bresler, L. (1994) Guest editorial, *Bulletin of the Council for Research in Music Education,* 122, 9-13.

Bresler, L. (1994/5) Teacher knowledge: A framework and discussion, *Bulletin of the Council for Research in Music Education,* 123, 26-30.

Bresler, L. (1995/1996) Curricular orientations in elementary school music: Roles, pedagogies and values, *Bulletin of the Council for Research in Music Education,* 127, 22-27.

Bresler, L. (1996a) Basic and applied qualitative research in music education, *Research Studies in Music Education,* 6, 5-17.

Bresler, L. (1996b) Towards the creation of a new ethical code in qualitative research, *Bulletin of the Council for Research in Music Education,* 130, 17-29.

Bresler, L. (1996c) Traditions and change across the arts: Case studies of arts education, *International Journal of Music Education,* 27, 24-35.

Bresler, L. (1998) The genre of school music and its shaping by meso, micro, and macro contexts, *Research Studies in Music Education, 11,* 2-18.

Bresler, L. (2002) Research: A foundation for arts education advocacy. In Colwell, R. and Richardson, C. (eds.) *The new handbook of research on music teaching and learning,* New York: Oxford University Press.

Bresler, L. and Stake, R. E. (1992) Qualitative research methodology in music education. In Colwell, R. (ed.) *Handbook of research on music teaching and learning,* New York: Schirmer.

Brophy, J. (ed.) (1991) *Advances in research on teaching: Vol. 2: Teachers' knowledge of subject matter as it relates to their teaching practice,* Greenwich, Connecticut: JAI Press.

Brophy, J. and Good, T. L. (1986) Teacher behavior and student achievement. In Wittrock, M. C. (ed.) *Handbook of research on teaching,* 3rd ed., New York: Macmillan.

Brown, S. and McIntyre, D. (1986) How do teachers think about their craft? In Ben-Peretz, M., Bromme, R. and Halkes, R. (eds.) *Advances of research on teacher thinking,* Lisse: ISATT/Swets & Zeitlinger.

Brown, S. and McIntyre, D. (1993) *Making sense of teaching,* Buckingham: Open University Press.

Bruner, J. (1990) *Acts of meaning,* Cambridge, Mass.: Harvard University Press.

Budd, M. (1985) *Music and the emotions: The philosophical theories,* London: Routledge & Kegan Paul.

Burgess, R. G. (1991) Sponsors, gatekeepers, members, and friends: Access in emotional settings. In Shaffir, W. B. and Stebbins, R. A. (eds.) *Experiencing fieldwork: An inside view of qualitative research,* London: Sage.

Burnard, P. (2004) Developing musical confidence in primary generalist student teachers, *NAME Magazine,* 12, 8-9.

Burr, V. (2003) *Social constructionism,* 2nd edition, Hove: Routledge.

Buzan, T. and Buzan, B. (1995) *The mind map book,* London: BBC Books.

Byo, S. J. (1999) Classroom teachers' and music specialists' perceived ability to implement the National Standards for Music Education, *Journal of Research in Music Education,* 47, 2, 111-123.

Cain, T. (1998) *Fanfare,* Cambridge: Cambridge University Press.

Calderhead, J. (ed.) (1987) *Exploring teachers' thinking,* London: Cassell Educational.

Calderhead, J. (1988) The development of knowledge structures in learning to teach. In Calderhead, J. (ed.) *Teachers' professional learning,* Lewes: The Falmer Press.

Calderhead, J. (1991) Representations of teachers' knowledge. In Goodyear, P. (ed.) *Teaching knowledge and intelligent tutoring,* Norwood, New Jersey: Ablex Publishing Corporation.

Calderhead, J. (1993) The contribution of research on teachers' thinking to the professional development of teachers. In Day, C., Calderhead, J. and Denicolo, P. (eds.) *Research on teacher thinking: Understanding professional development,* London: The Falmer Press.

Calderhead, J. (1996) Teachers: beliefs and knowledge. In Berliner, D. C. and Calfee, R. C. (eds.) *Handbook of educational psychology,* New York: Simon & Schuster Macmillan.

Calderhead, J. and Gates, P. (1993) *Conceptualising reflection in teacher development,* London: The Falmer Press.

Calouste Gulbenkian Foundation (1982) *The arts in schools: Principles, practice and provision,* London: Calouste Gulbenkian Foundation.

Campaign for Music in the Curriculum/Music Industries Association(1998) *The fourth "R": The case for music in the school curriculum,* West Horsley, Surrey. Available at: www.mia.org.uk (Accessed: 23.10.98).

Campbell, M. R. (1999) Learning to teach music: A collaborative ethnography, *Bulletin of the Council for Research in Music Education,* 139, 12-36.

Carlgren, I. and Lindblad, S. (1991) On teachers' practical reasoning and professional knowledge: Considering conceptions of context in teachers' thinking, *Teaching and Teacher Education,* 7, 5/6, 507-516.

Carr, W. and Kemmis, S. (1986) *Becoming critical: Education, knowledge and action research,* London: Falmer Press.

Carter, K. (1992) Creating cases for the development of teacher knowledge. In Russell, T. and Munby, H. (eds.) *Teachers and teaching: From classroom to reflection,* London: The Falmer Press.

Carter, K. and Doyle, W. (1987) Teachers' knowledge structures and comprehension processes. In Calderhead, J. (ed.) *Exploring teachers' thinking,* London: Cassell Educational.

Central Advisory Council for Education in England (1967) *Children and their primary schools,* (The Plowden Report). London: HMSO.

Charon, J. M. (2001) *Symbolic interactionalism: An introduction, an interpretation, an integration,* 7th edition, New Jersey: Prentice-Hall.

Clandinin, D. J. (1985) Personal practical knowledge: A study of teachers' classroom images, *Curriculum Inquiry,* 15, 4, 361-385.

Clandinin, D. J. (1986) *Classroom practice - teacher images in action,* London: The Falmer Press.

Clark, C. M. (1986) Ten years of conceptual development in research on teacher thinking. In Ben-Peretz, M., Bromme, R. and Halkes, R. (eds.) *Advances of research on teacher thinking,* Lisse: ISATT/Swets & Zeitlinger.

Clark, C. M. and Peterson, P. L. (1986) Teachers' thought processes. In Wittrock, M. C. (ed.) *Handbook of research on teaching,* 3rd ed., New York: MacMilllan.

Cohen, L., Manion, L. and Morrison, K. (2000) *Research methods in education,* 5th ed., London: Routledge.

Colwell, R. (ed.) (1992) *Handbook of research on music teaching and learning,* New York: Schirmer.

Colwell, R. and Richardson, C. (eds.) (2002) *The new handbook of research on music teaching and learning,* New York: Oxford University Press.

Connelly, F. M., Clandinin, D. J. and He, M. F. (1997) Teachers' personal practical knowledge on the professional knowledge landscape, *Teaching and Teacher Education,* 13, 7, 665-674.

Cook, N. (1998) *Music: A very short introduction,* Oxford: Oxford University Press.

Cooke, D. (1959) *The language of music,* Oxford: Oxford University Press.

Cope, P. (2003) OFSTED, fun and learning: A case study of a school music inspection, *British Journal of Music Education,* 20, 3, 307-315.

Council for the Accreditation of Teacher Education (1993) *Criteria for initial teacher training (primary phase): The initial training of primary school teachers,* DFE Circular 14/93, London: Department for Education.

Cox, G. (1999) Secondary school music teachers talking, *Music Education Research, 1,* 1, 37-45.

Cox, G. (2002a) *Living music in schools 1923-1999: Studies in the history of music education in England,* Aldershot: Ashgate.

Cox, G. (2002b) Transforming research in music education history. In Colwell, R. and Richardson, C. (eds.) *The new handbook of research on music teaching and learning,* New York: Oxford University Press.

Cox, G. and Hennessy, S. (2001) Music in schools. In Welch, G. (ed.) *Mapping music education research in the UK,* Southwell: British Educational Research Association.

Cox, G. and Pitts, S. E. (2003) Editorial, *British Journal of Music Education,* 20, 3, 227.

Crawford, K., Neve, L., Pearson, M. and Somekh, B. (1999) Creative tensions and disrupted routines: The impact of the Internet on primary children's understanding of the world, BERA annual conference (September 2-5), University of Sussex, Brighton.

Damasio, A. (1994) *Descartes' error: Emotion, reason, and the human brain,* New York: Putnam's

Damasio, A. (2003) *Looking for Spinoza: Joy, sorrow, and the feeling brain,* London: Heinemann.

Davies, L. and Stephens, J. (2004) *Creating chances for making music: The story of the Wider Opportunities pilot programme,* London: Youth Music.

Day, C. (1991) Roles and relationships in qualitative research on teachers' thinking: A reconsideration, *Teaching and Teacher Education,* 7, 5/6, 537-547.

Day, C. (1998) Working with the different selves of teachers: Beyond comfortable collaboration, *Educational Action Research,* 6, 2, 255-273.

Day, C. (1999) *Developing teachers: The challenges of lifelong learning,* London: Falmer Press.

Day, C., Calderhead, J. and Denicolo, P. (eds.) (1993) *Research on teacher thinking: Understanding professional development,* London: The Falmer Press.

Day, C. and Leitch, R. (2001) Teachers' and teacher educators' lives: The role of emotion, *Teaching and Teacher Education,* 17, 403-415.

Day, C., Pope, M. and Denicolo, P. (eds.) (1990) *Insights into teachers' thinking and practice,* Basingstoke: The Falmer Press.

Denicolo, P. and Pope, M. (1990) Adults learning - teachers thinking In Day, C. W., Pope, M. and Denicolo, P. (eds.) *Insights into teachers' thinking and practice,* London: The Falmer Press.

DeNora, T. (2000) *Music in everyday life,* Cambridge: Cambridge University Press.

Denzin, N. K. (1994) Romancing the text: The qualitative researcher-writer-as-bricoleur, *Bulletin of the Council for Research in Music Education,* 122, 15-30.

Denzin, N. K. and Lincoln, Y. S. (1994) Introduction: Entering the field of qualitative research. In Denzin, N. K. and Lincoln, Y. S. (eds.) *Handbook of qualitative research,* One Thousand Oaks, California: Sage.

Department for Education (1995) *Music in the National Curriculum,* London: HMSO. Department for Education and Employment/Qualifications and Curriculum Authority (1999) *Music,* London: HMSO.

Department for Education and Skills (2003) *Excellence and enjoyment: A strategy for primary schools,* London: DfES.

Department for Education and Skills (2004) *The music manifesto,* available at: http://www.musicmanifesto.co.uk/ (Accessed: 07 July 2004)

Department of Education and Science (1989) *National Curriculum: From policy to practice,* London: Department of Education and Science.

Department of Education and Science (1992) *Music in the National Curriculum (England),* London: HMSO.

deVries, P. (2000) Learning how to be a music teacher: An autobiographical case study, *Music Education Research,* 2, 2, 165-179.

Dewey, J. (1902/1983) The child and the curriculum. In Boydston, J. A. (ed.) *John Dewey: The middle works, 1899-1924, volume 2: 1902-1903.* Carbondale, IL: Southern Illinois University Press.

Dewey, J. (1910/1997) *How we think,* Boston/NewYork: D.C.Heath/Dover.

Dewey, J. (1916) *Democracy and education,* New York: The Free Press.

Dewey, J. (1934) *Art as experience,* New York: Capricorn Books.

Dibb, J. (2002) General opinion, *Music Teacher,* 81, 12, 24-25.

Dolloff, L. A. (1999) Imagining ourselves as teachers: The development of teacher identity in music teacher education, *Music Education Research,* 1, 2, 191-207.

Downing, D., Johnson, F. and Kaur, S. (2003) *Saving a place for the arts? A survey of the arts in primary schools in England,* Slough: National Foundation for Educational Research.

Dreyer, E. (1995) *Using semi-structured interviews in small-scale research: A teacher's guide,* Edinburgh: Scottish Council for Research in Education.

Dreyfus, H. L. and Dreyfus, S. E. (1986) *Mind over machine: The power of human intuition and expertise in the era of the computer,* Oxford: Basil Blackwell.

Dweck, C. S. (2000) *Self-theories: Their role in motivation, personality, and development,* Philadelphia, PA: Psychology Press.

Eden, C. (1992) On the nature of cognitive maps, *Journal of Management Studies,* 29, 3, 261-265.

Edwards, A. and Ogden, L. (1998) Constructing curriculum subject knowledge in primary school teacher training, *Teaching and Teacher Education,* 14, 7, 735-747.

Edwards, R. H. (1992) Model building. In Colwell, R. (ed.) *Handbook of research on music teaching and learning,* New York: Schirmer.

Eisenhardt, K. M. (1999) Building theories from case study research. In Bryman, A. and Burgess, R. G. (eds.) *Qualitative research: Volume I,* London: Sage.

Eisner, E. W. (1991/1998) *The enlightened eye: Qualitative inquiry and the enhancement of educational practice,* New York/Upper Saddle River: Macmillan/Prentice-Hall.

Eisner, E. W. (1996) *Cognition and curriculum reconsidered,* London: Paul Chapman.

Elbaz, F. (1983) *Teacher thinking: A study of practical knowledge,* London: Croom Helm.

Elbaz, F. (1990) Knowledge and discourse: The evolution of research on teacher thinking In Day, C., Pope, M. and Denicolo, P. (eds.) *Insights into teachers' thinking and practice,* Basingstoke: The Falmer Press.

Elbaz, F. (1991) Research on teacher's knowledge: The evolution of a discourse, *Journal of Curriculum Studies,* 23, 1, 1-19.

Elbaz, F., Hoz, R., Tomer, Y., Chayot, R., Mahler, S. and Yeheskel, N. (1986) The use of concept mapping in the study of teachers' knowledge structures. In Ben-Peretz, M., Bromme, R. and Halkes, R. (eds.) *Advances of research on teacher thinking,* Lisse: ISATT/Swets & Zeitlinger.

Elliott, D. J. (1995) *Music matters: A new philosophy of music education,* New York: Oxford University Press.

Elliott, D. J. (2002) Philosophical perspectives on research. In Colwell, R. and Richardson, C. (eds.) *The new handbook of research on music teaching and learning,* New York: Oxford University Press.

Ely, M., Anzul, M., Friedman, T., Garner, D. and Steinmetz, A. (1991) *Doing qualitative research: Circles within circles,* London: Falmer Press.

Eraut, M. (1985) Knowledge creation and knowledge use in professional contexts, *Studies in Higher Education, 10,* 2, 117-133.

Eraut, M. (1994) *Developing professional knowledge and competence,* London: The Falmer Press.

Eraut, M. (2000a) Non-formal learning and tacit knowledge in professional work, *British Journal of Educational Psychology,* 70, 113-136.

Eraut, M. (2000b) The intuitive practitioner: A critical overview. In Atkinson, S. and Claxton, G. (eds.) *The intuitive practitioner,* Buckingham: Open University Press.

Eraut, M. (2001) Theories of professional expertise. In Paechter, C., Preedy, M., Scott, D. and Soler, J. (eds.) *Knowledge, learning and power,* London: Paul Chapman/The Open University.

Eraut, M. (2004) Informal learning in the workplace, *Studies in Continuing Education,* 26, 2, 247-273.

Fang, Z. (1996) A review of research on teacher beliefs and practices, *Educational Research,* 38, 1, 47-65.

Feiman-Nemser, S. and Floden, R. E. (1986) The culture of teaching. In Wittrock, M. C. (ed.) *Handbook of research on teaching,* 3rd ed., New York: Macmillan.

Feldberg, E. and Atkinson, E. (1997) *Curriculum bank music (Key stage two),* Leamington Spa: Scholastic.

Fellows, N. J. (1994) A window into thinking: Using student writing to understand conceptual change in science learning, *Journal of Research in Science Teaching,* 31, 9, 985-1001.

Fenstermacher, G. D. (1986) Philosophy of research on teaching: Three aspects. In Wittrock, M. C. (ed.) *Handbook of research on teaching,* 3rd ed., New York: Macmillan.

Flynn, P. and Pratt, G. (1995) Developing an understanding of appraising music with practising primary teachers, *British Journal of Music Education,* 12, 2, 127-158.

Fox, R. (2001) Constructivism examined, *Oxford Review of Education,* 27, 1, 23-35.

Freeman, D. (1991) "To make the tacit explicit": Teacher education, emerging discourse, and conceptions of teaching, *Teaching and Teacher Education,* 7, 5/6, 439-454.

Fullan, M. (1991) *The new meaning of educational change,* London: Cassell.

Fullan, M. and Hargreaves, A. (1994) The teacher as a person. In Pollard, A. and Bourne, J. (eds.) *Teaching and learning in the primary school,* London: Routledge.

Fuller, F. F. and Bown, 0. H. (1975) Becoming a teacher. In Ryan, K. (ed.) *Teacher education: The seventy-fourth yearbook of the National Society for the Study of Education, Part II,* Chicago: NSSE/The University of Chicago Press.

Furlong, J. and Maynard, T. (1995) *Mentoring student teachers: The growth of professional knowledge,* London: Routledge.

Galton, M. (2000) The National Curriculum balance sheet for Key Stage 2: A researcher's view, *The Curriculum Journal, 11,* 3, 323-341.

Gammon, V. (2003) The subject general knowledge of secondary music PGCE applicants, *British Journal of Music Education,* 20, 1, 83-99.

Gardner, H. (1983/1985) *Frames of mind: The theory of multiple intelligences,* London: Paladin.

Gardner, H. (1993) *Multiple intelligences: The theory in practice,* New York: Basic Books.

Gebbie, C., Elliot, D. and Morris, C. (1984) First year in teaching, *British Journal of Music Education, 1,* 1, 37-62.

Gergen, K. J. (1999) *An invitation to social construction,* London: Sage Publications.

Gifford, E. (1993) The musical training of primary teachers: Old problems, new insights and possible solutions, *British Journal of Music Education, 10,* 1, 33-46.

Gipps, C., McCallum, B. and Brown, M. (1999) Primary teachers' beliefs about teaching and learning, *The Curriculum Journal, 10,* 1, 123-134.

Glaser, B. and Strauss, A. (1967) *The discovery of grounded theory,* Chicago: Aldine.

Glaser, R. (1999) Expert knowledge and processes of thinking In McCormick, R. and Paechter, C. (eds.) *Learning and knowledge,* London: The Open University/Paul Chapman Publishing.

Glover, J. and Ward, S. (eds.) (1993/1998a) *Teaching music in the primary school,* 2nd ed., London: Cassell.

Glover, J. and Ward, S. (1993/1998b) Understanding music. In Glover, J. and Ward, S. (eds.) *Teaching music in the primary school,* 2nd ed., London: Cassell.

Glover, J. and Young, S. (1999) *Primary music: Later years,* London: The Falmer Press.

Golby, M. (1996) Teachers' emotions: An illustrated discussion, *Cambridge Journal of Education,* 26, 3, 423-434.

Goleman, D. (1996) *Emotional intelligence: Why it can matter more than IQ,* London: Bloomsbury.

Goleman, D. (1998) *Working with emotional intelligence,* London: Bloomsbury.
Goodson, I. (1994) Studying the teacher's life and work, *Teaching and Teacher Education, 10,* 1, 29-37.

Goodson, I. F. (ed.) (1992) *Studying teachers' lives,* London: Routledge.

Goodson, I. F., Anstead, C. J. and Mangan, J. M. (1998) *Subject knowledge: Readings for the study of school subjects,* London: Falmer.

Green, L. (1988) *Music on deaf ears: Musical meaning, ideology, education,* Manchester: University of Manchester Press.

Green, L. (2001) *How popular musicians learn: A way ahead for music education,* Aldershot: Ashgate.

Green, L., Chedzoy, S., Harris, W., Mitchell, R., Naughton, C., Rolfe, L. and Stanton, W. (1998) A study of student teachers' perceptions of teaching the arts in primary schools, *British Educational Research Journal,* 24, 1, 95-107.

Griffiths, G. (1985) Doubts, dilemmas and diary-keeping: Some reflections on teacher-based research. In Burgess, R. (ed.) *Issues in educational research: Qualitative methods,* London: Falmer.

Grossman, P L (1990) *The making of a teacher: Teacher knowledge and teacher education,* New York: Teachers College Press.

Grossman, P. L. (1995) Teachers' knowledge. In Anderson, L. W. (ed.) *International encyclopedia of teaching and teacher education,* Oxford: Pergamon.

Grossman, P. L., Wilson, S. M. and Shulman, L. S. (1989) Teachers of substance: Subject matter knowledge for teaching. In Reynolds, M. C. (ed.) *Knowledge base for the beginning teacher,* Oxford/New York: Pergamon/American Association of Colleges for Teacher Education.

GudmundsdOttir, S. (1990) Curriculum stories: Four case studies of social studies teaching. In Day, C., Pope, M. and Denicolo, P. (eds.) *Insights into teachers' thinking and practice,* Basingstoke: The Falmer Press.

GudmundsdOttir, S. (2001) Narrative research on school practice. In Richardson, V. (ed.) *Handbook of research on teaching,* 4th ed., Washington, D.C.: American Educational Research Association.

Habermas, J. (1974) *Theory and practice,* London: Heinemann.

Halkes, R. (1986) Teacher thinking. A promising perspective into educational processes. Report of the 1983 and 1985 Conferences of the International Study Association on Teacher Thinking (ISATT), *Journal of Curriculum Studies,* 18, 2, 211-214.

Hall, R. H. and O'Donnell, A. (1996) Cognitive and affective outcomes of learning from knowledge maps, *Contemporary Educational Psychology,* 21, 94-101.

Hallam, S. (2001a) Learning in music: Complexity and diversity. In Philpott, C. and Plummeridge, C. (eds.) *Issues in music teaching,* London: RoutledgeFalmer.

Hallam, S. (2001b) *The power of music,* The Performing Right Society: www.thepowerofmusic.co.uk (Accessed: 23 May 2001).

Hanslick, E. (1854/1957) *The beautiful in music,* trans. Cohen, G., New York: Liberal Arts Press.

Hargreaves, A. (1994) *Changing teachers, changing times: Teachers' work and culture in postmodern times,* New York: Teachers College Press.

Hargreaves, A. (1998) The emotional practice of teaching, *Teaching and Teacher Education,* 14, 8, 835-854.

Hargreaves, D. J. (2004) What is 'being good at music'? *NAME magazine,* 13, 4-7.

Hargreaves, D. J. and Marshall, N. A. (2003) Developing identities in music education, *Music Education Research,* 5, 3, 263-274.

Hargreaves, D. J., Marshall, N. A. and North, A. C. (2003) Music education in the twenty-first century: A psychological perspective, *British Journal of Music Education,* 20, 2, 147-163.

Hargreaves, D. J., Miell, D. and MacDonald, R. A. R. (eds.) (2002a) *Musical identities,* Oxford: Oxford University Press.

Hargreaves, D. J., Miell, D. and MacDonald, R. A. R. (2002b) What are musical identities, and why are they important? In MacDonald, R. A. R., Hargreaves, D. J. and Miell, D. (eds.) *Musical identities,* Oxford: Oxford University Press.

Hargreaves, D., Welch, G., Purves, R. and Marshall, N. (2003) *Effective teaching in secondary school music: Teacher and pupil identities. ESRC End of award report,* available at: http://:www.regard.ac.uk/research_findings/R000223751/summary.pdf (Accessed: 25 March 2005).

Hargreaves, L., Comber, C. and Galton, M. (1996) The National Curriculum: Can small schools deliver? Confidence and competence levels of teachers in small rural primary schools, *British Educational Research Journal,* 22, 1, 89-99.

Harris, D. (2000) Limited access only: The problems of researching performing arts in a Muslim Pakistani community, *Music Education Research,* 2, 2, 193-201.

Harris, D. (in preparation) *Music education and Muslim pupils,* London: Trentham Books.

Hay McBer (2000) Research into teacher effectiveness: A model of teacher effectiveness. Research report No 216, DfEE, London.

Hebdige, D. (1979) *Subculture: The meaning of style,* London: Methuen.

Hennessy, S. (1998) *Coordinating music across the primary school,* London· Falmer Press.

Hennessy, S. (2000) Overcoming the red feeling: The development of confidence to teach music in primary school amongst student teachers, *British Journal of Music Education,* 17, 2, 183-196.

Hennessy, S. (2001) Research and development in music education. In Philpott, C. and Plummeridge, C. (eds.) *Issues in music teaching,* London: RoutledgeFalmer.

Hennessy, S., Rolf, L. and Chedzoy, S. (1999) *The factors which influence student teachers' confidence to teach the arts in the primary classroom,* paper given at BERA conference: University of Sussex, Brighton, September 2-5.

Hirst, P. H. (1974) *Knowledge and the curriculum: A collection of philosophical papers,* London: Routledge and Kegan Paul.

Hofkins, D. (2003) One thing leads to another... *The Times Educational Supplement,* 28 March, p. 21.

Holdstock, J. and Richards, C. (1995) *Sounds topical,* Oxford: Oxford University Press.

Ivanov, V. K. and Geake, J. G. (2003) The Mozart Effect and primary school children, *Psychology of Music,* 31, 4, 405-413.

Jackson, P. W. (1968) *Life in classrooms,* New York: Holt, Rinehart & Winston.

Jeanneret, N. (1997) Model for developing preservice primary teachers' confidence to teach music, *Bulletin of the Council for Research in Music Education,* 133, 37-44.

Jeffrey, B. and Woods, P. (1996) Feeling deprofessionalised: The social construction of emotions during an OFSTED inspection, *Cambridge Journal of Education,* 26, 3, 325-343.

Jones, B. J. and McFee, J. K. (1986) Research on teaching arts and aesthetics. In Wittrock, M. C. (ed.) *Handbook of research on teaching.* 3rd ed., New York: MacMillan.

Jorgensen, E. R. (1997) *In search of music education,* Urbana: University of Illinois Press.

Juslin, P. N. and Sloboda, J. A. (eds.) (2001) *Music and emotion: Theory and research,* Oxford: Oxford University Press.

Kagan, D. M. (1990) Ways of evaluating teacher cognition: Inferences concerning the Goldilocks principle, *Review of Educational Research,* 60, 3, 419-469.

Kelly, G. A. (1955) *The psychology of personal constructs,* New York: Norton.

Kelly, S. N. (1998) Preschool classroom teachers' perceptions of useful music skills and understandings, *Journal of Research in Music Education,* 46, 3, 374-383.

Kinchin, I. M., Hay, D. B. and Adams, A. (2000) How a qualitative approach to concept map analysis can be used to aid learning by illustrating patterns of conceptual development, *Educational Research,* 42, 1, 43-57.

Kingston, P. (2005) Hello. How are you? *The Times Educational Supplement,* January 18, p. 14.

Knapp, A. (2000) Music and the literacy hour at Key Stage 2: An investigation into curricular pressure, *British Journal of Music Education,* 17, 3, 265-276.

Knight, T. (2002) Music education in the 21st century, *NAME magazine: Reports from NAME Conference 2002,* 9, 4-6.

Krathwohl, D. R., Bloom, B. S. and Masia, B. B. (eds.) (1964) *Taxonomy of educational objectives: Book 2: Affective domain,* New York: Longman.

Kushner, S. (1999) Fringe benefits: Music education out of the National Curriculum, *Music Education Research,* 1, 2, 209-218.

Laar, B. (2004) Creativity loses again, *The Times Educational Supplement,* 30 January , p. 24.

Lakoff, G. and Johnson, M. (1980) *Metaphors we live by,* Chicago: University of Chicago Press.

Lamont, A. (2002) Musical identities and the school environment. In MacDonald, R. A. R., Hargreaves, D. J. and Miell, D. (eds.) *Musical identities,* Oxford: Oxford University Press.

Lamont, A., Hargreaves, D. J., Marshall, N. A. and Tarrant, M. (2003) Young people's music in and out of school, *British Journal of Music Education,* 20, 3, 229-241.

Langer, S. K. (1942/1957) *Philosophy in a new key: A study in the symbolism of reason, rite, and art,* 3rd ed., Cambridge, Massachusetts: Harvard University Press.

Lather, P. (1986) Research as praxis, *Harvard Educational Review,* 56, 3, 257-277.

Lawson, D., Plummeridge, C. and Swanwick, K. (1994) Music and the National Curriculum in primary schools, *British Journal of Music Education, 11,* 1, 3-14.

Lawson, M. J. (1994) Concept mapping. In Husen, T. and Postlethwaite, T. N. (eds.) *The international encyclopedia of education,* 2nd ed., vol. 2, Oxford: Pergamon.

Leach, J., Williams, J. and Andrews, R. (2002) Introduction: Research in subject knowledge and application, *British Educational Research Journal,* 28, 5, 643-648.

Learner, S. (2001) 'Inspectors frown on fun in class', *Times Educational Supplement,* 14 December, p. 5.

Leglar, M. and Collay, M. (2002) Research by teachers on teacher education. In Colwell, R. and Richardson, C. (eds.) *The new handbook of research on music teaching and learning,* New York: Oxford University Press.

Leinhardt, G. (1988) Situated knowledge and expertise in teaching. In Calderhead, J. (ed.) *Teachers' professional learning,* Lewes: The Falmer Press.

Leinhardt, G. and Greeno, J. G. (1986) The cognitive skill of teaching, *Journal of Educational Psychology,* 78, 2, 75-95.

Leinhardt, G. and Smith, D. A. (1985) Expertise in mathematics instruction: Subject matter knowledge, *Journal of Educational Psychology,* 77, 3, 247-271.

Leitch, R. and Day, C. (2000) Action research and reflective practice: Towards a holistic view, *Educational Action Research,* 8, 1, 179-193.

Lemons, M. (1997) Teacher knowledge in elementary general music: The voices of two teachers, *Bulletin of the Council for Research in Music Education,* 131, 34.

Levi-Strauss, C. (1962/1966) *The savage mind,* Chicago: University of Chicago Press.

Lieblich, A., Tuval-Mashiach, R. and Zilber, T. (1998) *Narrative research: Reading, analysis, and interpretation,* Thousand Oaks, California: Sage Publications.

Lincoln, Y. S. and Guba, E. G. (1985) *Naturalistic inquiry,* Newbury Park, Calif.: Sage.
Littledyke, M. and Huxford, L. (eds.) (1998) *Teaching the primary curriculum for constructive learning,* London: David Fulton.

Lortie, D. C. (1975, paperback edition 1977) *Schoolteacher: A sociological study,* Chicago: The University of Chicago Press.

Lowyck, J. (1990) Teacher thinking studies: Bridges between description, prescription and application. In Day, C., Pope, M. and Denicolo, P. (ed.) *Insights into teachers' thinking and practice,* Basingstoke: The Falmer Press.

Mark, M. L. (1996) *Contemporary music education,* New York: Schirmer.

Mark, M. L. (2002) *Music education: Source readings from Ancient Greece to today,* New York/London: Routledge.

McCullough, E. D. (1999) *"I don't know anything about music." An exploration of primary school teachers knowledge about music in education,* PhD proposal for the University of Newcastle upon Tyne, unpublished submission to the research degrees panel.

McDiarmid, G. W., Ball, D. L. and Anderson, C. W. (1989) Why staying one chapter ahead doesn't really work: Subject-specific pedagogy. In Reynolds, M. C. (ed.) *Knowledge base for the beginning teacher,* Oxford/New York: Pergamon/American Association of Colleges for Teacher Education.

McEwan, H. and Bull, B. (1991) The pedagogical nature of subject knowledge, *American Educational Research Journal,* 28, 2, 316-334.

McNamara, D. (1991) Subject knowledge and its applications: Problems and possibilities for teacher educators, *Journal of Education for Teaching,* 17, 2, 113-128.

McNess, E., Broadfoot, P. and Osborn, M. (2003) Is the effective compromising the affective? *British Educational Research Journal,* 29, 2, 243-257.

Measor, L. and Sikes, P. (1992) Visiting lives: Ethics and methodology in life history. In Goodson, I. F. (ed.) *Studying teachers' lives,* London: 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.

Meredith, A. (1995) Terry's learning: Some limitations of Shulman's pedagogical content knowledge, *Cambridge Journal of Education,* 25, 2, 175-187.

Merriam, A. P. (1964) *The anthropology of music,* Evanston, Illinois: Northwestern University Press.

Meyer, L. B. (1956) *Emotion and meaning in music,* Chicago: University of Chicago Press.

Miles, M. B. and Huberman, A. M. (1994) *Qualitative data analysis: An expanded sourcebook,* Thousand Oaks, California: Sage.

Mills, J. (1989) The generalist primary teacher of music: A problem of confidence, *British Journal of Music Education,* 6, 2, 125-138.

Mills, J. (1993) *Music in the primary school,* 2nd edition, Cambridge: Cambridge University Press.

Mills, J. (1994) Music in the National Curriculum: The first year, *British Journal of Music Education, 11,* 3, 191-196.

Mills, J. (1995/6) Primary student teachers as musicians, *Bulletin of the Council for Research in Music Education,* 127, 122-126.

Mills, J. (1997a) A comparison of the quality of class music teaching in primary and secondary schools in England, *Bulletin of the Council for Research in Music Education,* 133, 72-76.

Mills, J. (1997b) Knowing the subject *versus* knowing the child: Striking the right balance for children aged 7-11 years, *Research Studies in Music Education,* 9, 29-35.

Mills, J. (1997c) OFSTED music inspection findings 1995-6, *Primary Music Today,* 8, 20-21.

Mills, J. (1998) Music. In Clay, G., Hertrich, J., Jones, P., Mills, J. and Rose, J. (eds.) *The arts inspected.* Oxford: Heinemann.

Mills, J. (2000-2001) Music and the arts: The quality of provision in maintained schools in England, *Bulletin of the Council for Research in Music Education,* 147, 128-131

Mitchell, J. (1994) Teachers' implicit theories concerning questioning, *British Educational Research Journal,* 20, 1, 69-83.

Morine-Dershimer, G. (1989) Preservice teachers' conceptions of content and pedagogy: Measuring growth in reflective, pedagogical decision-making, *Journal of Teacher Education,* 40, 5, 46-52.

Morine-Dershimer, G. G. (1999) Instructional planning. In Cooper, J. A. (ed.) *Classroom teaching skills,* Boston: Houghton Mifflin.

Mroz, M. (1999) Concept mapping - its potential to increase children's comprehension of narrative texts, *Studies in Teaching and Learning, 1,* 1, 19-28.

Munby, H. (1986) Metaphor in the thinking of teachers, *Journal of Curriculum Studies,* 18, 2, 197-209.

Munby, H., Russell, T. and Martin, A. K. (2001) Teachers' knowledge and how it develops. In Richardson, V. (ed.) *Handbook of research on teaching,* Washington, D.C.: American Educational Research Association.

National Advisory Committee on Creative and Cultural Education (1999/2001) *All our futures: Creativity, culture and education,* London: DfEE.

National Institute of Education (1975) *Teaching as clinical information processing.* Report of Panel 6, National Conference on Studies in Teaching, National Institute of Education, Washington, DC.

Neimeyer, G. J. (ed.) (1993) *Constructivist assessment: A casebook,* Newbury Park, Ca.: Sage Publications.

Neisser, U. (1967) *Cognitive psychology,* New York: Appleton-Century-Crofts.
Nespor, J. (1987) The role of beliefs in the practice of teaching, *Journal of Curriculum Studies,* 19, 4, 317-328.

Nespor, J. and Barber, L. (1991) The rhetorical construction of "the teacher", *Harvard Educational Review,* 61, 4, 417-433.

Newton, D. P. (2000) *Teaching for understanding: What it is and how to do it,* London: RoutledgeFalmer.

Newton, D. P. and Newton, L. D. (1997) Teachers' conceptions of understanding historical and scientific events, *British Journal of Educational Psychology,* 67, 513-527.

Newton, D. P. and Newton, L. D. (2001) Subject content knowledge and teacher talk in the primary science classroom, *European Journal of Teacher Education,* 24, 3, 369-379.

Nias, J. (1987) Teaching and the self, *Cambridge Journal of Education,* 17, 3, 178-185.

Nias, J. (1989) *Primary teachers talking,* London: Routledge.

Nias, J. (1993) Changing times, changing identities: Grieving for a lost self. In Burgess, R. G. (ed.) *Education research and evaluation: For policy and practice?* London: The Falmer Press.

Nias, J. (1996) Thinking about feeling: The emotions in teaching, *Cambridge Journal of Education,* 26, 2, 293-306.

North, A. C., Hargreaves, D. J. and Tarrant, M. (2002) Social psychology and music education. In Colwell, R. and Richardson, C. (eds.) *The new handbook of research on music teaching and learning,* New York: Oxford University Press.

Novak, J. D. (1998) *Learning, creating, and using knowledge: Concept maps as facilitative tools in schools and corporations,* Mahwah, New Jersey: Lawrence Erlbaum Associates.

Novak, J. D. and Gowin, D. B. (1984) *Learning how to learn,* New York: Cambridge University Press.

Odam, G. (1995) *The sounding symbol,* Cheltenham: Stanley Thornes.

OFSTED (1993) *Music: Key stages 1, 2 and 3: First year 1992-93,* London: HMSO.

OFSTED (1995a) *Music: A review of inspection findings 1993/4,* London: HMSO.

OFSTED (1995b) *The OFSTED handbook: Guidance on the inspection of nursery and primary schools,* London: HMSO.

OFSTED (1997) *Using subject specialists to promote high standards at Key Stage 2,* London: OFSTED.

OFSTED (1998a) *Changes to the National Curriculum in Key Stages 1 and 2: Implications for primary and special school inspections,* London: OFSTED.

OFSTED (1998b) *Inspection '98: Briefing for schools on the new inspection requirements,* London: OFSTED.

OFSTED (1998c) *Standards in the primary curriculum 1996-97,* London: OFSTED.

OFSTED (1999) *Inspection report,* available at ofsted.gov.uk/reports/ (Last accessed: 25.05.00 but since superseded by more recent report) (NB precise details not given to protect anonymity)

OFSTED (2000a) *Inspecting subjects 3-11: Guidance for inspectors and schools,* London: OFSTED.

OFSTED (2000b) *Standards in music 1998-1999,* available at www.ofsted.gov.uk.

OFSTED (2001) *Primary music: OFSTED subject reports, 1999-2000,* available at www.ofsted.gov.uk.

OFSTED (2002) *The curriculum in successful primary schools,* HMI 553, London: OFSTED.

Ofsted (2004a) *Ofsted subject reports 2002/03: Music in primary schools,* available at www.ofsted.gov.uk

Ofsted (2004b) *Standards and quality 2002/03: The annual report of Her Majesty's Chief Inspector of Schools,* London: The Stationery Office.

Ofsted (2005) *Ofsted subject reports 2003/04: Music in primary schools,* available at: www.ofsted.gov.uklpublications/annualreport03 04/subject reports/primary! music (Accessed: 26.03.05)

Olsson, B. (1997) Is musical knowledge aesthetic or social? A pilot study of knowledge formation in music, *Bulletin of the Council for Research in Music Education,* 133, 110-114.

Osborn, M., McNess, E., Broadfoot, P., Pollard, A. and Triggs, P. (2000) *What teachers do: Changing policy and practice in primary education,* London: Continuum.

Overy, K. (1998) Can music really "improve" the mind? *Psychology of Music,* 26, 1, 97-99.

Paechter, C. (2000) *Changing school subjects: Power, gender and curriculum,* Buckingham: Open University Press.

Pajares, M. F. (1992) Teachers' beliefs and educational research: Cleaning up a messy construct, *Review of Educational Research,* 62, 3, 307-332.

Paynter, J. (1982) *Music in the secondary school curriculum,* Cambridge: Cambridge University Press.

Paynter, J. and Aston, P. (1970) *Sound and silence: Classroom projects in creative music,* Cambridge: Cambridge University Press.

Pearson, M. and Somekh, B. (2000) *Concept mapping as a research tool: A study of primary children's representations of information and communication technologies (ICT),* Cardiff, www.leeds.ac.uldeducol/documents/00001677.htm

Perkins, D. N. (1986) *Knowledge as design,* Hillsdale, New Jersey: Lawrence Erlbaum.

Peshkin, A. (2000) The nature of interpretation in qualitative research, *Educational Researcher,* 29, 9, 5-10.

Phenix, P. (1964) *Realms of meaning: A philosophy of the curriculum for general education,* New York: McGraw Hill.

Piaget, J. (1973) *To understand is to invent,* New York: Grossman.

Pitts, S. E. (1998) The development of secondary school music in the twentieth century: Historical perspectives on contemporary practice, unpublished PhD thesis, University of Sheffield.

Pitts, S. E. (2000) Reasons to teach music: Establishing a place in the contemporary curriculum, *British Journal of Music Education, 17,* 1, 33-42.

Plummeridge, C. (1999) Aesthetic education and the practice of music teaching, *British Journal of Music Education,* 16, 2, 115-122.

Plummeridge, C. (2000) The evolution of music education. In Kent, A. (ed.) *School subject teaching: The history and future of the curriculum.* London: Kogan Page.

Plummeridge, C. (2001) The justification for music education. In Philpott, C. and Plummeridge, C. (eds.) *Issues in music teaching,* London: RoutledgeFalmer.

Plummeridge, C. (2002) What is music in the curriculum? In Spruce, G. (ed.) *Aspects of teaching secondary music: Perspectives in practice,* London: RoutledgeFalmer/The Open University.

Polanyi, M. (1967) *The tacit dimension,* London: Routledge.

Pollard, A. (ed.) (1996) *Readings for reflective teaching in the primary school,* London: Cassell.

Pollard, A. (1997) *Reflective teaching in the primary school,* London: Cassell Education.

Pollard, A., Broadfoot, P., Croll, P., Osborn, M. and Abbott, D. (1994) *Changing English primary schools? The impact of the Education Reform Act at Key Stage One,* London: Cassell.

Pope, M. and Denicolo, P. (1993) The art and science of constructivist research in teacher education, *Teaching and Teacher Education,* 9, 5/6, 529-544.

Poulson, L. (2001) Paradigm lost? Subject knowledge, primary teachers and education policy, *British Journal of Educational Studies,* 49, 1, 40-55.

Poulson, L., Avramidis, E., Fox, R., Medwell, J. and Wray, D. (2001) The theoretical beliefs of effective teachers of literacy in primary schools: An exploratory study of orientations to reading and writing, *Research Papers in Education,* 16, 3, 271-292.

Pound, L. and Harrison, C. (2003) *Supporting musical development in the early years,* Buckingham· Open University Press.

Powell, R. R. (1992) The influence of prior experiences on pedagogical constructs of traditional and nontraditional preservice teachers, *Teaching and Teacher Education,* 8, 3, 225-238.

Powney, J. and Watts, M. (1987) *Interviewing in educational research,* London: Routledge and Kegan Paul.

Prawat, R. S. (1992) Teachers' beliefs about teaching and learning: A constructivist perspective, *American Journal of Education,* 100, 354-395.

Price, D. (2005) *Musical futures — An emerging vision,* London: Paul Hamlyn Foundation.

Primary Schools Research and Development Group (1983) *Curriculum responsibility and the use of teacher expertise in the primary school,* Birmingham: University of Birmingham Department of Curriculum Studies.

Qualifications and Curriculum Authority (2000) *Investing in our future: Curriculum guidance for the foundation stage,* London: QCA.

Qualifications and Curriculum Authority/Depai __ anent for Education and Employment (2000) *Music: A scheme of work for key stages 1 and 2,* London: Qualifications and Curriculum Authority.

Rainbow, B. (1989) *Music in educational thought and practice,* Aberystwyth: Boethius Press.

Rauscher, F. H. (1998) Response to Katie Overy's paper, "Can music really 'improve' the mind?" *Psychology of Music,* 26, 197-199.

Reid, L. A. (1986) *Ways of understanding and education,* London: University of London Institute of Education/Heinemann.

Reimer, B. (1970) *A philosophy of music education,* Englewood Cliffs, New Jersey: Prentice-Hall.

Reimer, B. (1989) *A philosophy of music education,* 2nd ed., Upper Saddle River, New Jersey: Prentice-Hall.

Reimer, B. (1997) Should there be a universal philosophy of music education? *International Journal of Music Education,* 29, 4-21.

Reimer, B. (2003) *A philosophy of music education: Advancing the vision,* 3rd ed., Upper Saddle River, New Jersey: Prentice Hall.

Richardson, V. (1996) The role of attitudes and beliefs in learning to teach. In Sikula, J. (ed.) *Handbook of research on teacher education,* New York: Simon & Schuster Macmillan.

Roberts, B. (1991) Music teacher education as identity construction, *International Journal of Music Education,* 18, 30-39.

Robinson, D. H., Robinson, S. L. and Katayama, A. D. (1999) When words are represented in memory like pictures: Evidence for spatial encoding of study materials, *Contemporary Educational Psychology,* 24, 38-54.

Robson, C. (2002) *Real world research,* Oxford: Blackwell.

Rogers, R. (2005) *Music manifesto report no 1,* London: DfES.

Ross, M. (1975) *Arts and the adolescent,* London: Evans.

Ross, M. (1995) What's wrong with school music? *British Journal of Music Education,* 12, 3, 185-201.

Rowland, S. (1988) My body of knowledge. In Nias, J. and Groundwater-Smith, S. (eds.) *The enquiring teacher: Supporting and sustaining teacher research,* Lewes: Falmer Press.

Runfola, M. and Swanwick, K. (2002) Developmental characteristics of music learners. In Colwell, R. and Richardson, C. (eds.) *The new handbook of research on music teaching and learning,* New York: Oxford University Press.

Ryle, G. (1949/1963) *The concept of mind,* London: Hutchinson/Peregrine.

Sanger, J. (1994) Seven types of creativity: Looking for insights in data analysis, *British Educational Research Journal,* 20, 2, 175-185.

Schmidt, M. (1998) Defining "good" music teaching: Four student teachers' beliefs and practices, *Bulletin of the Council for Research in Music Education,* 138, 19-46.

Schtin, D. A. (1983) *The reflective practitioner: How professionals think in action,* London: Temple Smith.

Schuell, T. J. (1988) The role of transfer in the learning and teaching of music: A cognitive perspective. In Fowler, C. (ed.) *The Crane Symposium: Toward an understanding of the teaching and learning of musical performance,* Potsdam: College of the State University of New York.

Schwab, J. J. (1961/1978) Education and the structure of the disciplines. In Westbury, I. and Wilkof, N. J. (eds.) *Science, curriculum and liberal education,* Chicago: University of Chicago Press.

Schwab, J. J. (1962) The concept of the structure of a discipline, *The Educational Record,* 43, 197-205.

Schwab, J. J. (1973) The practical 3: Translation into curriculum, *School Review,* 81, 4, 501-522.

Schwandt, T. A. (1994) Constructivist, interpretivist approaches to human inquiry. In Denzin, N. K. and Lincoln, Y. S. (eds.) *Handbook of qualitative research,* Thousand Oaks, California: Sage.

Serafine, M. L. (1988) *Music as cognition,* New York: Columbia University Press.

Shulman, L. S. (1986a) Paradigms and research programs in the study of teaching. In Wittrock, M. C. (ed.) *Handbook of research on teaching,* 3rd ed., New York: Macmillan.

Shulman, L. S. (1986b) Those who understand: Knowledge growth in teaching, *Educational Researcher,* 15, 2, 4-14.

Shulman, L. S. (1987a) Knowledge and teaching: Foundations of the new reform, *Harvard Educational Review,* 57, 1, 1-22.

Shulman, L. S. (1987b) Sounding an alarm: A reply to Sockett, *Harvard Educational Review,* 57, 4, 473-482.

Shulman, L. S. and Quinlan, K. M. (1996) The comparative psychology of school subjects. In Berliner, D. C. and Calfee, R. C. (eds.) *Handbook of educational psychology,* New York: Simon & Schuster Macmillan.

Simmel, G. (1950) *The sociology of Georg Simmel,* trans., ed. and intro. by Kurt H. Wolff, Glencoe: Free Press.

Sloboda, J. (1999) Music — where cognition and emotion meet, *The Psychologist,* 12, 9, 450-455.

Sloboda, J. (2001) Emotion, functionality and the everyday experience of music: Where does music education fit? *Music Education Research,* 3, 2, 243-253.

Sloboda, J. A. (1985) *The musical mind: The cognitive psychology of music,* paperback edition, 1986, Oxford: Oxford University Press.

Sloboda, J. A., O'Neill, S. A. and Ivaldi, A. (2001) Functions of music in everyday life: An exploratory study using the experience sampling methodology, *Musical Scientiae,* 5, 1, 9-32.

Small, C. (1998) *Musicking• The meanings of performing and listening,* Hanover, NH: Wesleyan University Press.

Sockett, H. T. (1987) Has Shulman got the strategy right? *Harvard Educational Review,* 57, 2, 208-219.

Somekh, B. (1995) The contribution of action research to development in social endeavours: A position paper on action research methodology, *British Educational Research Journal,* 21, 3, 339-355.

Spencer, P. (1999) *What is musical understanding?* Paper given at the 1st Research in Music Education international conference: University of Exeter, April 20-24.

Spradley, J. P. (1979) *The ethnographic interview,* New York: Holt, Reinhart & Winston.

Spruce, G. (2002) Ways of thinking about music: Political dimensions and educational consequences. In Spruce, G. (ed.) *Teaching music in secondary schools: A reader,* London: RoutledgeFalmer/The Open University.

Spruce, G. (2003) The subject knowledge of secondary music PGCE applicants: A response, *British Journal of Music Education,* 20, 3, 317-320.

Stake, R. E. (1994) Case studies. In Denzin, N. K. and Lincoln, Y. S. (eds.) *Handbook of qualitative research,* Thousand Oaks, California: Sage.

Stake, R., Bresler, L. and Mabry, L. (1991) *Custom and cherishing: The arts in elementary schools,* Urbana-Champagne, Il: Council for Research in Music Education, University of Illinois School of Music.

Stenhouse, L. (1975) *An introduction to curriculum research and development,* London: Heinemann.

Stenhouse, L. (1982) The conduct, analysis and reporting of case study in educational research and evaluation. In McCormick, R. (ed.) *Calling education to account,* London: Heinemann/Open University.

Stodolsky, S. S. (1988) *The subject matters,* Chicago: University of Chicago Press.

Strahan, D. B. (1989) How experienced and novice teachers frame their views of instruction: An analysis of semantic ordered trees, *Teaching and Teacher Education, 5,* 1, 53-67.

Stuart, H. A. (1985) Should concept maps be scored numerically? *European Journal of Science Education, 7,* 1, 73-81.

Stubley, E. V. (1992) Philosophical foundations. In Colwell, R. (ed.) *Handbook of research in music teaching and learning,* New York: Schirmer.

Stunell, G. and McCullough, L. (2004) *'What about the teachers? Primary school teachers and their musical cultures: A double perspective',* paper presented at the 'Musical cultures and the realisation of potential' conference: Society for Education, Music and Psychology Research (Sempre), Institute of Education, University of London, 23 October.

Summers, M. and Mant, J. (1995) A survey of British primary school teachers' understanding of the Earth's place in the universe, *Educational Research,* 37, 3-20.

Swanwick, K. (1979) *A basis for music education,* Windsor: NFER-Nelson.

Swanwick, K. (1988) *Music, mind, and education,* London: Routledge.

Swanwick, K. (1994) *Musical knowledge: Intuition, analysis and music education,* London: Routledge.

Swanwick, K. (1999) *Teaching music musically,* London: Routledge.

Swanwick, K. (2001) An overview. In Welch, G. (ed.) *Mapping music education research in the UK,* Southwell: BERA.

Swanwick, K. and Franca, C. C. (1999) Composing, performing and audience-listening as indicators of musical understanding, *British Journal of Music Education,* 16, 1, 5-19.

Swanwick, K. and Tillman, J. (1986) The sequence of musical development: A study of children's composition, *British Journal of Music Education,* 3, 3, 305-339.

Tait, M. J. (1992) Teaching strategies and styles. In Colwell, R. (ed.) *Handbook of research on music teaching and learning,* New York: Schirmer.

Taylor, S. J. (1991) Leaving the field: Research, relationships, and responsibilities. In Shaffir, W. B. and Stebbins, R. A. (eds.) *Experiencing fieldwork: An inside view of qualitative research,* London: Sage.

Teacher Training Agency (1998) *National standards for qualified teacher status,* Chelmsford: TTA.

Teacher Training Agency (2002) *Qualifying to teach: Professional standards for Qualified Teacher Status and requirements for Initial Teacher Training,* London: TTA, and www.tta.gov.uk.

Teacher Training Agency (2003) *Qualifying to teach: Handbook of guidance,* London: TTA.

Teachout, D. J. (1997) Preservice and experienced teachers' opinions of skills and behaviors important to successful music teaching, *Journal of Research in Music Education,* 45, 1, 41-50.

Thompson, B. (1993) Teachers interviewing teachers: You only need to ask, *Curriculum,* 14, 1, 84-90.

Tochon, F. V. (1990) Heuristic schemata as tools for epistemic analysis of teachers' thinking, *Teaching and Teacher Education,* 6, 2, 183-196.

Tolman, E. C. (1948) Cognitive maps in rats and men, *The Psychological Review,* 55, 4, 189-208.

Treacher, V. (ed.) (1989) *Classroom issues in assessment and evaluation in the arts,* SCDC Arts in schools project, Reading: Berkshire Local Education Authority.

Turner-Bisset, R. (1999) The knowledge bases of the expert teacher, *British Educational Research Journal,* 25, 1, 39-55.

Twiselton, S. (2000) Seeing the wood for the trees: The National Literacy Strategy and Initial Teacher Education; pedagogical content knowledge and the structure of subjects, *Cambridge Journal of Education,* 30, 3, 391-403.

Van Driel, J. H., Veal, W. R. and Janssen, F. J. J. M. (2001) Pedagogical content knowledge: An integrative component within the knowledge base for teaching. An essay review, *Teaching and Teacher Education,* 17, 979-986.

Verma, G. K. and Mallick, K. (1999) *Researching education: Perspectives and techniques,* London: Falmer Press.

Verrastro, R. E. and Leglar, M. (1992) Music teacher education. In Colwell, R. (ed.) *Handbook of research on music teaching and learning,* New York: Schirmer.

Vygotsky, L. S. (1962) *Thought and language,* Cambridge, Mass.: MIT Press.

Wagner, A. C. (1987) 'Knots' in teachers' thinking. In Calderhead, J. (ed.) *Exploring teachers' thinking,* London: Cassell Educational.

Walford, G. (ed.) (1991) *Doing educational research,* London: Routledge.

Walford, G. (2001) *Doing qualitative educational research: A personal guide to the research process,* London: Continuum.

Welch, G. F. (1998) Early childhood musical development, *Research Studies in Music Education, 11,* 27-41.

Welch, G. (ed.) (2001a) *Mapping music education research in the UK,* Southwell: BERA.

Welch, G. (2001b) *The misunderstanding of music,* London: Institute of Education University of London.

Welch, G. F. (2000) The ontogenesis of musical behaviours: A sociological perspective, *Research Studies in Music Education,* 14, 1-13.

Welch, G. F. and Adams, P. (2003) *How is music learning celebrated and developed?* Southwell, Notts: BERA.

Wellington, J. J. (1996) *Methods and issues in educational research,* Sheffield: University of Sheffield Department of Education.

Wenger, E. (1998) *Communities of practice: Learning, meaning and identity,* Cambridge: Cambridge University Press.

Westbury, I. and Wilkof, N. (eds.) (1978) *Science, curriculum and liberal education,* Chicago: University of Chicago Press.

White, R. and Gunstone, R. (1992) *Probing understanding,* London: The Falmer Press.

Wilson, S. M., Shulman, L. S. and Richert, A. E. (1987) '150 different ways' of knowing: Representations of knowledge in teaching. In Calderhead, J. (ed.) *Exploring teachers' thinking,* London: Cassell Educational.

Wilson, S. M. and Wineburg, S. S. (1988) Peering at history through different lenses: The role of disciplinary perspectives in teaching history, *Teachers College Record,* 89, 4, 525-539.

Winch, C. and Gingell, J. (1999) *Key concepts in the philosophy of education,* London: Routledge.

Wineburg, S. (1997) Beyond "breadth and depth": Subject matter knowledge and assessment, *Theory into Practice,* 36, 4, 255-261.

Winitzky, N., Kauchak, D. and Kelly, M. (1994) Measuring teachers' structural knowledge, *Teaching and Teacher Education, 10,* 2, 125-139.

Winnicott, D. W. (1971/1991) *Playing and reality,* London: Routledge.

Witkin, R. W. (1974) *The intelligence of feeling,* London: Heinemann.

Wittrock, M. C. (ed.) (1986) *Handbook of research on teaching,* 3rd ed., New York: Macmillan.

Wood, E. and Bennett, N. (2000) Changing theories, changing practice: Exploring early childhood teachers' professional learning, *Teaching and Teacher Education,* 16, 635-647.

Woods, P. (1986) *Inside schools,* London: Routledge and Kegan Paul.

Woods, P. (1993) *Critical events in teaching and learning,* London: The Falmer Press.

Woods, P. and Jeffrey, B. (2002) The reconstruction of primary teachers' identities, *British Journal of Sociology of Education,* 23, 1, 89-106.

Wragg, E. C., Bennett, S. N. and Cane, C. G. (1989) Primary teachers and the National Curriculum, *Research Papers in Education,* 4, 3, 17-45.

Wragg, T. (1994) Teachers' subject knowledge. In Pollard, A. and Bourne, J. (ed.) *Teaching and learning in the primary school,* London: Routledge.

Yinger, R. and Hendricks-Lee, M. (1993) Working knowledge in teaching. In Day, C., Calderhead, J. and Denicolo, P. (eds.) *Research on teacher thinking: Understanding professional development,* London: The Falmer Press.

York, N. (2001) *Valuing school music: A report on school music,* London: University of Westminster/Rockschool Ltd.

Zeichner, K. M. (1994) Research on teacher thinking and different views of reflective practice. In Carlgren, I., Handal, G. and Vaage, S. (eds.) *Teachers' minds and actions: Research on teachers' thinking and practice,* London: The Falmer Press.

Appendices

This provided the basic structure and was my checklist. However, in reality there was variation depending on an individual's responses.

Appendix B

AN EXPLORATION OF PRIMARY TEACHERS' KNOWLEDGE ABOUT MUSIC IN EDUCATION
1st Meeting

<u>Introduction</u>

[The Head] may already have told you some of this.

Purpose of study: PhD. I'm interested in how teachers think about music. It isn't about how *much* you know, nor is there an ideal. Anything and everything you say is useful and I expect everyone to be different.

About me: Worked as primary school class teacher, then primary music support and advisory teacher for 3 LEAs, working mostly in schools: teaching classes as INSET for teachers. 2 years for a University running music courses round the country (one in this area c. 10 years ago).

Confidentiality: As far as possible all teachers will be anonymous (with pseudonyms), although you may be recognisable within the community/school that knows you. However, it will be several years before the thesis is finished and I don't expect many people will read final document! It may also be written up for conferences and journals. Is that all right with you?

Tape recorder: Do you mind if I record? It's only to help me remember (tapes not part of final thesis), so don't have to write too many notes now, especially when seeing so many people back-to-back. I'll transcribe it — easier for me to access what you said (line references in thesis) and will give you a version to check next time. I may want to quote extracts in thesis and associated papers (anonymity as already described). OK?

NB. Please don't feel you have to say anything you don't want to.

Format: 3 sessions during the academic year, 1 per term:
 1) (today) a) details re yourself and past experiences, because can affect how
                and what you think and helps to build picture.
           b) beginning to describe how/what you think about music and about
               music education.
 2) and 3) will build on today.

Is there **anything else** you would like to know before we start?

One of the reasons I expect everyone to be different is because we've all had different experiences - and those affect how and what we think and what we do. So it would be a help for me to know something about you:

I Personal details

Name

Tel. contact number or address (home —————— —————— or school)

(NB. My tel. no. is on summary sheet of this meeting, to be given at end)

Length of time teaching: NQT
1-2   years
2-7   years
7-20   yrs
20+ years

including, therefore, whether teacher taught before introduction of National Curriculum.

II Personal previous experience of music teaching (as 'pupil')

1   School   a) primary   (i) type of activities you can remember?
                              (ii) enjoyment?
                              (iii)any particular 'events' remembered?
                  b) secondary (i) type of activities?
                              (ii) enjoyment?
                              (iii)any particular events?
      HE   (i) type of activity?
                              (ii) enjoyment?
                              (iii)any particular events?

2   Related extra-curricular 'learning'? (eg instrumental lessons)
3   Home? (eg records/CDs, taken to 'concerts')
4   Anything else? (eg any particular teacher — for whatever reason!)

III Current involvement — outside school

1.   What do you do? (eg. sing in choir, bath; go to concerts, of whatever kind; listen in car)
2.   How would you 'rate' your personal musical knowledge/expertise? (This probably depends on context and in relation to what/who.)
3.   How would you rate your personal musical enjoyment?

IV Current involvement — in school

1.   Level/role (eg class teacher of what year group, co-ordinator of what subject)

2. **Further details: What do you do as far as music is concerned?** (eg take class lessons, eg mixture of singing and dance; follow radio broadcasts; take a recorder group; organise school concerts...)

3. **How do you feel about this?** How much enjoyment from it?

Is there **anything else** you would like to know before we start?

4   **Any particular 'events' — concerning you or pupils?**

5.   **Can you remember any music INSET?** (+ details)

V   Music education in general

1.   **Brainstorm as many words as you can think of to do with music and music education.**

2.   **What areas do you most enjoy teaching? Can you explain why?**
                   "   "   "   "   **dislike**   **?**   51   If   If   11

3.   **What do you think music is? How would you describe it to someone from another planet?**

4a.   **What aspects do you think about/consider when you're planning?**
        (Whole school or class, long term, medium term or short term. This could include aspects to do with the curriculum (in the widest sense), with the children and with themselves. eg. the Nat.Curr. documents; selves — their own experiences, as pupil and teacher; their pupils — as a class or as individuals; resources; how what they do fits with rest of music curriculum and/or other (subject) areas.)

4b.   **When planning, what do you *start* from?**
        (Your own likes/knowledge/experiences? The Nat. Curric. PoS?
        An existing scheme — published/school/own? Pupils? Something else?)

5   **Why do you think music is included as part of the 'broad and balanced' National Curriculum?**

6.   **Is music important?**

7   **What is the purpose of teaching music?**

8   **What is the most useful thing you know / can do? Where did you 'find'/learn that?**

9.   **If I could wave a magic wand, what would like to know / be able to do?**

                                            Thank you

NB 1. 'Soften' questions by "Please", "Could you tell me". "I wonder if" etc.
Move on naturally as in conversation.

NB 2. Encourage teachers to expand on answers by using prompts and probes:
Were you thinking of a specific instance when you said that?
Can you give an example of something that you've done recently that would fit with/ demonstrate that?
What do you mean by...? What kind of...? Could you describe...?
Tell me about... Tell me more...
Are there different...? What is the difference between...?
I notice you haven't said anything about ...

NB 3. Restate what teachers say. Feed back *interpretation* of what they say.
    Ask for and suggest explanation,
    Be aware of repetition and divergence — refer back to previous remarks.
    Ask for use and meaning.

AN EXPLORATION OF PRIMARY TEACHERS' KNOWLEDGE ABOUT MUSIC IN EDUCATION
2nd meeting

OK to tape record again? It was a real help last time.

I Last time's 'transcript'
Please read through — take your time (nb speaking different from writing)
Anything you disagree with? Or want to change?
Anything you would like to add?

II This time

Going to put some of the things you said into a **concept map** or **web.**

You may be familiar with the idea — not a million miles away from the flow charts we (used to) use for planning.
Can be used to **illustrate** knowledge and understanding, also to help **construct** knowledge and understanding (often can't do one without doing something of the other).

Here's an **example:** [Novak & Gowin, 1984, p. 14, showing key features]
This map example is **hierarchical,** ie top = main word, most inclusive, under which everything else is subsumed — yours may or may not be like that.
NB. hierarchy, linking words and possible **content:** here using word 'concept' in broad sense to mean facts, beliefs, opinions, images, episodes, skills, events ...

Did you ever come across **Tony Buzan?** [Show Buzan and Buzan, 1995, and some of illustrations]. This sort of thing used in schools.

Because we are thinking about *music in education,* everything in the map you make today will be connected under that umbrella heading, and will show the **relationship** between some of the aspects in a pictorial way with **linking words** to describe the relationship (eg the National Curriculum *includes* music).
Can put **lines** and **arrows** to show links and direction of relationship.
Can put **cross-links** to connect across the page.

Will probably change several times — this is normal. As also is the fact that there is no one or right way of doing this: one of my pilot study people did hers in four different ways — none of which was how I would have done it!

No right or wrong. It's yours.

Constructing the map

It would help me if you could **think out loud** while you're doing this, so there's a record of your thinking behind what you do. Partly because, although we use the same words, we don't have the same mental images for those words, so not necessarily exactly the same meaning.

1. We need to start by compiling a starter set of words from your interview. Here are some I did earlier! You can use any, all or none of my choice. Have put them on **cards** so can move around. I'll show you where they came from in the transcript so you can see the context they came from and also check whether you think they were key words/phrases. [Go through transcript.] *Add, change or remove any at any time throughout session.*

2. How could you **arrange** these labels in a way that illustrates your thinking concerning music in education? Using separate cards so can move them around.

3. Prompt: For example, can these cards be **sorted into groups —** sharing a particular characteristic (meaningful to you)?

4. Can the labels or groups be arranged **hierarchically:**

most general first?

In reality, a hierarchical arrangement rarely happened.

5. Can you make **links** between the cards or groups?

6. Would you like to **add** anything else (eg. new terms, specific examples)?

7. May need to **rearrange** the map (eg. to fit everything in or to make the links easier to show).

8. Have you **finished?** Are you happy/satisfied with this?

9. Stick down using glue stick.

10. Use felt pen to **draw** boundaries/arrows/lines and **write in** linking words.

[Throughout all this, support teacher, eg by suggesting group like with like; and ask questions for clarification, eg Why have you put that there? Does this mean...? Are there links between...? I remember you said...? Can you think of an example?]

Thank you

This provided the basic structure and was my checklist. However, in reality there was variation depending on an individual's responses.

Appendix D

AN EXPLORATION OF PRIMARY TEACHERS' KNOWLEDGE ABOUT MUSIC IN EDUCATION
3rd meeting

OK to tape record again?

1. Go through **maps** from previous meeting (original and my version, sent last week) — explain my interpretation, opportunity to change either.
2. Go through main 'themes' from map+interviews. Agree/disagree/change.
3. Fill in any **gaps** and clarify **queries** from sessions 1 & 2.

The following tasks as conversation starters:

4. Order **reasons** for including music in education (choose 10 from list of 37) — talk through.
5. Order **Nat. Curr. subjects** according to
   a) how **important** you think each is to a child's education in school, and
   b) how **comfortable** you feel teaching that subject.
6. **Compare/contrast** music with most or least 'comfortable' subject. (Trying to get at essence of subjects.)

And cover these:

7. If mentioned **cross-curricular links,** ask how make those links.
8. What does a Newly Qualified Teacher need to know and be able to do (musically speaking)?
9. How would you summarise the current **National Curriculum** requirements?
10. Have you been able to see how will these **change in September?** Details?
11. How does your **broadcast** fit with National Curriculum requirements?
12. What (other) **resources** do you use/are you aware of in school?
13. What is **progress** in music? How can you tell? What do you look for in pupils to assess ability and attainment? Eg Use main NC areas of performing, composing, listening, appraising + attitude and other extra-musical areas (eg. concentration, social skills). What changes have you seen in current class since last autumn?
14. What would you want to see in a music curriculum in an **ideal** world?

15. **Anything else** you'd like to add — last chance!

16. OK to **contact** if necessary? Using contact details as given in 1st session?

Thank you!

Appendix E

The teachers' concept maps

Rectangular boxes with single borders indicate original labels, prepared by me from the first interview. Labels with double borders were added by the teacher concerned.

all cultures

High Scope – key experiences

to include

variation of styles

how

subject-based knowledge

important to

enthusiasm

planning

cross links

movement

al)
o o

me

Most important

playing a (teacher) musical instrument

important/regret

children

instruments

Negative

me

children's enjoyment

listening area

quality of music

children

social experience

expressing creativity

topic

homework

nursery rhymes

background music

Singing together R/N and large group time

family concerts

social activity

enthusiasm

music can represent places & actions

instruments

influences on teacher

`feeling good' when taking part, physically' as well as from music point of view

effect of teacher

music can represent feelings

"everybody enjoys music of some kind"

creative/aesthetic part of whole person

relaxation

music as stimulus for movement

non-threatening

enjoyment

listening

singing — taking part in small/large group songs

pictorial representation

theory

music — a sequence of sounds forming a pattern

activities / involvement

making percussion

creating sounds

music = sequence of sounds forming a pattern

action songs

listening games

music table

hymn practice

reinforces other subjects

topic (planning start)

Numeracy

culture – own + other

literacy dev'pt spelling + spoken lang.

classical music

pop music

affects moods

pleasure

cue

music to control

experience

appreciation

play instrument

teacher confidence

these both determine RHS

music part of everyday life

effect of home/ parents

INHIAIA0fN3

laughter

art

o

14
5

a)
C)
u

P.E.

crosscurricular

planning

providing opportunities

Occasions

instruments

identify, name them, explore use + sounds

Composing

graphic scores

multicultural

Performing

P.

music for all

everyone is musical

WORKING WITH OTHERS

confidence

gualovaL NaHio

CHILDREN

(ONIDNIS 'SEIFIIHD 'SUNNED) 100HDS AO ino

voice

song writing?

provide an audience

choir

need (basic)

PERSONAL

SKILLS

ATTRIBUTES

ENTHUSIASM

express feelings

through playing

through listening

responding

Nati_____ _____ + balance

$\frac{a)}{O}$ cnl

—110.

OFSTED

pressure of

impacts

large amounts of children

hymn practice

BTN

Music Area

Individual time with instruments. Music table available

cross-curricular links

Dance, science, maths

need to be valued in a group situation

child enjoyment

Focused listening

singing

percussion instruments

children need to be involved

cooperative, 'an altogether thing'

symbols

Need background/ past experiences

0 0 (l)

cc 0 °

teacher enjoyment

cos f O V

personal tastes

resources

):01-oval

child centred

sharing

non-threatening

involvement

fun

music is a learning tool

individual preferences

working together

---

forms of musical experience

visiting groups

movement

all experience music at home

elements

listening

concerts

games

songs

instruments

MUSIC EDUCATION

Constant, outside influences, cannot be changed by teacher

time

SATs

N.C.

Changing, improving, building upon, can be altered, working with others

concerts

teacher resources

teachers' knowledge and experience

range of songs

broadcast

ownership

participatory experience

part of heritage

Music one of the Arts

need:-

range of listening material

listening

listening to music on tape, CD etc

listening to each other performing/singing

everybody needs

affects mood

singing

learning songs

performing songs already known

instruments

singing

broadcast programmes

E
U
E
o
a-

clap

c)

singing

rhythm

band

beat

Creating music.
-- sound effects. (mood)

MUSIC TEACHER!

subject knowledge
– terminology

children

teacher

togetherness

confidence

Musicianship =
instrumental skills

play together

dancing

joining in

feeling

pitch

fun

tone

out-of-school
experiences

listening

range of
listening materials

symphony

variety of music

choice

high/low

influence of home / parents

LEA Authorities emphasis on music education

influence of school

opportunity

capability of teacher

appreciation

listening

influence of national curriculum

aptitude

teachers have to teach wide range (of subjects)

learning an instrument

start to play at

notation

young age

enjoyment

discipline in music

performances

"music makes you smart"

singing

broadcast

shows

[background=child]

Relaxation

Enjoyment

shows

Working together within KS2

Emphasis on Numeracy, Literacy, IT

Lack of confidence – teachers

Background = interface with home/outside school

practical

singing

appreciation

Music is personal

Range of materials

Links with KS1

Range – musically vocab – levels of difficulty

Teachers working together – across key stages

Hymn Practice KS2 – good

Collective Worship – KS2 disappointing

Response of children

John (4B)

Means of delivery

- visiting groups
- Assembly
- hymn practice
- Christmas show
- CO o o
- ɡ ɔ̇
  - 04 ai

music industry

time pressures

governmental requirements

5 o O U

Schools should prepare for life after school

teacher should tease out talent

everyone has a voice

self esteem ↓

Children learn in different ways

confidence

enjoyment ↓

2uu·its iotioval

teacher confidence

subject skills

teacher enjoyment

Subject

music natural part of person's make up

-to S n o E

.5

o

rhythms

beats

instruments

2·1nuolsH

cultural heritage

enjoyment (children)

for the future

link with real life

classical

appreciation

Xmas shows

Assembly

singing

rhythm

instruments

broadcast

time pressures

pop music – 60s Beatles

teacher's role

enjoyment (teacher)

teacher's experience

play the piano

confidence

effect of home

notation

art form

music has value

music = element of human society

music = element of human expression

music all around us

instruments

choral works

traditional songs

choir

school work load

time spent on planning

Time allocated to music

BBC Broadcast

singing

suitability

hymn practice

enjoyment (of children)

Public Performance

Quality

knowledge

confidence

teacher attributes

Instrumental skills

enjoyment (of teacher)

alone

home — relaxation

individual

singing

rehearsing

performance

appraising

sharing

pleasure | listening

emotive

enjoyment
(of children)

creative

aesthetic

enjoyment
(of teacher)

emotive

age group

children

composing

instruments

notation

playing

pressure

time

balance

Government

League tables

External

meeting levels

public

guilty

enjoyment

not very
confident

subject
knowledge

resources

Personal

- personal choice
- personal response
- emotional experience
- popular music
- music has connotations

lack of specialist knowledge

BBC Broadcasts

classroom curriculum

- singing
- notation
- classical music

effects of NC

whole school

- school as source of experience
- variety of music
- listening
- assembly

"music is all-embracing

singing

"music is therapy"

theory of music

effect of music

fun

range of music

composition

Long-term objectives

teacher's enthusiasm

Formal
"Corpus of
Knowledge"
Discipline

appreciation

catalyst
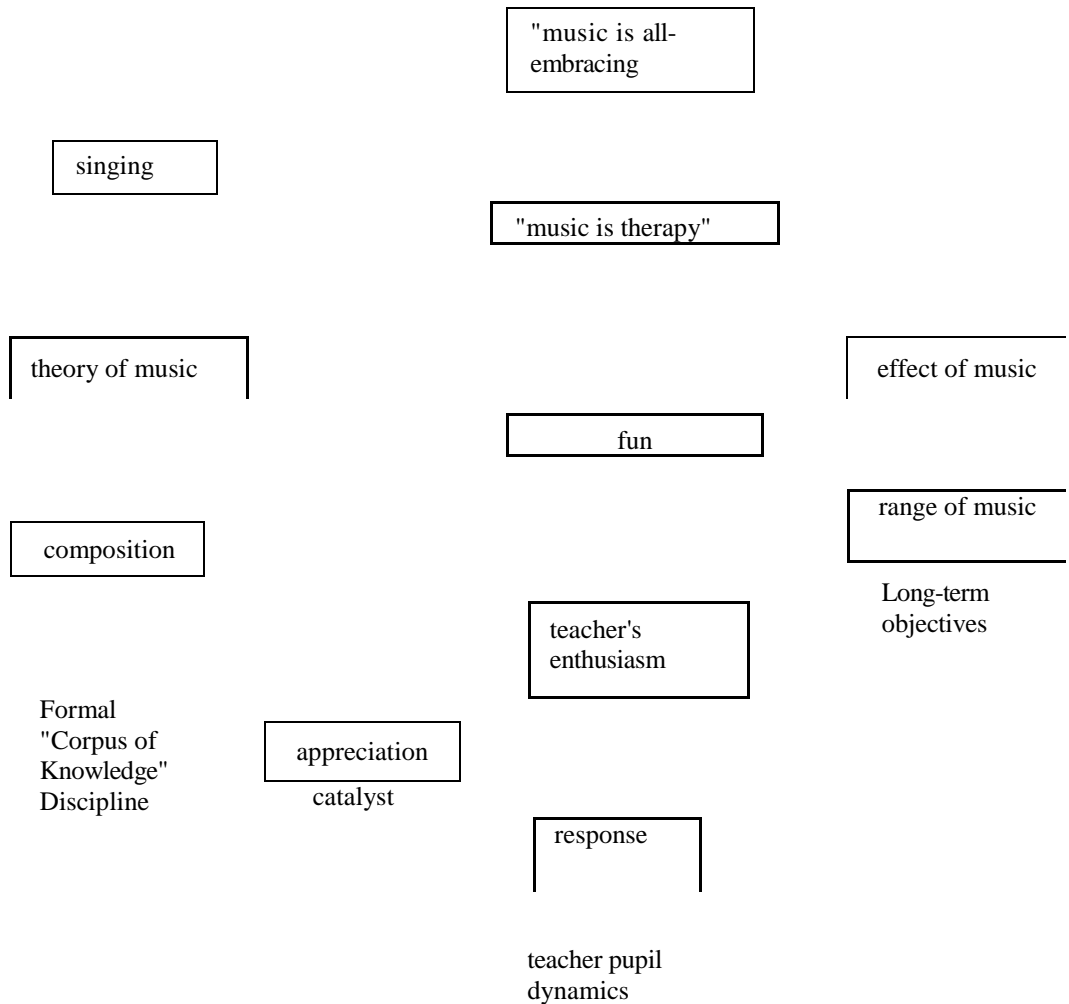
response

teacher pupil
dynamics

The nature and value of music

Why should music be part of a child's education?

Aesthetic
An art
A way of expressing yourself
A way of linking with the world outside school
Basic need

Can affect one's mood
Creative
Cross-curricular
Encourages critical awareness and response
Enjoyment
Everybody enjoys music of some kind
Everyone is musical
Evocative

Form of communication
Good for less able children
Helps listening skills Helps
self-confidence Helps train the
brain Important for future life —
leisure
Important for future life — work
In all cultures
Individual response
Music is all around us
Non-academic — lighter' than core subjects
Non-threatening
Part of (cultural) heritage
Part of human make up — whole person
Part of the National Curriculum
Practical experience
Reinforces other subjects/areas
Relaxing
Social experience
Therapeutic
To do with emotions
To do with individual choice/taste/preference
To do with sound(s)
Unique experience

Music in school

In class	class 'lesson' recorded background music cross-curricular support (mostly KS 1) music table (KS 1) Early Years joint sessions (N & R)
Entrance Hall	recorded music (before school, adults' choice)
Lunchtime	recorded music (children's choice)
Assembly	recorded music as enter/leave, hymn singing, occasional performances by pupils receiving instrumental tuition, class performances
Hymn practice	(half music's allocated time for KS2)
Celebrations	eg Harvest festival, Christmas performance, informal sing-song at Christmas
Extra-curricular	recorder, penny whistle, country dancing
Peripatetic teaching	violin, guitar, percussion
Visiting groups	eg LEA adviser's group, Peruvian musicians, Kathryn Tickell's folk group, Steps promotional dancers

Into the community

Visits	eg choir to local care homes
Projects	eg Y6 combined schools' community arts project

Process of analysis

Thematic induction
(describing, sorting and sifting responses — concurrent and consecutive sessions —
then reiteratively looking for consistencies, contradictions and patterns within
each teacher and across teachers)

From interview 1

transcript (edited for individual teachers to check in interview 2)
brief page plan for each teacher, listing areas mentioned
♦ main themes for each individual
b) to suggest starting point for maps
Answers to individual 'questions' from interview schedule pulled together across
individuals (KS 1 & KS2)

From interview 2

maps (copied for teachers to have in interview 3)
maps translated into my own version (checked by teachers in interview 3)
maps later analysed: description of content and structure. For individual and then
across all.

transcripts of 2nd interviews
any extra themes extracted from 2nd interview combined with those from 1st for
each individual, then pulled together.

Informed the list of 37 items relating to the nature and value of music prepared for
3rd interview.

1

From interview 3

transcripts
maps checked, themes checked
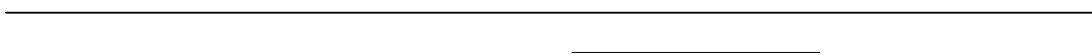37 rating tabulated for indivs. and for whole staff. Comments edited for each
indiv.
each teacher's rating of value (children) and `comfortableness' (teachers) of NC
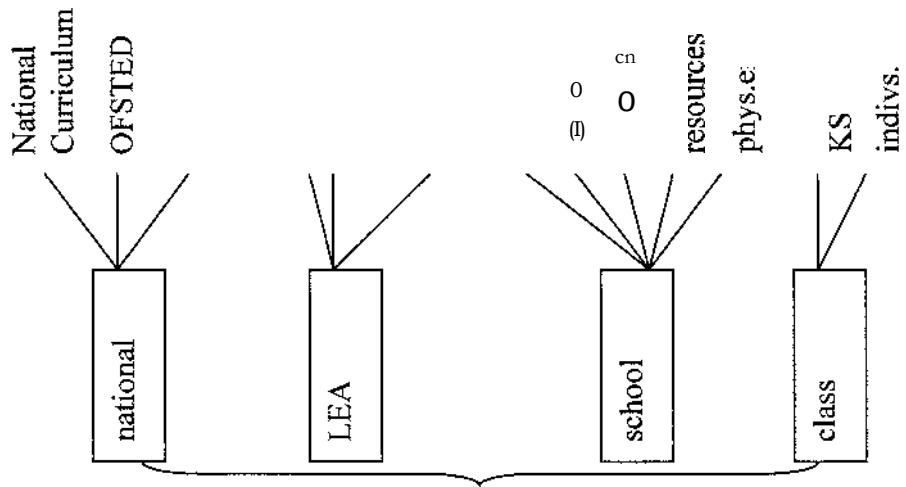subjects tabulated for individuals, then for whole staff.

♦ V ♦

Looked across all three interviews for each teacher
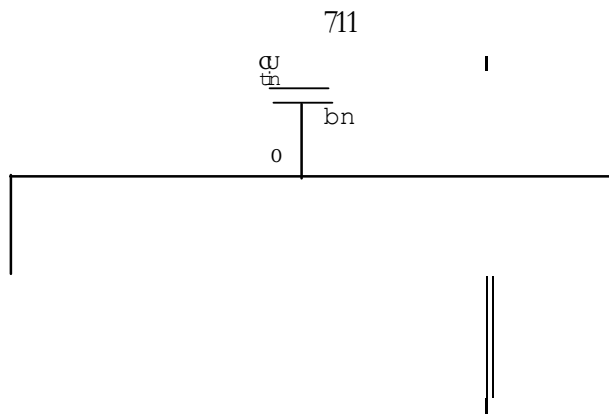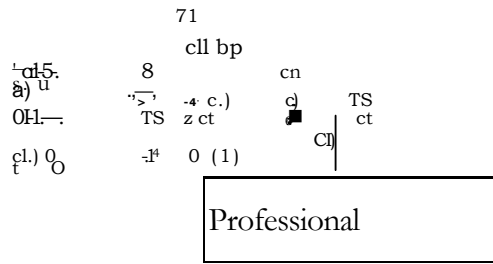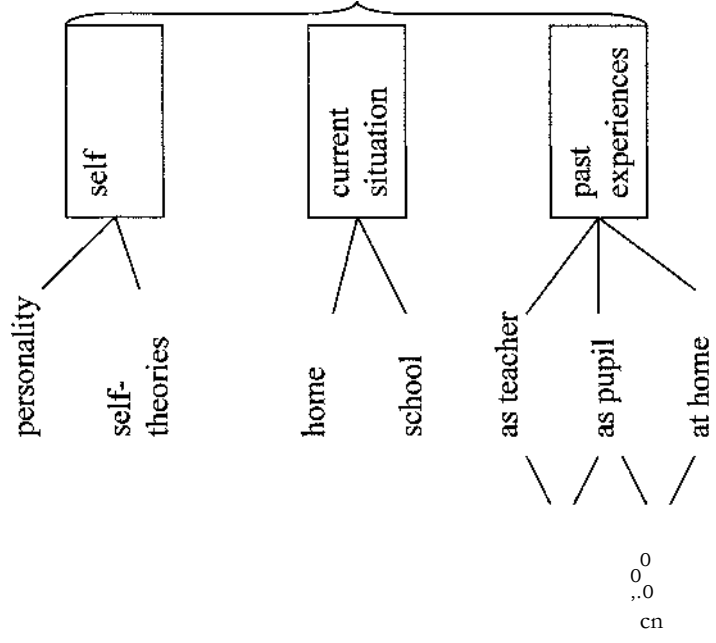— consistencies and contradictions.

↓↓ ↓↓

Second level of **Main themes** pulled out relating to
a) enjoyment, b) instruments, c) use of broadcasts, d) nature/value of music.
Sub themes of perceived influences on what the teachers (can) do (personal and
professional), different occasions when music experienced + different attitudes.

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Influences on thinking about music

self	current situation	past experiences
personality	home	as teacher
self-theories	school	as pupil
		at home

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Methodological issues when concept mapping

During (execution

After (analysis)

Research criteria

Choice of method

Explanation to teachers

Constructio of map

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generation of terms | selection of terms

rocedure | limitat- ions | researcher role

reliability | val

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