

## 2. Research Methodology

### 2.1. Introduction: *Kind of Blue*

Miles Davis' classic album *Kind of Blue* is beloved by many, including myself. The album featured Bill Evan's piano playing, as well as legendary jazz musicians such as John Coltrane, Cannonball Adderly, Paul Chambers and Jimmy Cobb. It is a marvel in the history of improvised music and is the best-selling jazz album of all time. Bill Evans wrote the following sleeve notes to accompany the album:

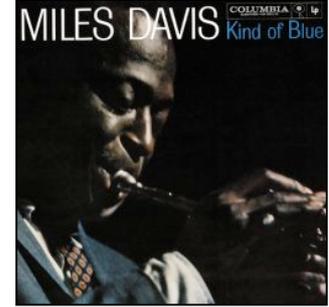


Fig. 1: *Kind of Blue* Album Cover

There is a Japanese visual art in which the artist is forced to be spontaneous. He must paint on a thin stretched parchment with a special brush and black water paint in such a way that an unnatural or interrupted stroke will destroy the line or break through the parchment. Erasures or changes are impossible. These artists must practice a particular discipline, that of allowing the idea to express itself in communication with their hands in such a direct way that deliberation cannot interfere.

The resulting pictures lack the complex composition and textures of ordinary painting, but it is said that those who see well find something captured that escapes explanation.

This conviction that direct deed is the most meaningful reflections, I believe, has prompted the evolution of the extremely severe and unique disciplines of the jazz or improvising musician.

Group improvisation is a further challenge. Aside from the weighty technical problem of collective coherent thinking, there is the very human, even social need for sympathy from all members to bend for the common result. This most difficult problem, I think, is beautifully met and solved on this recording.

As the painter needs his framework of parchment, the improvising musical group needs its framework in time. Miles Davis presents here frameworks which are exquisite in their simplicity and yet contain all that is necessary to stimulate performance with sure reference to the primary conception.

Miles conceived these settings only hours before the recording dates and arrived with sketches which indicated to the group what was to be played. Therefore, you will hear something close to pure spontaneity in these performances. The group had never played these pieces prior to the recordings and I think without exception the first complete performance of each was a "take."

At the opening of this chapter describing my research methodology, I would like to draw on Evans' writing and Davis' music to give brief examples of some of the themes that will become increasingly important as this text unfolds. These themes relate to various aspects of my work over the last six years as a teacher, researcher and musician. But these themes are also interrelated, primarily because I have found that my most effective teaching takes place when I have operated freely, and perhaps with a degree of improvisation, around and between these various roles.

Firstly, Evans writes of spontaneity, naturalness and uninterrupted expression within a Japanese art form. Yet this art form is a closely defined discipline with a range of associated practices and philosophies. What one might see as the limitations or boundaries of the practice become the framework within which the skilful artist produces something of great beauty.

My teaching career began in 1996. It would have been so easy to allow the ‘systems’ and ‘bureaucracy’ of teaching to dominate my work and extinguish my passion for music as a life-enhancing and changing force in young people’s lives. I am convinced that the playfulness of working with and through notions of teaching and research, albeit within the occasionally restricting National Curriculum framework and associated devices, has enabled me to produce challenging opportunities for my pupils and myself.

Secondly, the fragility of this artistic practice is quickly apparent. The permanence of the recording means that erasure and change are not an option for the artist. He (sic) has to work on a fragile surface of parchment with a highly developed sensitivity and control of movement. These are skills that take time to develop and come with experience.

I have been so conscious that teaching is principally about a relationship between the teacher and the learner. Such relationships should contain large elements of trust and respect, and this is particularly the case within arts education where there is such a high degree of self-expression within working processes and artistic products. The teacher, like the artist in Evans’ text, has the power to mark pupils’ artistic lives. Insensitive words or dismissive body language can shatter confidence and the effects can often be irreversible. I would like to present my work and my relationships with my pupils in a positive light throughout this thesis. I believe that much creative and valuable work has been done. But I would be naïve and dishonest to suggest that things have been perfect. Teaching and research skills take time to learn and I have made my mistakes. I hope that this thesis will chart the highs and lows of the last six years’ work honestly and fairly.

Thirdly, within this medium there is a focused and directed communication between the artist and the listener. As I write this introduction, a new recording of Mahler’s Fifth Symphony has been released by EMI (EMI 2002). It is the first recording of a Mahler symphony by Simon Rattle in his new role as conductor of the Berlin Philharmonic Orchestra. It won much praise and adulation from the critics and is a live recording - spontaneous, vibrant and exciting. Maybe there is an increasing dissatisfaction with the heavily processed and edited studio-based recordings that dominate recording catalogues? Similarly, in *Kind of Blue* Miles Davis has managed to capture the immediacy of an improvised performance in a way that has seldom been repeated by other jazz artists. The directness of the communication is the source of reflection for the immediate participants in the recording and every subsequent listener since.

I have worked hard to build into my text a sense of the reader ‘being there’ in the various educational events being portrayed. The case studies that make up Chapter Three were conducted over a space of two and a half years. Subsequently, as I have considered and analysed the data that I collected during this time, I have relived memorable experiences and rehearsed various narrative strategies for their portrayal. In the previous paragraph I used a series of adjectives to describe live performance recordings – spontaneous, vibrant, exciting, immediate and direct in expression. These are lofty ideals for me to aim at in my text. I have tried to produce an account of my work that is engaging for the reader who is outside the immediate experience of the research. But we must all remember that whilst

recordings of live performances can be wonderful, they can also contain the odd miscalculation, passages of mundane expression and embarrassing moments.

Fourthly, what marks this album out from others is the collective nature and thinking of the various musicians. These jazz musicians have sophisticated musical skills, yet it is aspects of their humanness that shine through. Characteristics such as sympathy, empathy, reflection and appreciation of the role of others, and an awareness of one's shifting role and importance in changing contexts are just as crucial here.

These are vital components for anyone wanting to engage with teaching, research or music making in any shape or form. All of these disciplines have at their heart interactions between human beings that demand care and attention to detail. One could have all the skills needed to be an excellent teacher or researcher, or the technique to become the finest individual musician, but still lack that ability to work alongside others within the classroom, the research field or any other learning context. So just as one could describe the teaching and research process as a fragile one, so it is essentially a human one. This is nowhere more apparent than in the accounts I have sought to construct about my work. It could be easy to misrepresent people or events through the skilful use of prose, or to major on the minor pieces of research data to make tenuous claims or propositions. In the following text I have tried to speak plainly and with attention to detail. I trust that those who read my work with personal experiential knowledge of it will find it an accurate account of my time at Debenham High School.

Finally, Evans writes about the 'sketches' and 'settings' that Davis brought to the recording session. In this art form, as in many others, creativity and spontaneity are not freak, decontextualised processes. There is a process of outworking from a simple framework that leads to the final product. The quality and simplicity of Davis' initial ideas were a key factor in the production of the album.

To conclude this introductory section describing key conceptual themes in my research methodology, group improvisations such as *Kind of Blue* are a rarefied art form. Such exquisite examples are few in number and rightly cherished. In many senses Evans writes about a range of features specific to the creation of this album. But through my experience of teaching and research over the last six years I would like to suggest that they also relate metaphorically to my work as a teacher researcher. Like Oldfather and West (1994), I have discovered that jazz, as a metaphor for teaching and research, has rich possibilities for helping to describe and analyse the complex 'classroom' world of music teaching and learning.

### 2.1.1. A Definition of Educational Research

Research is systematic enquiry made public. (Stenhouse 1983, p.11)

This is as good a definition of my research methodology as I can find. Whilst systematic research activity is in itself of great importance, my research has come at a time when there is a great need for classroom-based and clearly focused studies of teaching and learning with new technologies (British Educational Research Association 2001, p.37). As discussed in the previous chapter, the context of this research has placed a degree of significance on such studies that I could not have predicted at the start of my PhD. As I have studied and refined my research methodology, I have become increasingly aware of the continued need to make public the research findings and apply them to a variety of teaching contexts. Even

at the beginning of this PhD I was keen that my research findings should have value for others working within similar fields – whether these be teaching staff in school or university, school students, under- and postgraduates, community musicians or freelance composers.

The communication of research results and expertise to a range of different audiences is a major part of the working lives of the most successful social scientists. . . . Anyone serious about changing the world through their research has to talk to a range of audiences. (Major 2001, p.13)

This emphasis on the ‘practicality’ of research findings has driven my thoughts over the last six years. It has influenced the way in which I teach, write, analyse, and discuss my work. Whilst for some this might be problematic, a distortion of the role of a researcher, I believe that within the field of practitioner research this emphasis is entirely justifiable and beneficial for all, including the researcher, involved. That is not to say that it is without its problems. But to tell the story of my research, I need to go back eight years to the beginning of October 1996.

## **2.2. Opening Avenues of Enquiry**

Art, instead of being an object made by one person, is a process set in motion by a group of people. Art’s socialised. It isn’t someone saying something but a group of people doing things, giving everyone (including those involved) the opportunity to have experiences they would not otherwise have had. (Cage 1968, p.151)

If postmodernism means putting the Word in its place . . . if it means opening up to critical discourse the lines of enquiry which were formerly prohibited, of evidence which was previously inadmissible so that new and different questions can be asked and new and other voices can begin asking them; if it means the opening up of institutional and discursive spaces within which more fluid and plural social and sexual identities may develop; if it means the erosion of triangular formations of power and knowledge with the expert at the apex and the ‘masses’ at the base, if, in a word, it enhances our collective (and democratic) sense of possibility, then I for one am a postmodernist. (Hebdige 1989, p.226)

Was John Cage a postmodernist? In the above quotation Cage outlines a philosophy of artistic practice that has many similarities to the changing nature of educational research under the postmodern condition (Stronach & MacLure 1997, p.6). In light of the deconstruction of a range of supposed educational certainties, how should one begin to engage in educational research? After all, the choice of methods and techniques can be overwhelming. On one level my situation was clear. Part of me aims for clarity and comprehensiveness. I knew what I wanted to do, what I wanted to research, where I wanted to do it and, given the correct tools, I thought that interesting findings would result. I was prepared to make the necessary sacrifices of time and money to complete the project. So why should choosing an appropriate methodology become so bewildering and difficult?

Perhaps the answer to this can be found in a brief survey of recent developments in educational research. Here one can find a variety of shifting practices and procedures, influenced in part by postmodernism. Stronach and MacLure (1997, pp.1-12) paint a fascinating picture of uncertainty and debate amongst researchers about what constitutes ‘educational research’ in the current climate. Rivalling claims and the challenging of orthodoxies result in a complex ‘opening’ into which new research practice can be situated.

To return to Hebdige's quote, it seems that educational research in the postmodern era has undergone key changes. Firstly, the lines of engagement between the researcher and researched have been redrawn. Old patterns of research that rely on formal and external observation are widening to include new evidence, new questions and new voices. Secondly, the spaces in which research is conducted are opening up and the interplay between them has become freer. Thirdly, the traditional formations of power and knowledge have been knocked aside as research activity becomes increasingly democratic and inclusive.

Ultimately, changes in educational research as a result of postmodernism are really about deconstructing or challenging the nature of knowledge itself. Many of these themes have been opened up for analytical enquiry elsewhere, but it seemed to me that as result of these deliberations a number of potential 'standpoints' had been legitimised. These included the opportunity for:

- My role, as a teacher, to become a teacher researcher;
- My classroom and school to become a 'research environment';
- My pupils (from the traditional perspective 'the researched') to become actively involved and empowered as researchers of their own learning;
- Pupils' voices and music to become valuable research data;
- Pupils and I to collaborate in research as equal partners.

Educational research, instead of being a written account made by one person, is a process set in motion by a group of people. Educational research is socialised. It isn't the Researcher saying something but a group of people doing things, giving everyone (including those involved) the opportunity to have experiences they would not otherwise have had. (after Cage 1968, p.151)

Reinterpreting Cage provides a picture of knowledge being 'reconstructed' in socialised, contextual and experiential arenas. Finally (if this is possible within a debate on the postmodern condition?), the influence of postmodernism on our views of what constitutes high quality teaching and research is, by its nature, fleeting and indefinable:

Take teaching. What is good teaching? We know it when we see it. We try to capture it in words, in criteria. But which criteria – evoking, learning, nurturance, stability, sensitivity, scholarship? It depends. Merit in teaching changes as the teaching situation changes. And our discernment of merit changes as we realize more the complexity of the situation. (Stake 1997, p.41)

As a teacher seeking to conduct high quality research within my classroom I was becoming aware that things were far from being as simple as I might have first thought. The most helpful approach I have found in thinking about how to approach this dilemma is Stake's notion of being 'postmodern in our thinking' as much as being a 'postmodernist person':

It is probably a mistake to think of a postmodernist person, better to think of moments when each of us is postmodern in our thinking, or pulled towards a postmodern view. At many other times, we will be modern, or schematic, or absolutist – the very things we bemoan in our postmodern mood. (Stake 1997, p.43)

These sentiments certainly rang true for me. Within the field of music education there were often times when I felt confident in my ability to judge the quality of pupils' music knowledge and understanding. However, there were also many occasions when I felt deeply challenged, intellectually and emotionally, when having to respond to some of their musical

work within the classroom. It was clear that I needed a research methodology that would take account of these features and provide a means by which I could reflect intimately on the process of education within my classroom. It was time to make some choices.

### **2.3. Range of Possible Methodologies**

In this section I will show how my chosen research methodologies have formed and developed. This is obviously a unique story but also a complex one due, in many respects, to the wider contextual factors of employment as outlined above. I will trace the development of two particular research methodologies in my work – action research and case study– drawn from the wider umbrella term of ‘qualitative’ research.

Qualitative research covers a variety of practices and terminology, including such things as case study, ethnographic research, grounded theory, naturalistic evaluation, action research, field study, phenomenological, interpretative or descriptive research. As a starting point, Bresler and Stake (Bresler & Stake 1992, p.76) use ‘qualitative research’ as a general term to refer to a range of several research strategies that share common key characteristics, namely:

1. Non-interventionist observation in natural settings;
2. An emphasis on interpretation of issues relating to those of the ‘researcher’ and the ‘researched’;
3. Highly contextual descriptions of people and events;
4. The validation of information through triangulation.

They go on to describe in more detail the general characteristics of qualitative research. As many of these will form important themes in what follows, I will paraphrase their description. Their general characteristics of qualitative research are that it is:

1. Holistic, orientated around particular cases and relatively non-comparative;
2. Empirical, field oriented, naturalistic and non-interventionistic;
3. Descriptive, including the use of quotations, visual and other data;
4. Interpretative;
5. Empathic, emergent and responsive;
6. Validated through triangulation;
7. Deliberately seeking to disconfirm the researcher’s interpretations by way of empowering the reader to make their own. (Bresler & Stake 1992, p.79)

As my case studies unfold in the following chapter, the reader will quickly become aware that some of these statements are more or less true of my research methodology. For example, the third point relating to the inclusion of descriptive material (including visual and musical materials) will be a very important part of my research method. However, the second point relating to non-intervention is not a feature of this research. As I will illustrate, as a teacher researcher there is a sense in which one is completely interventionistic within the field of the enquiry. It comes with the territory and one has to live with the consequences. Indeed, my closeness to the research field is one of the strengths of my chosen methodologies and is something that has been missing in much music education research (British Educational Research Association 2001, p.43). But there are methods and approaches to this kind of research that acknowledge the influence of the ‘self’ and help the teacher researcher clarify and respond to their influence in the particular field of enquiry (see Peshkin 1988 and 4.8. – 4.9.).

In surveying this field of possible qualitative research methodologies it quickly became clear that a series of initial choices would need to be made. These choices would have to be made in light of my research aim and questions (as articulated in 1.5.), as well as the means by which all teaching and learning takes place – the relationships between teachers, pupils and learning contexts.

## **2.4. Action Research**

### 2.4.1. Defining Action Research

John Elliott defined action research as:

The study of a social situation with a view to improving the quality of action within it. It aims to feed practical judgment in concrete situations, and the validity of the ‘theories’ or hypotheses it generates depends not so much on ‘scientific’ tests of truth, as on *their usefulness in helping people to act more intelligently and skillfully*. In action research ‘theories’ are not validated independently and then applied to practice. *They are validated through practice.* [my italics] (Elliott 1991, p.69)

One of the strengths of an action research methodology is its reliance on a close link between research or theory and practice. In adopting the action research methodology one is constantly developing theories, testing them in practice, reflecting on the results and trying things out differently. This testing has the primary aim of improving that practice for the individuals involved. In an educational context, teachers can reap the full benefits of this strategy. Through harnessing the techniques of action research, they can develop and improve their practice as they carry out their research in a particular ‘social situation’. The results of this process can then be shared in a wider arena. This vital strand in publicising the results of the action research process can result in further testing out and revising of theories.

### 2.4.2. The United Kingdom Tradition for Action Research

The tradition for educational action research in the United Kingdom was really established through the work of Lawrence Stenhouse’s Humanities Project and John Elliott’s Ford Teaching Project in the 1970s. Stenhouse viewed the process of action research as being an integrated and essential part of the work of a teacher. For Stenhouse the curriculum was not primarily specified in terms of subject content but as a series of educational processes and interactions through which pupils could engage with subject matter. Throughout the last twenty years a number of action research studies have been produced that apply these methodologies to arts and ICT education (see Treacher 1989, 1992; Somekh et al 1990). As I discussed in the introduction, the PALM project was the largest and most influential project to adopt an action research methodology to study the use of ICT as an educational tool in the United Kingdom’s schools.

### 2.4.3. The Processes and Products of Action Research

The action research movement stands in opposition to the development of a curriculum based on the identification of measurable learning outcomes prior to the process of teaching. It still stresses the importance of process values as a basis for the construction of the curriculum. I believe that through a creative approach to music education one can

achieve this, even in the current educational environment with its explicit organisation of the curriculum into learning objectives and learning outcomes.

A felt need to innovate or change is a prerequisite of action research. There needs to be a feeling that some aspects of practice need to be changed if its aims and values are to be fully realised. Action research unifies processes that have often been regarded as disparate (teaching, curriculum development, evaluation, educational research and professional development) not solely to produce knowledge but to also improve practice. Improvement of practice consists of realising the values that constitute the practice's ends. For example, a pupil's 'education' is a valued end for 'teaching' activity. These ends are not a simple outcome of practice but they are manifest in the intrinsic qualities of the practice itself. To put it another way, teaching is not just about generating educational outcomes but engaging pupils in educational processes. These processes should be capable of generating educational outcomes in terms of pupil learning. When seeking to improve one's teaching practice one must consider both the outcomes and the processes.

The practice of teaching also needs to be appraised in terms of its intrinsic qualities. Both product and process need to be jointly considered when attempting to improve practice. Processes need to be considered in the light of the quality of learning outcomes and vice versa. (Elliott 1991, p.50)

As an aside, this is very important when one considers the musical works of pupils in the classroom. As I shall go on to describe in my analysis of the case studies (Chapter 4), pupils have to adopt this position when seeking to evaluate their own compositional activities. In order for teachers to assess and evaluate their pupils' work fairly, both process and product (and their complex relationships) must be considered.

It is the teacher's active reflection on the events or processes within the classroom that is the important point to emphasise. What one thinks is of value within a classroom is highly individual and contextual. Personal judgements are debatable and teachers need to reflect on them within these contexts, with their pupils and with each other. This is a vital interchange and dialogue that is central to the process of action research. The process challenges one's own values and opens them to reinterpretation through reflective practice. They are not fixed or unchanging benchmarks against which improvements in practice can be measured.

The reflective practitioner's understanding of the values (s)he attempts to realise in practice are continually transformed in the process of reflecting about such attempts. Values constitute ever-receding standards. (Elliott 1991, p.50)

Therefore, an important strand in any research that seeks to utilise action research is a reflection on the self in the research process. Peshkin's work (1988) is particularly helpful in this respect. His categorisation of 'subjective I's' and 'situational I's' aims at seeking a clarity and responsiveness to the collected aspirations, motivations and values that one brings to a research process. It is only as one recognises the effect of these attributes on one's work that a more focussed and accurate picture can be obtained of the overall field of enquiry.

Action research aims to improve practice by developing the teacher's capacity for discrimination and judgement in complex human situations. It brings together a number of different concerns such as inquiry, the improvement of performance and professional development. It fully recognises the often-messy realities that teachers' face and resists the

temptation to simplify them by theoretical abstraction.

#### 2.4.4. Action Research in the Wider Context of Government Reforms

For an innovation to be effective, those responsible for implementing it need to feel a sense of ownership. ... Unless teachers believe in an innovation it is very unlikely that they will introduce it effectively. (Somekh & Davis, 1997, p. 115)

Early in 2000 I wrote the following paragraph for an article on teachers' continuing professional development:

Teachers in the United Kingdom are being asked to implement wide-scale changes in relation to the utilisation of information and communication technologies throughout the curriculum. Many teachers are embracing the changes. When using new technologies in education they need to be persuaded of the effectiveness of its use, and of their capabilities and competencies in using it successfully to enhance teaching and learning. The Government has developed a scheme to train teachers in the use of these technologies. The scheme integrates the acquisition of general ICT skills alongside the subject-specific skills required. Another key feature of the initiative is that 'a majority of the training is to be school-based and involve the use of ICT in the classroom' (TTA 1999, p.1). The UK Government's initiative undoubtedly has many positive features. Teachers will be trained in the use of ICT, and develop understandings of its potential power and use. But exactly how much of the training will be classroom based is unclear. (Savage 2000)

The Government scheme I referred to cost £230 million and was funded through the New Opportunity Fund. Within a three-year period (1999 – 2002) all teachers and librarians were given ICT training that was designed to mix generic and subject specific skills. Also, and most importantly, it was meant to give examples of how ICT should be used in the classroom. I taught through the period of innovation described and received ICT training of this type. In many respects it was a frustrating and difficult time. Although my experience may not reflect that of other teachers, the training I received was simplistic, undifferentiated and bore little relevance to the work that I was seeking to develop in my classroom. The training made little or no impact on my work as a teacher.

My adoption of action research as a research methodology was an entirely different story. As a result of the high level of 'ownership' and depth of understanding that it can engender in teachers, it is recognised as one of the most effective ways of bringing about educational change (Somekh & Davis 1997, p.115). Of course, since it is carried out alongside their normal full-time work, teachers are seldom able to meet the ideal and carry out the whole research process. However, my experience of the power of action research lay in my involvement as a researcher whilst *at the same time* the main focus of my energy continued to be teaching and learning (Somekh & Davis 1997, p.115). Working as an action researcher was hard on time and effort but highly rewarding in terms generating my understanding of how I could analyse and evaluate the use of ICT as a way to develop new approaches to music education.

## 2.5. Case Study

### 2.5.1. Defining Case Study

Case study has a long tradition within the United Kingdom's educational system. Kushner (Kushner 2000, p.5) quotes early discussions and negotiations in the development of a case study 'manifesto' as early as 1972. Within the field of the arts education there have been several published collections of case studies and interesting approaches to comparative analysis by teams of teacher researchers (Treacher 1989 & 1992). But my introduction and approach to case study has been primarily through the work of two writers, Robert Stake and Lawrence Stenhouse. Their definitions of case study are as follows:

Case study methods involve the collection and recording of data about a case or cases, and the preparation of a report or a presentation of the case. (Stenhouse 1988, p.49)

Case study is the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances. (Stake 1995, p.xi)

Stake emphasises the importance of getting to grips with the particularity and complexity of a single case. His seminal text (Stake 1995) on the art of case study research is constructed around an actual case study that he conducted at Chicago's Frances Harper Elementary School. But Stenhouse is quick to point out that case study can also be generalised and comparative in its design:

Many researchers seek theories that will penetrate the varying conditions of action, or applications founded on the comparison of case with case. (1988, p.49)

The exact balance between individual cases and generalisations across cases are matters of judgement. But either way, case study should produce ordered reports of experience that 'invite judgement and offer evidence to which judgement can appeal' (Stenhouse 1988, p.49). In this sense, Stenhouse suggests, case study is like history in that its appeal to judgement rests on the representation of events and persons within these events. The process by which one seeks to represent people and events within one's case studies is therefore highly significant. The need for a detailed and 'naturalistic' element in case study is something to which I shall return below. By way of seeking to summarise, here is a list drawn from Stake and Stenhouse's texts (as cited above) that detail the characteristics of case study:

- Particularity (a case or cases)
- Collecting and recording data
- Reporting and presenting the findings
- Contextual understanding
- Being responsive
- Illuminating complex issues at work
- Relevance
- Accessibility

Within the practice of case study there are several main styles. Stenhouse (1988, p.49) identifies four principle types:

- The Ethnographic Case Study

- The Evaluative Case Study
- The Educational Case Study
- Case Study in Action Research

Each of these approaches will be defined and commented on briefly:

#### *2.5.5.1. Ethnographic Case Study*

This is a single case in depth by participant observation supported by interview. It seeks to understand society and culture through the observation and interpretation of inter-personal relations in the context of customs and institutions.

It may be said that it calls into question the apparent understandings of the actors in the case and offers from the outsider's standpoint explanations that emphasise causal or structural patterns of which participants in the case are unaware. (Stenhouse 1988, p.49)

#### *2.5.1.2. Evaluative Case Study*

This is a single case or a collection of cases studied with the purpose of providing those involved in the case with information that will help them judge the worth and merit of policies, programmes or institutions.

#### *2.5.1.3. Educational Case Study*

This type of case study is focussed on the understanding of educational action. Within this style of study the strategies of the ethnographer and evaluator are merged.

They are concerned to enrich the thinking and discourse of educators either by the development of educational theory or by the refinement of prudence through the systematic and reflective documentation of experience. (Stenhouse 1988, p.50)

#### *2.5.1.4. Case Study in Action Research*

As I have discussed above, action research is concerned with contributing to the development of case(s) through the feedback of information that can guide revision and refinement of action. Within this process of revision and refinement, teachers are commonly involved in developing their own teaching through 'self' case study.

### 2.5.2. Choosing a Case Study

Whatever particular 'style' of case study one is seeking to pursue (and I think that my case studies fit most easily within the third and fourth styles outlined above), the most important question that a case study research should ask is, "What will my case study be a study of?" A careful early definition of the boundaries of the case study is vital to ensure enough focus and depth to the forthcoming research activity. Stake puts it like this:

The case is a specific, a complex, functioning thing. (Stake 1995, p.2)

The specification of a case's boundaries may not be an easy or obvious decision. As a teacher researcher with a particular interest in the use of ICT to promote effective music teaching and learning, I felt that there was an obvious theme to my case studies. But many

other details needed consideration. Stenhouse's advice is helpful here (1988, p.50) as it draws distinctions between the conduct of individual cases, which may be opportunistic in their selection process, and urges us to consider the choice of a case study in light of other pre-existing case studies and variables which may be judged to be the most important in relation to the theme of the proposed study. This pre-analysis to the actual decision of a case study's boundaries is an important stage. It clarifies the context for the study as well as one's personal reasons for wanting to study it.

The first criterion should be to maximize what we can learn. Given our purposes, which cases are likely to lead us to understandings, to assertions, perhaps even to modifying of generalizations? (Stake 1995, p.4)

Given the aims and context of my research study (see 1.1.2 & 1.5), I was keen to maximise the opportunity to learn about the changing nature of the music curriculum when new technologies are introduced as tools for pupils to use. In this sense I saw part of the boundaries of my research as following in the example of many other case study researchers and teachers (Treacher 1989 & 1992) who used action research and case study to produce 'curriculum specifications and materials' (Stenhouse 1988, p.50). A more recent adaptation of this approach has been used by Sefton-Green in his survey of the digital arts (Sefton-Green 1999).

### 2.5.3. Practising Case Study

Fieldwork is that process of evoking, gathering, and organizing information which takes place on, or in close proximity to, the site of the events or phenomena being studied. (Stenhouse 1988, p.50)

There are many descriptions of how to practise case study. Typically, the collection of data is described as fieldwork and generally involves:

#### *2.5.3.1. Participant or non participant observation and interviewing*

Close and thoughtful observation of others is always an important and intensive feature of participant observation, and this includes, as an important element, observation of speech in natural settings. (Stenhouse 1988, p.51)

Within my role as a teacher researcher fieldwork activities took on a number of clearly defined roles. During teaching within the classroom I was clearly in the role of participant observer and, at many stages, of interviewer, questioning individuals or groups of pupils in a naturalistic setting. Outside the formal classroom setting I arranged for more informal discussion groups to take place during lunchtime sessions. These sessions could be described as focus groups, but an important difference was that I was keen to allow the structure of the conversations to follow their own course to a certain extent. Given the large number of pupils involved within two of the case studies, I also made use of structured questionnaires to assist in the planning and evaluation of the studies. Having analysed the results of these questionnaires, I would often interview pupils individually outside of formal classroom teaching sessions.

The results of these interviews and questionnaires were collated and analysed using basic principles drawn from grounded theory (Glaser 1967). Key points made by pupils and others involved in the case studies informed the writings of my own teaching journal. This journal took on several forms during the course of the case studies and was modelled on the

work of Somekh and others as described in Chapter 2 of Altrichter's introduction to the methods of action research (Altrichter 1993). A sample of my teaching journal from Case Study 3c: *Reflecting Others* can be found in Appendix U.

In Case Study 3b: *Dunwich Revisited* and Case Study 3c: *Reflecting Others* I worked alongside another teacher, Mike Challis, as part of the teaching and research process. As the sole music teacher within Debenham High School, having another colleague to work with at this level was a tremendous bonus. Our conversations about the ideas for curriculum projects, the planning of particular lessons and the choosing of particular pieces of technology for use in the case studies were formed on the basis of our discussions. Similarly, Mike and I discussed the research process and provisional findings at various points throughout the case studies. At the conclusion of each case study Mike and I co-authored research papers that were published in two international music journals (Savage & Challis 2001 & 2002).

#### 2.5.3.2. *Collection of documentary evidence, descriptive statistics, tests and questionnaires*

A range of other written evidence was collected throughout the case studies. This included pupils' written work of various types, including diaries and journals written after each classroom session. Many of the sessions produced work that was displayed on a project notice board within the classroom. This work was kept after the projects had finished and analysed carefully as described above. In addition to work generated by the various case studies, there was a range of other documentary evidence external to the projects themselves that provided a useful backdrop to the various activities. This included curriculum materials, framework and guidance produced by the Department for Education and Skills and other bodies (including, of course, the National Curriculum for Music and ICT Subject Exemplification materials). These documents were analysed carefully and the provisional findings of each case study were reflected on in light of this analysis. Additionally, the *Reflecting Others* project was conducted jointly with Aldeburgh Productions and their Education Department produced a range of interesting background papers and thoughts that influenced the planning and direction of this curriculum project.

#### 2.5.3.3. *Use of photography, video, musical and other materials*

The multimedia nature of the case studies meant that I generated a lot of other materials that fell under this final category. Musical outcomes were particularly significant in the various projects and these were captured using Minidisc recordings of pupils' works in progress as well as final pieces. Examples of this work are provided on the accompanying CD that I have conceptualised as a multimedia case record (Walker 2002). The performance work that pupils produced as part of the second case study (Case Study 3b: *Dunwich Revisited*) was also captured digitally using a digital camera and digital video camera (see the video material under the *Dunwich Revisited* section of the accompanying CD). In the final case study (Case Study 3c: *Reflecting Others*) pupils spent much of their time working on a number of iMac computers. This provided an excellent opportunity to capture snapshots of their work at various stages of development and from within the software environments that they were working. Much of this material was transferred onto an external hard disk for safekeeping and further analysis and can also be heard and viewed on the accompanying CD.

#### *2.5.3.4. Organising the Case Record*

The organisation of all the materials generated by a case study is a crucial part of the process of analysis and needs to be managed effectively. This raw material, known as the case record, needs handling in such a way that key concepts and ideas are not lost. Stake's advice was helpful here:

For many researchers, the most important thing is to have a personal diary or log in which everything is kept: calendar, telephone numbers, observation notes, expenses. Increasingly this information is kept in electronic files – which facilitates categorizing and editing information – but hard copy is still the preference of most. (Stake 1995, p.55)

During the conduct of my three case studies I experimented with a variety of approaches to this problem. The keeping of a journal was certainly a successful part of the second and third case studies. This was kept electronically and I attempted to make regular entries. Other information was also kept electronically and I found a number of useful pieces of software to assist in the process of managing the materials. The most simple of these was a basic word processor that allowed me to link text files through hypertext. This proved to be a useful way to generate key words and link ideas easily. However, it did have its limitations, the most obvious being that it could only handle text-based information such as that produced by pupils' questionnaires that I transcribed into an electronic format. In later case studies I experimented with electronic versions of case records in a FileMaker Pro database. This proved much more successful as it allowed me to link together records that contained photographic, video and music materials. At a basic level I used this program to assist in the storage of pupils' work and in categorising certain common features of their compositions. (Interestingly, this type of tool is becoming increasingly common as teachers seek to produce electronic portfolios of pupils' work for external assessment purposes.) Ultimately, a web-authoring environment such as that provided by the Dreamweaver software is ideal for creating a multimedia case record. This was used to create the accompanying CD.

#### 2.5.4. The Multiple Roles of the Case Study Researcher

A particularly helpful chapter of Stake's book discusses the multiple roles of a case study researcher. Stake describes these as:

- Teacher
- Advocate
- Evaluator
- Biographer
- Interpreter

Precisely which role a case study researcher adopts and 'plays' is a matter of choice:

Each researcher consciously or unconsciously makes continuous decisions about how much emphasis to give each role. (Stake 1995, p.91)

Stake presents us with a flexible model for the case study researcher's work. This role is something that is continually in a state of flux and, at a fundamental level, is operating both consciously and unconsciously. For me, this implies that a full and thorough reflection on

one's participation in the research process is a vital aspect of case study research at every stage.

As a teacher researcher it is obvious that one has an influence on the research environment. Seeking to identify and clarify this influence is crucial, not just for the outcomes or products of the research but also for the process through which one is engaged. At a conscious level, I was happy to adopt Stake's model of the multiple roles of a case study researcher. I saw myself as moving between the various categories and, at certain moments, found myself wearing many hats simultaneously and realising that they can coexist quite happily. At an unconscious level, I have found that these categories have assisted my process of reflection on the case study materials and helped me to recognise elements of personal influence, bias and prejudice. Used in conjunction with Peshkin's model of subjective I's, (Peshkin 1988) I have been able to provide an analysis of this process in the final part of Chapter 4 (4.8. & 4.9.).

### 2.5.5. Reporting the Study

A case record will contain a wealth of material of various types. In seeking to present the case to an audience one has to make important choices about what to put in and what to leave out. Selection of material is crucial in light of what one perceives to be the main function or aim of the case study. Stake's description of case study researcher roles is just as relevant here. One needs to decide what is the purpose of a particular case study. It might be to educate or inform an audience, or to act as a document advocating a particular position, to evaluate the impact of a certain innovation or provide a biography of a participant's experience. Either way, and there may be many particular ways within one case study, it is important to represent the case, the analysis of it and the conclusions drawn from it faithfully and, I believe, in as transparent a way as possible.

Given the large collection of material compiled as a case record, there are choices that one has to make about representing the case study. Traditional approaches to research design may be inappropriate:

But the traditional research report of statement of the problem, review of the literature, design, data gathering, analysis, and conclusions, is particularly ill fitting for a case study report. The case is not a problem or a hypothesis. It is useful for the writer to contemplate certain alternatives such as those suggested here, then to work out his or her own approach to portraying the case. (Stake 1995, p.128)

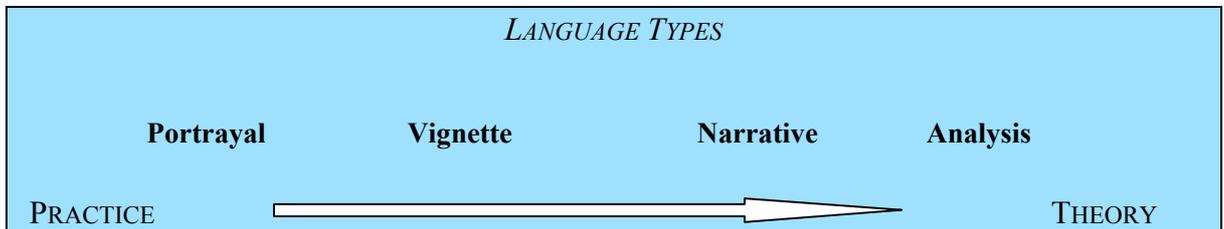
Stake goes on to identify three options for the case study reporter:

1. A chronological or biographical development of the case;
2. A researcher's view of coming to know the case;
3. Description one by one of several major components of the case.

These provided a useful starting point for my own report writing. At certain points within my case studies I found myself adopting each of these positions and often attempting a synthesis of approaches.

### 2.5.6. Language Types

Stenhouse (Stenhouse 1988, p.52) provides some useful advice relating to the types of language that may be appropriate to use within the various approaches to the report. I have found it useful to chart these along a continuum of theoretical and practical language types, often in relation to the content that I have been trying to convey to the reader. These can be represented as follows:



**Fig. 4: Language Types**

Obviously this is an artificial construction and there are many times when boundaries between language types are blurred and confused. But at a basic level and following Stenhouse's example, I have tried to achieve a balance within the language of my case studies in relating aspects of practice and theory. Each of these language types is simply defined below:

#### *Portrayal*

Within this language type I attempt to present clearly descriptive writing about particular characters or incidents within the case study. These descriptive moments may lack the surrounding narrative of a storyline but attempt to synthesise or focus the essence of the case study into a specific instance.

#### *Vignette*

Stenhouse describes vignettes as have the status of a sketch compared to a fully worked picture (1988, p.52). The selection of a vignette is an important decision, as is the way in which the vignette is interpreted. I have sought to use vignettes within my case studies as ways of illustrating or enhancing an analytical point. As such, they move away from portrayal as a descriptive device towards aspects of theoretical language.

#### *Narrative*

According to Stenhouse, narrative reporting has two strengths – directness and subtlety. The narrative form is direct due to it being familiar to most audiences and also because it restricts, at least to a point, the writer from presenting his or her own opinion or bias because of the 'teeth of resistance' that the story provides (Stenhouse 1988, p.52); it is subtle in that it allows for the writer to play with an ambiguity concerning cause and effect by the process of selecting which information to include and by inviting the reader to speculate about alternative interpretations. This kind of creative interplay between writer and reader is crucial as one seeks to construct or deconstruct potential meaning through the case study report.

## *Analysis*

The analysis language type provides the writer with the opportunity to make points explicitly through a review of the evidence provided in the case study record. Conceptual frameworks, denotative language, precision in terminology and theory all characterise this language type.

The precise use of language within case study should move between these artificial boundaries with naturalness and fluidity. I have found this to be more easily said than done. There is a real sense in which case study itself is a highly artistic activity, none more so than in the use of a rich and varied approach to language.

### 2.5.7. New Ways of Seeing

A handsome window through which the voluminous sky spreads forth – but the opened window reveals the void behind the sky, beyond our ordinary vision. I interpret it as an assertion about the nature of reality. (Stake 1995, p.98)

Case study done well provides a new way of seeing. Stake considers this concept through the use of visual metaphors, drawing on the work of the Belgian Surrealist painter Magritte. *The Field Glass* (1931; see Appendix C) is Magritte's painting that Stake chose to put on the front cover of his influential textbook on case study. Magritte plays with notions of frames, objects and spaces, teasing the viewer with what are often multiple interpretations of reality, encouraging him or her to look beyond the obvious and representational to a deeper level. Another picture that Stake discusses represents these ideas particularly well. *La Condition Humaine* (1933; Appendix D) was described by Magritte as follows:

*La Condition Humaine* was the solution to the problem of the window. I placed in front of a window, seen from inside a room, a painting representing exactly that part of the landscape which was hidden from view by the painting. Therefore, the tree represented in the painting hid from view the real tree situated behind it, outside the room. It existed for the spectator, as it were, simultaneously in his mind, as both inside the room in the painting, and outside in the real landscape. Which is how we see the world: we see it as being outside ourselves even though it is only a mental representation of it that we experience inside ourselves. (Magritte 1938, p.90)

These thoughts are essential if one is to get a handle on the power of case study as a research method. Through case study one can represent people, activities, events, curriculum initiatives, art and music making but only at a certain level. It still remains a representation and there is always another level or representation lying just beyond or through 'the window'. Even familiar objects, like the tree, can be viewed and analysed at different levels and with different meanings. Stake concludes his metaphorical exploration of Magritte's work by summarising the provisional nature of all case study research:

The researcher struggles to liberate the reader from simplistic views and illusion. The researcher is the agent of new interpretation, new knowledge, but also new illusion. Sometimes, the research points to what to believe, sometimes facilitating reader understandings that exceed the comprehension of the researcher. The researcher helps extend the elegant intricacy of understanding but meticulous readers find the infinite void still lying just beyond. (Stake 1995, p.99)

## **2.6. Searching for a Personal Research Methodology**

Action research and case study are my key chosen research methods. But a description of each method does not tell the whole story. There have been a number of other important themes in my search for a personal research methodology. I would like to briefly outline some of these other stages below.

### 2.6.1. The Centrality of Reflective Practice

Firstly, a key feature of case study and action research is the ability to reflect on one's own teaching practice. Schon's book (Schon 1983) has played an important part in my generating a research methodology. His characterisation of the high ground and the swamp has challenged my thinking on many levels:

In the varied topography of professional practice, there is a high hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution. The irony of this situation is that the problems of the high ground tend to be relatively unimportant to individuals or society at large, however great their technical interest may be, while in the swamp lie the problems of greatest human concern. The practitioner must choose. Shall he remain on the high ground where he can solve relatively unimportant problems according to prevailing standards of rigor, or shall he descend to the swamp of important problems and non-rigorous inquiry? (Schon 1983, p.3)

At various stages of my research over the last six years I have found myself in the full range of positions – from swampy lowlands to the high hard ground – and at many points in between. I have found the swampy lowlands to be the place of most interest and challenge for a beginning researcher and, whilst there is a temptation to withdraw to the relative safety of the high ground, a key principle of an action researcher is the commitment to work within the swamp, to address its problems and fashion modes and processes of enquiry in response to the issues one can identify. But, there is an important difference between action research and reflective practice:

Whilst it is true that action researchers necessarily engage in reflective practice, it is not true conversely that all reflective practitioners are action researchers. Crucially, action research involves a process of the collection and analysis of data that provides the practitioner with some objectivity and distance, looking at his/her own practice from another point of view, as if with 'a third eye'. (MMU 2002)

As a teacher and lecturer, I would characterise all my teaching as being permeated by the notion of reflective practice; but at specific instants and for identifiable occasions, I have adopted the role of action researcher in order to cultivate an alternative viewpoint on my own practice. The rigours and procedures of action research force one to be more systematic about one's enquiry, without which one's reflective practice remains no more than private comment or belief.

### 2.6.2. Networks and Relationships

Secondly, through adopting a role of teacher researcher I have been able to establish a network of relationships between my teaching and research beneficial for my own continuing professional development, as well as provide an imaginative curriculum for my

students. This confirms Stenhouse's statement 'No curriculum development without teacher development' (supposedly written on a sign over his desk (Kushner 1999, p.212)).

The adoption of these action research and case study methodologies within my teaching practice has enabled me to reflect on key educational events with a degree of intimacy that I seldom achieved previously. They have facilitated an increased awareness of the intricacies of classroom events and interactions. 'We need to portray complexity', argues Stake, 'We need to convey holistic impression, the mood, even the mystery of the experience' (private memo in Kushner 1991, pp. 2-3). As a result of these reflections, I have been able to construct and implement a variety of innovative schemes of work that exploit the educational potential of new technologies for artistic practice. The following case studies reflect the interdependence of my teaching and research activities. It would be impossible to imagine one without the other. My personal research methodology has been the most effective tool for my continuing professional development. It has given me:

- The opportunity to establish my own networks of support. I have learnt and applied lessons from staff within my own and other schools, through supervision sessions with university staff and through contacts with composers, artists and musicians working with new technologies outside of the direct educational context of my research;
- Time and space to initiate, develop and extend ideas through several 'spirals' of research activity. Having tried these methods of teaching and research, I would find it hard to teach in any other way;
- A legitimate reason to describe and analyse the contextual basis of my research;
- A structured process of negotiation with others (whether they be pupils, teachers or artists) that continually informs my own professional development. This has resulted in streams of ideas being fed back into the educational cycle of action research and evaluation.

In a curious way it seems appropriate that I am a teacher of the arts. For in many ways, developing such an approach to teaching and research resembles artistic practice. Elliott Eisner puts it succinctly when he talks about the relationship between curriculum and evaluation:

In both the construction of educational means (the curriculum) and the appraisal of its consequences, the teacher would become an artist, for criticism itself when carried to its height is an art. (Eisner 1985, p. 37)

### 2.6.3. Qualitative Research as Jazz

Finally in this section on additional themes that have informed the development of my own personal research methodology, the most helpful metaphor to describe this generation has been that suggested by Oldfather and West (1994): qualitative research as jazz. Drawing on research that has developed jazz as a metaphor for life itself (Bateson 1990), they suggest that:

Jazz exemplifies artistic activity that is at once individual and communal, performance that is both repetitive and innovative, each participant sometimes providing background support and sometimes flying free. (Oldfather & West 1994, pp.2-3)

Within jazz there are numerous paradoxes and dialectics. The jazz group functions and relies on interdependence between participants. At various times, each musician has to play a range of roles. There is a unity in their diversity, but this is a sea of constantly shifting balances and relationships. And underneath this interplay, the deep structure of the music guides the unfolding improvisatory nature of melodic, harmonic and rhythmic expression.

Similarly, in qualitative research there is an improvisatory interplay between the participants and the deep structures of the research methodology. I have found that my methodological principles, values, inquiry focuses and findings have all been guided and challenged within the changing and collaborative arena of the classroom. Often I have felt myself to be within the role of a jazz improviser, seeking to play my part within the group in such a way that acknowledges the balance between individual, communal, supportive and extemporaneous research activity.

The process by which I became aware of this reflective role is worth dwelling on for a moment. Initially I was looked for a fixed method, a textbook for qualitative research that would tell me all the about the how, why and when questions that I considered important. But I quickly realised that such an approach was too formal and reliant on someone else's criteria for research 'success'. Gradually I began to appreciate that such a fixed approach would have failed to capture the very essence and detail of the research field that I wanted to investigate. Oldfather and West express it like this:

Newcomers may search for the sheet music, or the instructions, and finding none, may be quite uncomfortable until they develop an intuitive sense of the guiding deep structures. ... The trick is to be able to feel the music. This ability comes through both understanding the deep structures and giving oneself to the freedom to let go and apply those deep structures in improvisatory ways. (Oldfather & West 1994, p.23)

And in many senses this ability is one that I am continuing to develop. I have learnt to let myself go to the 'freedom' that qualitative research methodologies allow, yet to constantly depend and rely on my understanding of the 'deep structures' of the research methodologies that I have adopted for this research. Within this interplay is the acknowledgment that one's experience of the research process in action is as important and valid as one's critical and rational explanation of it (often in hindsight). This blending of affect and cognition is vital if one is to construct vivid and accurate accounts of the research process:

Experience is the bedrock upon which meaning is constructed, and that experience in significant degrees depends upon our ability to get in touch with the qualitative world we inhabit. This qualitative world is immediate before it is mediated, presentational before it is representational, sensuous before it is symbolic. (Eisner 1993, p.5)

## **2.7. Case Study Design and Issues Relating to the Research Context at Debenham High School**

As I discussed at the opening of this chapter, my metaphorical interpretation of the sleeve notes to *Kind of Blue* have been important recurrent themes throughout this research project. I am well acquainted with jazz as a musical style and find it a useful metaphor in the sense that it has allowed me to adapt a sense of playfulness and improvisation to the construction and execution of my own case study design. In drawing together this section

relating to the construction of my research methodology, I want to consider briefly what I believe are important factors about the function of ICT within a school context and how they practically affected the early stages of my research work. These affected each of my three main case studies (see 2.7.2.) in equal measure. Once I have described these particularly contextual influences on my case study work, I will conclude this chapter with a diagrammatic representation of the case study design along with a consideration of the issues it raises for the rest of the thesis.

### 2.7.1. The Research Context at Debenham High School

#### *2.7.1.1. Implicit Assumptions*

Firstly, within the school context there are many people who make assumptions about the purpose of, and practices surrounding, ICT. These assumptions can hinder as well as facilitate any attempt to bring about change in a specific subject area. This had major implications for me and continues to effect teachers in many schools today. The outcomes of these assumptions are evidenced in a variety of ways.

The physical environment of a school and the distribution of resources within it is one such factor. In many schools music takes place in the music room or suite because it is noisy, often involves pupils working together in groups and requires these groups to have their own space to work (so they spread out over a wide area). All of this (and more) can be disruptive to other teachers. For these reasons, music departments are often on the fringes of school buildings. Early developments in networked technologies saw the location of computer suites at central points, within easy access of the majority of teaching spaces. Pupils' work within these computer suites was characterised by a quiet, often individual, working approach with particular pieces of software.

All of the above was true at Debenham High School. The opportunity to move music classes into the computer suite was fraught with difficulty and associated disruption to other teachers in the surrounding area. The layout of the room was not designed to facilitate group work, with all the computer workstations facing the walls and little additional space for other instruments or resources. I found it difficult to conceptualise how any creative musical use of these technologies could take place in this context.

But networked computers represent a valuable musical resource for any school. In many schools today the distribution of such a resource has become much more versatile and democratic. It is not uncommon to see large collections of networked computers at various 'nodes' around the school buildings. And with the adoption of wireless networking in many schools computers have taken on an increased mobility that transcends physical boundaries. At a practical level this allows them to be integrated within subject teaching more easily. But as I started planning my first case study things were very different. I felt cut off from the centralised ICT provision of the school and had to look elsewhere.

#### *2.7.1.2. Financial Considerations*

My second consideration about the function of ICT within a school context concerns the financial resources made available to individual subject areas. During the period of my research there was a strong acknowledgement of the need to increase the use of ICT in each subject area. For many staff, this involved them taking classes to the computer suite and using a range of generic software (word processors, spreadsheets, internet tools). But my ideas for teaching music with ICT needed a range of other technologies. My department

budget in 1998 was £400 and this provided little scope for purchasing the necessary equipment. I made representations to the Headteacher and he provided me with additional funds to purchase four sound processors and microphones (£700 in early 1999) and a computer (£800 in 2000). In a sense, the limited resources available to me made the planning and conducting of the curriculum projects more difficult. But I was acutely aware that other music departments were managing on even less. The third case study (*Reflecting Others*) was financed through external funding. This meant that four computers and associated hardware were lent to the school. But at the end of the project these were removed, along with all the new ways of working with music and video that the pupils had experienced. This was a source of tremendous frustration for me.

#### *2.7.1.3. Compartmentalism*

The final assumption about the function of ICT that I faced was that of 'compartmentalisation' (Somekh & Davis 1997, p.188). The compartmentalisation that I felt was that of the National Curriculum framework. In many respects this creates artificial barriers between subject areas. At its heart, the National Curriculum encourages cross-artistic practice, but in the reality of day-to-day life in a small but hectic secondary school these links with other staff and curriculum areas are increasingly difficult to initiate and manage. As my case study work developed, and particularly in Case Study 3c: *Reflecting Others*, I quickly realised that if I was going to explore the power of ICT to facilitate pupils' work across the arts then this was going to have to take place within designated 'music' sessions. To their credit, the senior management of the school supported this decision.

#### 2.7.2. Final Case Study Design

Given the above contextual influences of my work at Debenham High School I designed an overarching framework for my research project. This centred on three main case studies, conducted over a period of just less than two years. The diagram below represents this final framework.

## The Final Case Study Design

### T r i a l C a s e S t u d i e s ( 1 9 9 7 – 1 9 9 9 )

Case Study	Date	Participants	My Role(s)	Data Collection	Output
Stowmarket High School Bid for Technology Status	October 1997	Working group (7 staff including Headteacher)	Observer & Advisor	Documentary materials including Government initiatives & advisory material from the Technology College Trust; Survey of initial research literature.	Advisory paper for Headteacher. See Appendix V.
Community Music East The Kerrison Back To School Project	23 <sup>rd</sup> June 1998	4 Year 11 pupils (all school refusers) 2 project workers 2 CME staff	Observer & Interviewer	Observation of two teaching sessions; Interviews of all pupils, project workers and CME staff.	Case study report fed into the CME evaluation process (led by Barbara Walker) See Appendix W.
Sonic Arts Network (SAN) Almondbury Church of England Infant & Nursery School	13 <sup>th</sup> May 1999	Year 5 class (24 pupils) Paul Scrimshaw, Teacher of Music & ICT Duncan Chapman (composer in residence) Rachel Healey (SAN project officer)	Observer & Interviewer	Observation notes and discussion with Paul Scrimshaw, Duncan Chapman and Rachel Healey; Interview with Paul Wright, Education Director of SAN.	Case Study report fed into the SAN evaluation. See Appendix B that includes key questions that fed into the generation of my research aim and questions.
Sonic Arts Network	13 <sup>th</sup> May 1999	Year 1 class (22 pupils)	Observer	Observation notes and	Case Study report fed into

(SAN) Lowerhouses Church of England Infant and Nursery School		Liz Marshall, Teacher of Music Duncan Chapman (composer in residence) Rachel Healey (SAN project officer)	& Interviewer	discussion with Liz Marshall, Duncan Chapman and Rachel Healey; Interview with Paul Wright, Education Director of SAN.	the SAN evaluation. See Appendix B that includes key questions that fed into the generation of my research aim and questions.
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**G e n e r a t i o n o f R e s e a r c h A i m &  
A s s o c i a t e d Q u e s t i o n s ( s e e 1 . 5 . )**

**C a s e S t u d i e s ( 1 9 9 9 - 2 0 0 1 )**

<b>CASE STUDY</b>	<b>DATE</b>	<b>PARTICIPANTS</b>	<b>MY ROLE(S)</b>	<b>DATA COLLECTION</b>	<b>OUTPUT</b>
3a. Year 10 & 7 Compositional Tasks	June – July 1999	Year 10 GCSE group (12 pupils) Year 7 (84 pupils)	Teacher researcher Observer Interviewer	My observation notes kept in teaching journal; Interviews with selected groups of pupils (Year 7); Class discussion (Year 10); Musical products (2 audio tracks provided on the accompanying CD).	Case study report; Publication for the European Music Journal (online journal) ( <a href="http://www.music-journal.com">http://www.music-journal.com</a> ).

## I m p l i c a t i o n s   f o r   f u t u r e   w o r k   ( 3 a . 5 . )

3b. <i>Dunwich Revisited</i>	January – April 2000	Years 7, 8 & 9 (230 pupils) Year 10 GCSE group (15 pupils)	Teacher researcher Observer Interviewer	My observation notes kept in teaching journal; Class discussion (recorded) and evaluation with all participants; Pupil diaries in response to set evaluation questions; Concluding questionnaire (see Appendix X); Interviews with selected groups of pupils (all years); Musical and video products (provided on the accompanying CD).	Case study report; Publication for the <i>British Journal of Music Education</i> 18:2 (July 2001), pp.139-149.
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## I m p l i c a t i o n s   f o r   f u t u r e   w o r k   ( 3 b . 4 . )

3c. <i>Reflecting Others</i>	October 2000 – March 2001	Year 9 (84 pupils)	Teacher researcher Observer Interviewer	My observation notes kept in teaching journal; Class discussion (recorded) and evaluation with all participants; Pupil diaries in response to set evaluation questions; Initial and concluding questionnaires;	Case study report; Publication for the <i>Music Education Research</i> journal 4.1 (March 2002), pp.7-24.
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				Interviews with selected groups of pupils (all years); Musical and video products (provided on the accompanying CD including photographic materials, pre- and post-manipulated audio and video sample materials, images of the final installation product).	
<b>C o m p a r a t i v e C a s e A n a l y s i s</b>					
<b>( C h a p t e r . 4 )</b>					
<b>C o n c l u s i o n</b>					

### 2.7.3. Discussion

The final design of my case study methodology (as illustrated above) includes the preliminary case study work that I did in preparation for the three curriculum-based case studies (Case Studies 3a, b & c) that form the heart of my research project. The time spent working on these initial ‘trial’ case studies was very productive in relation to coming to terms with the case study methodology. It was a chance for me to develop and test out my skills of observation, document analysis, interview and discussion in a range of different contexts (high school, primary school and on location at the Kerrison Back to School Project). The products of these case studies are included in Appendices of this thesis. It was after the conclusion of these four trial case studies that I established my research aim and associated questions (see 1.5.).

The participants in each of the three main case studies (3a, b & c) were all pupils within my classes at Debenham High School. One group of pupils (highlighted by blue text in the above diagram) participated in all three case studies. It was interesting to note the quality of their responses in light of the various data collection methods that I employed throughout the case studies as contrasted with those made by other pupils who only participated in one or two of the case studies.

An ‘Implications for Future Work’ section follows Case Study 3a and 3b. This was my opportunity to reflect on the case study materials in a developmental manner, a way of looking forward to future work and considering the next ‘action step’ (Elliott 1991, p.50). Case Study 3c is followed by a comparative case interpretation that forms the first two thirds of Chapter 4 (4.1. – 4.7.). Following an analysis of my own influence on the research process (4.8. & 4.9.), I will then establish my final conclusions in Chapter 5, with illustrative material drawn from a recent research project – another case study – that examines the studio practices and biographical stories of a number of Manchester-based songwriters and sound designers.

## **2.8. Summary**

Through my research I have sought to combine the methodologies of case study and action research, together with a heightened sense of reflection, professional development and a notion of playfulness drawn from my metaphorical interpretation of qualitative research as jazz. I believe that in doing this I have been able to evaluate effectively the use of music technologies within my teaching. An obvious strength of these research methodologies is that, to a large extent, they are an extension of what teachers do best. I am used to constructing situations in which pupils can learn, to observe them learning and to refine my techniques to enhance the opportunity for their future learning.

Creative use of music technologies, evaluated effectively, can lead to creative curriculum developments. Music technologies used in this way are empowering for both teachers and pupils. They can create a learning environment in which ‘the mind ‘adapts with’ rather than ‘adapts to’ structures of knowledge’ (Elliott 1991, p.10). In this sense, the curriculum can be seen to be in continual development, as a process rather than a series of products. The monitoring of this process is central to its success.

The curriculum map is shaped within pedagogical practice as the teacher selects and organises 'knowledge content' in response to students' own search for meaning, *and then monitors their responses* [my italics] in the light of such criteria as 'relevant to their concerns', 'interesting', 'challenging', and 'stretching'. (Elliott, 1991, p.11)

In a sense then, this research methodology is 'pupil-centred' but not in a constrained sense. It places the improvement of practice and the development of the curriculum firmly within the partnership of learning that has to exist between teacher and pupil. This approach to teaching, research and evaluation makes pupils 'feel' cared for, their comments and views are at the heart of the teacher's reflective practice and an inclusive, unified model of teaching and research can result.

Finally, if there is a danger that the adoption of such a research model can become a little too introspective and individualised, I would like to stress the emphasis on the dissemination and communication of my research findings in various different contexts. Teacher researchers need a structured framework to share their findings, to exchange views and engage in dialogue with teachers, researchers and other teacher researchers. 'Lone ranging' is not a viable option (Taylor 1998). As the following case studies will show, I have attempted, at every opportunity, to share my research findings in appropriate ways with a range of audiences.