

## ***3c. Case Study 3: Reflecting Others***

### **3c.1. Introduction and Research Context**

There are many more ways of expressing yourself rather than just talking. (Kim, Year 9, questionnaire response)

Music is the pretext – life is the text. (Kushner 1999, p.216)

*Reflecting Others* was an innovative digital arts project that had, at its heart, the idea of young people representing themselves and others through digital sounds and images. The project linked pupils in Years 9 and 10 (aged between 13 and 15 years old) at Debenham High School with a small group of young offenders (aged between 15 and 18 years old) in the Carlford Unit at Her Majesty's Prison Hollesley Bay, on the east coast of Suffolk. Whilst the project involved the whole of Year 9 (approximately 84 pupils with a full range of musical ability) and took place entirely within designated music curriculum time, the prison's group of young offenders was much smaller and made up of volunteers. There were approximately twelve young offenders working on the project, although this varied week-by-week as many young offenders had other commitments within the prison, e.g. meetings with probation officers, being isolated due to poor behaviour, etc. The school pupils had prior experience of using ICT within their music lessons having been the original group of Year 7 pupils who experimented with sound processing (see the Early Experiments case study) and also took part in the *Dunwich Revisited* project in Year 8; the young offenders had little or no experience of these technologies prior to the project and worked within a designated two hour session on a Friday afternoon with a composer-in-residence. The collaborative dimension of the project was organised by Aldeburgh Productions' Education Department. The resources for the project came through £11,000 of funding offered by The Monument Trust, with additional support from the J. Paul Getty Jr. Charitable Trust. Phillipa Reive, the Education Director for Aldeburgh Productions, took overall responsibility for the finance and management of the whole project.

*Reflecting Others* drew heavily on a number of ideas and observations from my previous case studies and can be conceptualised within the action research spiral as another 'action step' (Elliott 1991, p.71). In many ways it was the most ambitious of the three case studies, involving a number of external artists and agencies as well as the most sophisticated hardware and software. The outcomes of the project were certainly the most challenging to staff and parents, as well as to the pupils themselves.

Within the case study I hope to convey the essence of the work from the viewpoint of the school, its staff and pupils. This was the point at which I had most contact with the project. As with the *Dunwich Revisited* project, I have to acknowledge the considerable help and support of a teacher of mathematics within the school, Mike Challis. Mike's advanced skills as an electroacoustic composer, ICT technician and musician were indispensable. He shared in the teaching of the school pupils and was the prison's 'composer in residence'. The scope of this case study remains firmly within the school boundaries and does not attempt to document the experiences of the young offenders throughout the project. Like the *Dunwich Revisited* case study, it considers the project in light of the Government's exhortation for teachers and pupils

to use new technologies as tools for teaching and learning. But before describing the project in more detail, I would first like to set the context for the research activity.

And thus the opportunity is magnificent. Everywhere else the curriculum has to be bogged down in historical precedent, preparation for college, notions of minimum competency, preservation of the status quo. Outside the arts, no one much cares what is taught as art. Those who teach the arts have less resource than anyone else but more freedom. (Stake quoted in a personal correspondence to Saville Kushner (Kushner 1999, p.216))

Stake's observation has certainly proved true in the context of my teaching and research at Debenham High School. Taking the issue of resources first, at a financial level the project benefited from funding obtained from external sponsors. This was the first time that I had participated in a project funded by an external sponsor. But the funding was granted primarily because of Aldeburgh Production's collaboration with HMP Hollesley Bay. All incidental expenses occurred by the school (e.g. in allowing staff to attend sessions at the prison) were paid for through this sponsorship. Nearly all of the ICT used in the project was purchased by Aldeburgh Productions and has subsequently been withdrawn from the school. The continuity of the work from the pupils' experience was cut short by this arrangement. This was a disappointment for the pupils and myself.

However, what the school did provide was a research context open to new and experimental ideas. The Headteacher of the school was rightly cautious at first. He was keen to see detailed project planning and to be reassured about the precise relationships between the pupils and young offenders. Letters were written to parents giving them the opportunity to allow their children to opt out of the project, although none of them raised any concerns. But once these preliminary matters were dealt with the project was allowed to run its course with minimal interference from the school's senior management.

I am not certain that this was because of Stake's comment that 'outside the arts no one much cares what is taught as art'. Indeed, I have found that many people have expressed a great degree of interest into the findings of this project. Rather, I felt a delegation of responsibility from my senior managers in relation to the project's curriculum design and implementation. Within the school I was given the freedom to try out and experiment with new ideas about music teaching and learning with new technologies. I am very grateful for the confidence expressed by the senior management in allowing this to happen. This fact should not be understated and has been a consistent theme throughout my teaching and research. Music education on the 'fringe', as Kushner (1999, p.216) calls it, can be intensely rewarding for all involved. It is from teaching and researching within the fringes of the music curriculum that new knowledge and ideas can be produced. As will become apparent, this project seemed from my perspective to be nearer 'the fringe' of the music education, as defined by the National Curriculum Programme of Study, than previous projects. Through it I have sought to exemplify an interactive form of research that, whilst taking account of ideas and theories, is primarily built on 'observations of educational practice' and focuses on 'the individual and the idiosyncratic' (Kushner 1999, p.217).

As I have argued in Chapter Two, this approach to teaching and research is the most useful in providing an accurate picture of learning with new technologies. It produces an account of this

process within the context of a specific classroom, framed by the social, cultural and political context of the school. This 'inside-out' approach has the additional benefit of empowering my voice, enabling me to reflect on the interactions and relationships in my classroom with a degree of intimacy that is not attainable through alternative methods.

Having set out the brief research context for the project I will now describe its main events and activities.

### **3c.2. Description**

A central challenge for the education system is to find ways of embedding learning in a range of meaningful contexts where pupils can use their knowledge and skills creatively to make an impact on the world around them. (Seltzer & Bentley 1999, p.10)

Music lessons for pupils in Years 9 and 10 at Debenham High School were far from conventional during the Autumn 2000 and Spring 2001 terms. Within them you would have been as likely to find pupils working with digital video cameras, iMac computers, Minidisc players and microphones as with traditional classroom instruments. You would have found pupils recording the hustle and bustle of school life, the countryside, their hobbies and interests, collecting audio samples from CDs and radio programmes as well as visual images from the local skateboard park and leisure centre, all in relation to the project's themes of identity, community and environment. This material (over 20 gigabytes in total) was recorded onto a number of iMac computers before being edited and transferred to an external hard disk as a 'digital scrapbook'. A sample of this material is contained on the accompanying CD.

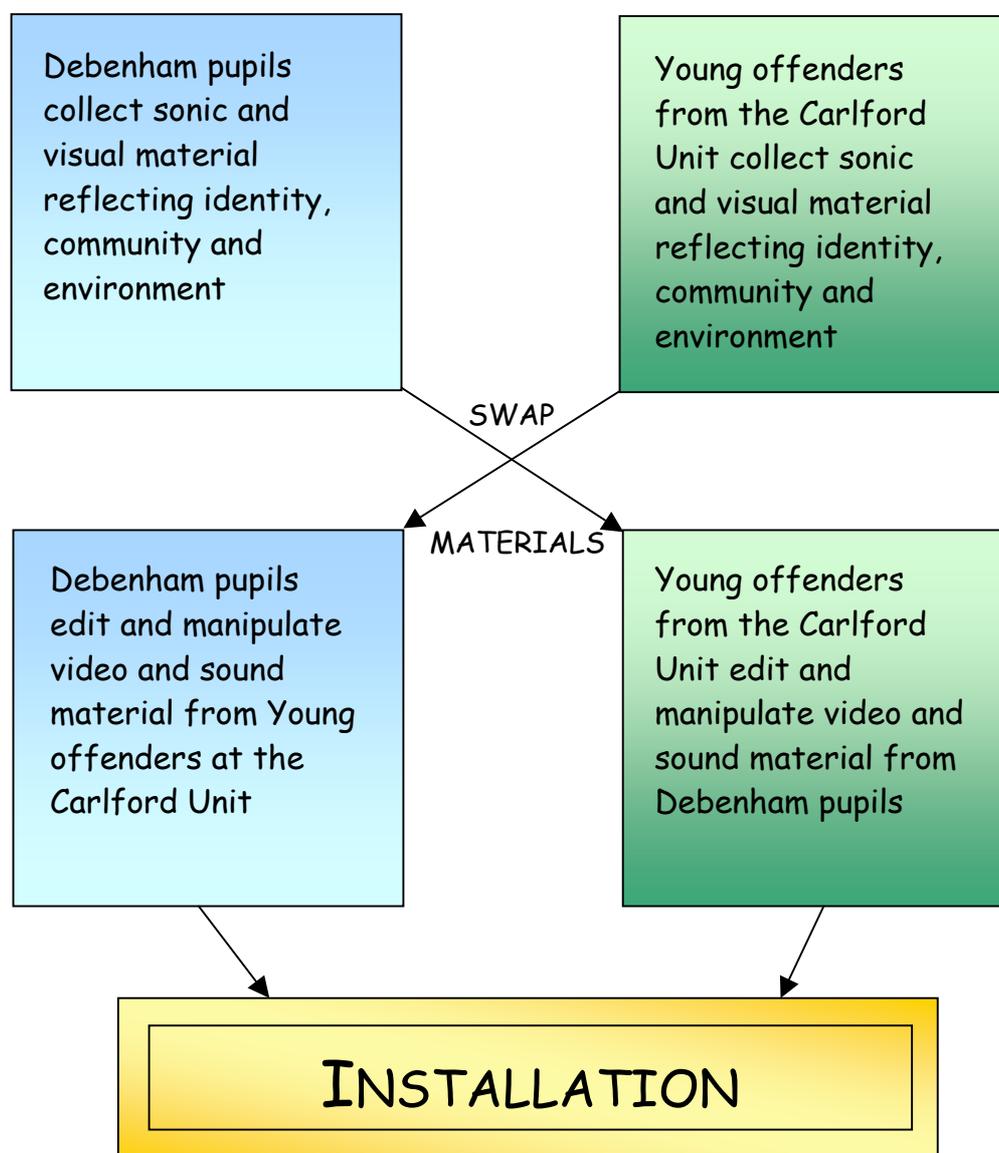
In another part of Suffolk, within a highly secure special unit at HMP Hollesley Bay, young offenders were offered the opportunity to carry out a similar exercise. Both pupils and young offenders documented, through sonic and visual digital recordings, their environment, sense of identity and community as young, 21<sup>st</sup> century teenagers.

After a small amount of editing by project staff to remove the names of pupils and prisoners from some of these materials, the school and prison exchanged these 'digital scrapbooks' after Christmas. The exchanged digital scrapbook became source materials for a number of sonic and visual compositions each made by one group about the other. Pupils worked on the material collected by the young offenders; the young offenders worked on the material collected by the pupils. They selected, edited and manipulated the images and sounds using a variety of innovative software tools, including Metasynth, Digital Performer and Adobe Premiere. Each of these pieces of software, despite being tools for professional use, proved easy to adapt for use within the classroom environment. The sonic and visual compositions produced were arranged to make a specially designed sound and visual installation that was housed in the Exhibition Room at Snape Maltings Concert Hall. The installation was transferred to the school and the prison before returning to Snape Maltings for public viewing during the 2001 Aldeburgh Festival and Snape Proms. Samples of the audio and video work produced by pupils for this installation is included on the accompanying CD. This also contains images of the final installation.

Key to the success of the project was the involvement of two artists: the electroacoustic composer Mike Challis (employed as a teacher of mathematics at the school) and the filmmaker (employed by Aldeburgh Productions for the duration of the project). Both worked in the school and the prison, combining and sharing their technological skills and artistic awareness with classes of pupils and young offenders. Like the *ConCussion* project (Higgins & Ross 2000, p.91), they adopted an approach to teaching with digital technologies that concentrated more on what they could achieve rather than how to accomplish any given task with a specific software tool. They promoted an approach to using new technologies that focused on developing pupils' creative ideas rather than getting weighed down with the intricacies of the software. On the whole, this seemed to be a successful approach.

The following diagram illustrates the main stages and flow for the material of the project.

Fig. 14: Diagram representing the exchange of material in Reflecting Others



### 3c.3. Analysis

The *Reflecting Others* project raised many issues for me to consider. These will be presented under two headings: Compositional Issues and Pupil Issues. Many of these issues have important parallels with those raised in the other two case studies. Chapter Four will draw together themes from all three case studies and place these in the extended context of the wider research literature.

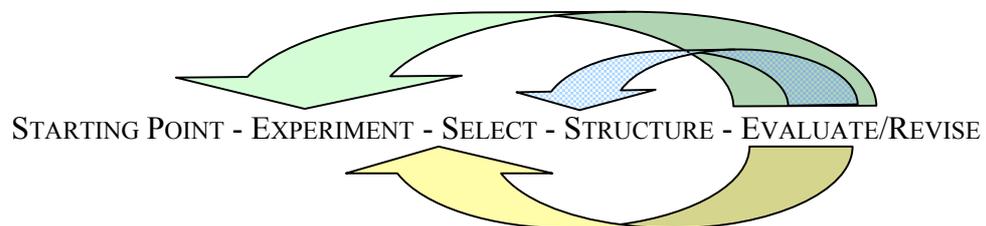
#### 3c.3.1. Compositional Issues

Within this section of the case study I will consider two main features of the pupils' composition work. These relate to adoption of a particular compositional process and the development of authentic compositional skills with ICT.

##### 3c.3.1.1. The Adoption of a Composition Process with ICT

As with previous projects, I was keen that pupils were encouraged to use and interact with ICT in ways that were 'authentic' to the compositional practice of other composers. My early observations of electroacoustic composers working within the studios at the UEA were most helpful in this respect. One of the most useful materials that I presented to pupils was a specific compositional process. This process was devised through discussions with electroacoustic composers, particularly Mike Challis. The five stages of the process were displayed on the project notice board:

**Fig. 15: Compositional process**



The *Reflecting Others* project was neatly divided across the Christmas break. Prior to Christmas, pupils and young offenders developed creative starting points, experimented and selected appropriate material; after the break they worked on selecting and structuring this material into short pieces, evaluating their choices and making revisions as appropriate.

Pupils were also encouraged to use this process throughout the many 'levels' or activities of compositional practice. It related to:

- The choice and recording of a particular sound using a Minidisc and microphone;
- The process of selecting and editing these sounds within various software environments;
- The structuring of them into pieces within software-based sequencing environments.

Although the process is presented in a linear format, the loop back from the evaluation component to previous stages is very important. This results in a compound process rather than a simple process of accumulating or structuring material. It gives an insight into what became an important role for me as a teacher in this project. As potentially any sound or image could be electronically captured and used as artistic material, I found that questioning pupils as to why they had chosen particular sounds or images became a vital teaching strategy. I often used questions such as, “What does this sound represent for you?” and, “Why have you placed this image alongside this one?” In some ways this type of questioning is a part of every teacher’s role within composition teaching. But given the nature of the material with which pupils were working and a lack of conventional sequencing and structural devices for them to work within, I had to work harder at engaging them with the materials and their meaning at a conceptual level. It was certainly the case that for some pupils this ‘gap’ was a jump too far, and despite my best efforts I felt sure that they struggled to make sense of the representational features of the artistic materials with which they were engaged.

But in the majority of cases this process did provide a series of ‘handles’ for the pupils’ work throughout the project, giving them a sense of progression within the compositional process. Pupils often have all kinds of strange ideas about who composers are and what composition is. Often their ideas revolve around concepts of old, white, bearded men working with manuscript and pen by divine inspiration and candlelight in a dusty attic. Rather than composition being seen as a mystical process or experience, this chart provided a simple yet authentic sequence of activities for them to follow.

It should be noted that this compositional process is one of many such processes devised by other researchers (Vishnick 2002). The relationship of this process to the wider literature will be developed as an important theme in Chapter Four.

### *3c.3.1.2. The Development of Authentic Composition Skills with ICT*

One of my key observation focus points during the project was on the type of skills pupils needed to develop whilst using ICT within composition tasks. An initial concern was that pupils would be working within a range of software environments that were unfamiliar. The adoption of professional software tools within the classroom environment had mixed results in the *Dunwich Revisited* project. One piece of software (Metasynt) had not had the desired impact on pupils’ work. Another piece of software (ProTools) had proved extremely effective and easy to use. I was keen to examine the reason for this during the course of this project.

In addition to the software environments within which pupils were working, the computers provided by Aldeburgh Productions were iMacs and, as is often the case in many schools throughout the United Kingdom, my pupils’ main experience with computers had been on the PC platform. Therefore, for many of these pupils this was the first time they had used an Apple Macintosh computer. This proved unproblematic and they quickly familiarised themselves with a new operating system with minimal fuss or difficulty.

So an early concern was that pupils would struggle learning the technological skills required to use new software and work within a new operating system (level two in the DfES & BECTa, 2002 *ImpaCT 2*’s report on implementing ICT in the classroom). However, the majority of

pupils quickly made the link between the computer as a technological tool and the possibility of the computer as an artistic ‘instrument’. Consider the following:

I think if you work a lot on your skills with the software you’d get it better like an instrument. You know what sounds you are looking for and pick them out quicker.  
(Adam, Year 10, in interview)

For Adam, alongside the development of technological skills quickly came the compositional skill of selecting sounds. He suggests that as his operation of the computer becomes, in a sense, more automatic, he can work more quickly on the important process of choosing interesting sounds. The aural skills needed to select the appropriate sounds are a key compositional skill. As a composer, the selection and structuring of sounds from a period of extensive experimentation or play is a vital link in the compositional process. Picking sounds is important but recognising their potential is crucial. Adam found that his prior knowledge about the type of sound that he required became fused to an awareness of the technologies potential to transform sounds in imaginative ways.

In many respects this is similar to the jazz musician’s aiming for particular sounds, notes or phrases in his response to the music’s evolving sense of shape and direction. David Sudnow’s book *The Ways of the Hand, The organisation of improvised conduct* (Sudnow 1993) is fascinating in this respect, drawing an account of the complicated interactive and interdependent relationships between the hand, ear, eye, keyboard and the ongoing flow of the music. There are many parallels here to the intuitive and responsive use of a computer as a musical instrument that I will follow up in Chapter Four. But in respect of this pupil’s relationship with the computer as an ‘instrument’, he was beginning to develop this kind of pre-listening and selective process that is a vital skill of the improviser.

You can experiment with it. If you don’t like the sounds you can change them without changing the whole lot. (Hannah, Year 10, in interview)

The use of mixing/editing software (Digital Performer) and editing and transformation software (Metasynth) in the project has enabled pupils to manipulate and structure material easily and effectively. When the external hard disks were exchanged after Christmas, pupils faced the task of watching and listening to the large amount of material that the young offenders had collected. They had to make artistic decisions about what to keep, what to store for possible future use, and what to throw away. From this wealth of material, pupils selected particular sounds and images that they felt were especially striking. Pupils made obvious choices but also some surprising ones too:

I think that the images of the bars were effective because they were so simple, but it meant a lot to them and show us a lot about their life. Also the clips of the chapel were quite interesting to have seen from a prison. (Sarah, Year 9, questionnaire response)

A range of photographic images drawn from these video materials can be found in Appendix L and on the accompanying CD.

In relation to sonic material, Mike Challis talks about this process of selection as enabling one to ‘build your own instrument’. Within the Digital Performer software, collections of audio

clips can be stored in the Soundbytes window (Appendix M). Pupils were able to play sounds simply clicking on them. They could also open sound files from this location, highlight part of a waveform and then save this as a new piece of sample material (Appendix N). A sample of sounds that pupils collected and manipulated can be found on the accompanying CD.

Quite literally, pupils could build a library of sounds that could then be structured, arranged, repeated or edited as appropriate within the 'time line' of the composition as portrayed in the Mixing window (Appendix O). They created their own virtual instruments that could be played by clicking the mouse on particular samples and then dropped them into the mix at pre-selected points. Pupils found it easy to arrange and structure their musical material within this environment. The same was true when pupils structured the video material within Adobe Premiere's 'time-line' working environment.

Pupils became adept at building up these collections of sound files within their various projects. They were also able to take audio files out of the Digital Performer environment, manipulate them in Metasynth and then reintroduce them into the Soundbytes window. Metasynth represents sounds graphically and this proved particularly versatile as a tool for editing and manipulating sound ideas (Appendix P).

In this sense the use of a sample editor such as Metasynth confirms and extends Swanwick's comment that:

The computer can also be used both to stimulate compositional processes and to facilitate editing and notating. It can also translate visual metaphors of music into sound. (Swanwick 1999, p.108)

The computer in this project certainly facilitated the editing of sound in a very direct and immediate sense. Notation of sound using conventional symbols such as notes and staves was inappropriate given the extensive use of audio sample material. Within the Metasynth environment pupils could literally turn visually precise and exact waveform morphologies of sound into music.

### 3c.3.2. Pupil Issues

Alongside issues to do with compositional processes skills with ICT, the *Reflecting Others* project provided a valuable insight into a range of other issues related to the musical and artistic use of ICT by pupils. Within my role as teacher researcher, the identification of these issues was fairly swift at the time of the project; however, in looking back at the events of the project at the present time I have found myself able to consider them in more depth and draw connections between them. Many of the following points deal with the pupils' reactions to various elements of the project, namely the sonic and visual materials, the differences between working processes and the final product of the project, the challenging and sometimes difficult genre of electroacoustic music and the judgements being made about their work (by their peers, project staff and wider community).

### 3c.3.2.1. *Developing Skills and Widening Perceptions*

At first I didn't think this was anything to do with music. It was all ICT. When you think of music you think of people playing instruments. When you get into it you realise that it's not just that. It's just another way to look at music. (Seth, Year 10, questionnaire response)

Unlike the *Dunwich Revisited* project that had a live, performance element and utilised traditional instruments and singing, within this project pupils were working entirely with recorded sample material in a digital environment. From this perspective it was pleasing to note a change in some pupils' attitudes towards their work, particularly from issues of a technical nature to those of an artistic one. Whilst in the first instance there was an obvious focus on effective use of software and hardware and the development of the necessary technological skills, pupils were quickly encouraged to use the various technologies as tools for a creative purpose. In many ways, and mainly because of time restraints, pupils were thrown in the creative deep end with some of the technology. They had to sink or swim with it and, to my delight, many rose to the challenge and quickly showed their creative flair through appropriate uses of the various pieces of software and hardware.

This was especially the case in the final stages of the project, when pupils were more adept at using the technology effectively, where it was pleasing to note pupils' discussions and questions moving from the issues about 'how' to do things to those about 'why' (from the technical to the aesthetic).

It is important not to underestimate the learning curve that some of this technology requires. Without exception, the software used in this project was of a professional standard and not designed specifically for educational use. At certain points the project leaders had to act as mediators through which pupils accessed and utilised various functions of the software. But on numerous occasions we found pupils experimenting and 'fiddling' with other 'unlearned' features of the software. This 'accidental' approach to learning with technologies is important and should be facilitated as a necessary sense of play and exploration. A highly rigorous and structured scheme of work in a particular piece of software may well be appropriate in some situations. But given the time constraints within the context of this project (and that within which many teachers find themselves working), one has to ask what the best approach might be to enable pupils to use a piece of software for a creative end. A brief introduction and then timely support, example materials and demonstrations within a wide-ranging and open-ended creative task were, I believe, successful pedagogical strategies in this project.

I had another idea with 'golden eye' (a normal eye) and 'green eye' (the same eye but in green). We faded this and spun it around. The only way I knew how was because Phil<sup>1</sup> gave us examples and I took a lot of it in. That was the most effective way of learning in my opinion. (Emily, Year 9, in interview)

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<sup>1</sup> Phil (not his real name) was the filmmaker who worked on the *Reflecting Others* project. He was employed by Aldeburgh Productions and led a series of lessons with Year 9 pupils and also worked with the young offenders.

### 3c.3.2.2. Project Processes and Products

There were interesting differences in terms of the motivational outcome of the *Dunwich Revisited* and *Reflecting Others* projects. The performance-based outcome of the *Dunwich Revisited* project was incredibly motivational for pupils. The chance to perform in a professional concert hall at a beautiful setting such as Snape Maltings made a lasting impression on the pupils involved for many months afterwards. This, linked with the strong sense of ownership that they felt relating to the composition of the piece, ensured that the product of the project was a key facilitator in the composition and rehearsal process. There was a definite and desirable outcome for the pupils that strongly motivated their efforts throughout the final weeks of the project.

The final product of the *Reflecting Others* project was a music and video installation. It was housed in a room off the main foyer at the Snape Maltings throughout the summer, on show to all the audiences at the Snape Proms and Aldeburgh Festival. This seemed like a wonderful opportunity to display the pupils' and young offenders' work and would be, I thought, a highly motivational factor in the project work. A photographic record of this installation, together with the final soundtrack produced by the pupils, can be found under the *Reflecting Others* section of the accompanying CD.

But this proved more problematic for the pupils. Many of them had little concept as to what an installation was and, despite our best efforts to explain the important differences between an installation 'event' and a live performance, they were still unsure about its function and purpose until the finished installation visited the school later during the following term. Despite what I perceived to be a major gap in their understanding (but one that I worked hard to try and fill), pupils were given the opportunity to explore potential designs for the installation and came up with some very interesting ideas. Some of these were incorporated within the final design, e.g. the inclusion of a series of mirrors to provide differing reflections of the projected video.

But in the final analysis, because of the lack of a coherent plan to inform and involve the pupils in the purpose and function of the installation, the single biggest influences on the design of the final installation were the composer-in-residence and the filmmaker. There were many technical discussions between these two artists, the education director at Aldeburgh Productions and, to a lesser extent, myself. Mike Challis, the composer-in-residence at the prison and my colleague at Debenham High School, was the major force in actually realising and overseeing the building of the installation.

Within the classroom, pupils worked throughout the project producing short audio and video compositions. Typically these compositions lasted between fifteen to sixty seconds. At the end of the classroom phase of the project these ideas were handed over to the two artists. The structuring of these ideas into a final 25-minute film was done by a small group of Year 10 pupils, Mike Challis and the filmmaker. This group worked very intensely over a period of three days to ensure that the final film was ready in time for the opening of the installation at Snape Maltings. I believe that a small number of pupils in Year 9 felt frustrated that they lost ownership of the material that they had produced at this final stage of the project.

Looking across the classes in Year 9 and 10, a larger group of pupils seemed to lack the same high level of motivation that had been exhibited in the *Dunwich Revisited* project. There is no doubt in my mind that the nature of the final installation product of the project and my inability to explain the purpose and function of this clearly was an influential factor in their views about the work. This is not to say that they did not engage enthusiastically with the processes of music and video composition. Many of them spent a lot of time working on their ideas outside of the formal curriculum time. But for me, there did not seem to be the ‘buzz’ of activity during the final stage of the project that there was surrounding the production of the *Dunwich Revisited*. In response to one of the evaluation questions asking what they would change if they had to do the project again, pupils made a range of comments that substantiate these observations:

Try to find a way to give us a chance to put their ideas forward and to develop them. More help and to be clearer on what will come of it at the end. I’m still not sure, so could you please explain what will happen at Snape Maltings again please. (Francesca, Year 9, in interview)

For us to actually produce something with all the material we had collected and had a choice in. To have a choice in how we do this and focus on this in particular. (Clare, Year 9, questionnaire response)

Further projects conducted by Mike Challis with young offenders and other schools throughout Suffolk have incorporated elements of live performance together with projected visual images. These have been highly successful events and have managed the difficult balance between final product and compositional process in a more sensitive way.

### *3c.3.2.3. Pupil Responses to Working with Sounds and Images*

All pupils were challenged by the results of their compositional labours. Pupils engaged well with the process of composition with computers but the very different sounds that they were working with did stretch their understandings of what they considered to be ‘musical’.

For example, as part of the project pupils listened to a piece of music called *Stone*. This piece, written by Mike Challis in 2000, features a poem interspersed by a range of computer generated sounds. These accompanying sounds are all drawn from the sound of the female voice reading the poem. This piece is included on the accompanying CD. On listening to this short piece, pupils were puzzled about the artistic intention and expression in the piece. They seemed unable to find a link between the words of the poem, the sounds and their own work within the project.

I think that you need to have something in a piece that tells you what the piece is about and then you understand it. But that [the title] tells you what the piece is about but it doesn’t seem to be related to the rest of the music and what the person was saying. (Rachel, Year 10, in group discussion)

Pupils faced a number of difficulties and problems working within the genre of electroacoustic music. They had to develop a ‘vocabulary’ of electroacoustic sounds and possibilities as well as consider the relationship of those sounds to an expressive purpose or function. The emphasis placed on the identification and selection of ‘good’ sounds and their subsequent arrangement

provided a simple route into this. It was pleasing to note a change in attitude in some pupils towards the idea of an all sounds have potential as music. One pupil, a competent country-style guitarist, expressed a commonly held view of many pupils at the end of the project:

I think that all sounds can be musical. It depends what you do with them. If you had someone walking, you could just have it as them walking or as a kind of background beat, for example. (Seth, Year 10)

Pupils were also challenged by the use of pre-recorded extracts of music included in the collection of material. Music forms an integral part in the life of many young people and, as part of the documenting of their lives, pupils valued the inclusion of a representative sample of their music. Strong beats and rhythms dominate much of this music. When working to produce their own music based on these samples, pupils often seemed attracted and drawn to this strong rhythmic framework. Without this, pupils expressed a clear sense of disappointment and anticlimax in relation to the music's directionality. Hence one pupil's comment in response to Challis' *Stone*:

There was a bit in it like a shuffled beat or something. And it built up and then faded away and it was kind of like you expected a beat to come in there or something. I thought it was disappointing really. It's what we expect really. Because you expect something like a beat to happen and when it doesn't you think "Oh". I think that we are conditioned in a way through our listening? We expect certain things to happen? And if it doesn't we feel that it's not very good and then get dissatisfied. (Paul, Year 10, in group discussion)

This observation captured precisely the problem that this pupil recognised and all pupils had to face. Composition within an electroacoustic genre challenged their assumptions and expectation about musical progress and development. It may be, as Weber implied earlier, that 'the musical ear of other peoples has probably been even more sensitively developed than our own, certainly not less so' (Weber 1930, p.14). In this instance, the ears of electroacoustic composers are attuned towards a wide range of potential sounds and their inherent aural possibilities. Some of these possibilities are common to pupils' wider musical experience. But some, like the sophisticated handling of rhythm and tempo in *Stone*, caused problems for pupils' listening and appreciation.

I was happy to promote the challenging nature of this genre throughout the project. Despite not using the term 'electroacoustic music' with the pupils, they did realise that what they were creating in the *Reflecting Others* project was something significantly different from their normal experience of music (both within and outside the immediate school context). This Year 10 girl illustrates her definition of creativity in respect to the artistic boundaries that she felt she was pushing throughout the project:

It's kind of creative, because it's not what you expect to hear. Being creative is being able to do things differently from others. You can push the boundaries a little bit. (Claire, Year 10)

Like McGinley, I believe that there is a need for greater electroacoustic composition work within the formal music curriculum:

There is a great need for more soundscape-orientated activity and awareness within the music education sector. ... Using computer and recording technology we are able, not just to listen and appraise the sounds around us, but to sculpt with this sonic material. (McGinley 2001, p.72)

As music educators we are constantly searching for new ways to motivate and inspire our pupils. In the United Kingdom, soundscape and acoustic ecology approaches to composition have been under-researched and utilised by classroom practitioners. This project attempted to show that such a creative approach to curriculum planning gives pupils the opportunity to reflect sonically on physical places, their own and others environments in powerful and authentic ways. The innovative uses of technologies in the classroom gives all students a voice for these expressions, regardless of 'traditional' musical ability or skill. This project represented an attempt to implement technological and pedagogical strategies that enabled "our young people not only to have the opportunity to become soundscape researchers, but [also] soundscape designers" (McGinley 2001, p.73). Acoustic ecological approaches within classroom composition bridge the gap between the demands of the formal curriculum and the personal values and experiences that pupils bring with them to the classroom. At the heart of the *Reflecting Others* project was a group of pupils' reflecting on their own and others' lives through digital media, a reflection that produced a range of inspired and creative responses.

#### *3c.3.2.4. Ranges of Expression and Reforming Preconceptions*

The material collected by the young offenders fascinated pupils. This was evidenced by their rapt attention to the filmmaker's presentation of the video material (without sound) in the first lesson after Christmas. Pupils were very keen to ask questions about the daily routine in the life of a young offender, the offences that they had committed (which they were not allowed to know about) and more general questions about the judicial system. The Year 10 group were equally interested in the sonic material. What I considered insignificant things, like the variety of young offenders' accents, were often picked out by pupils as being of significant interest. The material content of some of the words and phrases used by the prisoners were commented on. Undoubtedly, some of these were there for shock effect. To counterbalance this, pupils received the recording of a prisoner reading, with obvious difficulty, a poem that he had written with quiet and sombre appreciation.

The young offenders viewed the pupils as 'little rich kids'. They found their accents interesting too, commenting on how plumb they sounded in comparison to theirs. The Carlford Unit where the young offenders lived is entirely male and there is no association with female prisoners. There could have been problems with female images within the male environment of the prison and there were several comments made. The words and thoughts that the prisoners heard in the audio samples tempered these initial reactions. These audio samples turned the raw images into characters of pupils as real individuals. As the work continued the project team noticed a positive change in some of the prisoners reactions to these visual materials. However, at no point during the project were pupils and young offenders able to meet, talk or contact one another. Names of prisoners and pupils were removed from any sonic material and computer file names.

One initially surprising thing was the similarity of responses between the two groups in certain areas. Examples of sonic and visual themes explored by both groups included:

1. Sports hall games, including basketball, badminton and squash;
2. Sounds of the cafeteria or lunch hall;
3. Weight and fitness rooms;
4. Recorded CD extracts of popular dance music.

On consideration this doesn't seem so strange. The two groups of project participants are similar ages, have ranges of common interests and a natural curiosity for the images of the other sex. But there were stark differences in the environment. The young offenders inhabit an internal space, with hardly any view of the outside world; the pupils were able to collect a much broader range of environmental material.

Part of the project work included a range of creative writing tasks designed, through a series of questionnaires, to get pupils to think about themselves, their likes and dislikes, hopes and dreams. Some of the creative writing done by pupils in the school was very off the wall. Adolescent boys, whether in prison or in school, seem to have a range of weird, sometimes violent, ideas that could be seen to be inappropriate. Examples of some of this written work are included in Appendix Q.

### *3c.3.2.5. Issues of Quality and Assessment*

Interestingly, pupils had very clear views about the value of working at composition in this way. In discussion they were quick to draw comparisons between what might be called this 'technology-driven' approach to composition and more traditional approaches. Consider this exchange from a Year 10 lesson.

- Paul** I think that a lot of people think that making music in this way is just a doss. When people think that you have to play an instrument instead of doing this. I know that my Dad thinks that my DJ-ing is not a skill, it's just someone going down to play football or something. But its not, I mean I was trying to teach Clare the other day and it took her forever. I think it's like this in a way. It's not that easy, you've got to spend a fair while getting use to what you're doing.
- James** It's too easy. It's not creative enough. You can put any sound you want into a piece pretty much instantly and you don't have to think about.
- Matthew** Yeah, but it's quite hard to get a good quality piece.
- Me** What's the difference between a low quality piece of computer music and a high quality piece of computer music?
- James** Anything made on a computer is low quality.
- Paul** I don't think so.
- Claire** It doesn't show much talent though if you're using a computer to do it. If you're playing it yourself...
- Paul** Are you saying that Fat Boy Slim is talentless?
- James** No, he's pretty amazing.
- Paul** What he does is no difference to Radiohead or Coldplay.
- James** It's completely different.
- Paul** He's just putting music together. It's just his way of doing it. It's just like learning to play the guitar or the drums.
- Rachel** No it takes a lot longer though – to learn to play the piano for example.

- Me            There seems to be an argument here about how long it would take to learn a traditional instrument rather than the things we have been doing on the computer. Is that what some people are thinking?
- Kim            You haven't got to be talented though.
- Me            What does that mean?
- Kim            You don't know the high skills of being a musician or learning notes.
- Rachel        Yeah, talented means you've had to practice hard to get it into your head.
- Paul           I agree with them that some of the music made on computers is really rubbish, but some of it is really good. I think it is unfair to say that people who make music on computers are talentless.
- James        They have got lots of creativity and they are very talented.
- Me            What do think it means to be creative? What does creativity mean?
- Rachel        To do something different.
- Matthew      Doing things that are unusual.
- Rachel        Outstanding – better than all the rest.

In what was a rather sweeping exchange of views, these pupils identified a range of issues that are at the heart of how to assess and judge the quality of the work resulting from using ICT in the classroom. Some viewed the use of these technologies as a way of speeding up the process of making, but recognised that this does not equate to a 'better quality' end product. They suggested that in some ways the speedier process led to a lack of thinking about the artistic consequences of a decision.

James clearly feels that the considerable technical skills that he has obtained through the project do not equate equally with those instrumental skills he has practised and worked on over the previous years. For him, at least, it is just 'too easy'.

Paul, an experienced DJ, feels in a very acute way the associated prejudice of this view. He expresses this through his recounting of a conversation with his father about his DJ-ing skills. However, it is only when people try these things out for themselves, as another pupil had done recently, that they realise the skills and expertise involved.

Towards the end of the discussion 'creativity' and 'talent' become two important features when composing with or without computers. For Rachel and Kim talent is associated with instrumental skill or ability and of practice (of 'getting it into your head'); creativity, for them and Matthew, is being and doing 'different', being unusual or outstanding ('better than all the rest'). These are themes that I will return to below.

### 3c.3.2.6. *Impact of Personal Voices*

As a teacher researcher I often asked myself the following question in my journal:

How truthful am I in calling our project *Reflecting Others*? Are we really encouraging pupils and young offenders to give considered reflection to the 'other' within their composition work? Or are they doing technological things just for the sake of technological things?

Artistic decisions were being made throughout the project, but were they being made with the right motives and considerations? Does this matter? With the tremendous power that these

technologies give, there is an obvious danger of just drifting into arbitrary aesthetic judgements. As I have discussed above, issues relating to assessment and evaluation of work come into play here as I try to decipher and reward pupils' genuine artistic decision-making. But alongside these careful considerations one should not rule out the importance of 'artistic accidents'. By this I mean the ways in which pupils explored these new technologies occasionally resulted in sounds or images that were created by a chance process, by the 'careless' click of the mouse or by their use of part of the software that had not been introduced and which they did not fully understand. Often these so-called 'accidents' resulted in really interesting work that the pupils liked. This was particularly noticeable when pupils used the transparency, filter and transition effects within Adobe Premiere, and the Effects Palette within Metasynt.

Laying aside these considerations for a moment, it was pleasing to note in discussion with pupils that they often felt a real affinity to the young offenders through the material that they had collected. The following comment was fairly typical:

I like it when they talked about the prison. That person described the place but it looked completely different. The 'Prisoner on the Moon' poem helped us to know what they feel like inside. (Year 10 girl, in interview)

Despite not being allowed any personal contact with the young offenders in any way, pupils still thought deeply about the life of a young offender:

By the looks of things it looks worse that I thought 'cos I expected they would be able to go outside and do more normal activities like we do. But they're trapped in there never seeing proper sunlight, trapped between walls, bars, gates and doors, trapped in Hollesley Bay for so many years and never going outside. They're looking at the same things day in, day out for years. I think this is wrong. And one boy's poem about the prison backed this up. No crime deserves to do this to a child. (Boy, Y9, questionnaire response)

Comments like this impressed on me the value of choosing an appropriate starting point for a creative project. In providing a vehicle for pupils to challenge social agendas, for example, one is enabling them to grasp a key ingredient of artistic expression – personal communication. So often musical composition within the classroom context is divorced from pupils' life experiences as teenagers and the real value that music plays for them in expressing their identities, sense of community and environment. But authentic artistic expression is inextricably tied to life itself:

The more we talk with children and teachers the more music becomes entangled in lives and the more its significance fades in the light of experience. The closer we look at music events in schools the more we see that music is the pretext – life is the text. (Kushner 1999, p.216)

As one of the project leaders, I was only too aware of the pressures that I faced in fulfilling the demands of a National Curriculum. But these comments show that pupils value a chance to use a variety of artistic expressions as a way of commenting and reflecting on their lives and others. These important elements of artistic practice need not be stifled by the dictates of the curriculum documentation. A creative, collaborative and cross-curricula approach to a scheme of work was the key to pupils' heightened artistic response.

So what does the future hold for this kind of compositional approach? Kushner warns of the dangers of placing new wine in old wineskins. New ways of composing demand new ways of researching and reflecting on experience. If music is a vehicle for the expression of humanity, then “the more we see that music is the pretext – life is the text’ (Kushner 1999, p.216).

In other words, there is a need to redefine models of classroom composition for the 21st century and transform them within the digital age. And, most importantly, to build models of classroom composition work that engage our pupils in a more meaningful way with life itself.

### 3c.4. Summary

I am reminded that the transition from acoustic instruments to digital ones, *mutatis mutandis*, has not included a corresponding transition from acoustic to digital music. What has necessarily been a search for a new instrument should now mandate a search for a new music *endemic* to its nature. That is: *computer* music. (Gaburo 1985, p.43; [emphasis in the original])

Gaburo overstates his case. This typically modernist argument divides musical styles into types, separating them from previous or contemporaneous forms in a claim for uniqueness or originality. However, when considering the use of ICT in music education one all too often finds a situation too similar to that outlined above. For some there is a reluctance to move beyond the familiar world of acoustic instruments and their accumulated sensibilities to a digital age. For others, there is an embracing of the new but in an approach that reinforces and perpetuates past ways of teaching and learning. And all of us, at various times (and perhaps rightly so), find ourselves moving between these categories.

*Reflecting Others* was an attempt to adopt a curriculum endemic to the nature of digital technologies. But even a project with such an explicit focus as this, as Paul Théberge points out, inevitably falls within a broader continuum of musical expression. For all of us, teachers and pupils, approach new technologies with ‘at least some of our own “accumulated sensibilities” with regards to music making’ (Théberge 1997, p.159). This is a key point in considering some of the problems encountered within the project. Many of the core beliefs that pupils and teachers hold relating to what constitutes musical activity are challenged by the use of new technologies. Or to put it another way, the use of ICT begins a process of redefining and transforming what counts as music in a way that some have found difficult to embrace. Indeed for some pupils, particularly those with a greater amount of ‘accumulated sensibility’, the practical and philosophical gap was just too far to jump during the course of this project. For many pupils and teachers, musical activities can be so strongly defined or influenced by instrumental ability that it is extraordinarily difficult to convince them that what they are doing with a computer is valuable, worthwhile and counts as music.

But despite these difficulties, I believe that this project has shown that new technologies can be used effectively and creatively within the music classroom environment. It has been amazing to see how easily pupils have learnt the skills needed to use these technologies effectively and how they have applied their knowledge in pursuit of a creative purpose. This third case study has demonstrated a number of key points.

#### 3c.4.1. New Technologies Can Lead to New Models of Music Making

Rather than use the technologies to reinforce existing models of performance and composition, this project demonstrates that the majority of pupils have valued the opportunity and challenge to express their ideas in new ways and through new media. Despite the problems discussed above relating to the lack of a motivational dimension to the project's final outcome, when the final installation did visit the school it caused immense interest and excitement. Many pupils and staff came to visit it during the lunchtime opening sessions. They responded to it in a variety of ways, most considering it an effective portrayal of the lives of young teenagers in contrasting environments (although for many, including the majority of the staff, it still remained a bit of a mystery).

#### 3c.4.2. Creative Tasks Can Give a Clear Focus for Using New Technologies

In developing coherent links between the creative tasks and the particular pieces of technology, one can ensure that pupils understand what they are to achieve by using that piece of technology. Appropriate use of different technologies can empower pupils with the skills needed to fulfil the tasks.

#### 3c.4.3. The Democratisation of Performance and Composition

In this case study, all pupils, regardless of instrumental skill or traditional 'musical' ability, were involved in the music-making process. But new technologies should not be seen as a universal panacea; with them come a range of new skills and abilities that pupils need to learn and to develop. Some pupils with advanced instrumental skills found it difficult to engage in these new processes of performance and composition. A number of these pupils expressed a frustration with their work principally because they felt disempowered and stripped of the tools by which they had previously obtained success in music education. Obviously this was not an aim of the project. But it was interesting to note that inclusive models of instrumental and technological classroom composition work engaged and motivated the majority of pupils effectively.

#### 3c.4.4. Digital Arts as a Key to Promoting Creativity

Finally, the *Reflecting Others* case study demonstrated that a digital arts curriculum can promote and develop pupils' creativity. Research conducted at the time of the *Reflecting Others* project suggested that 'enjoyment, relevance, skill development, creativity and expressive dimensions' are often absent from pupils' experiences in music lessons (National Foundation for Educational Research 2000, p.568). In light of comments like this it was encouraging to note positive pupil reactions to their work, particularly their comments relating to the creative process and originality if not the ownership of the end product.

The National Advisory Committee on Creative and Cultural Education report defines creativity as 'imaginative activity fashioned so as to produce outcomes that are both original and of value' (NACCCE 1998, p.30). It outlines a four-fold model of creativity, the four stages being:

First, they always involve thinking or behaving imaginatively. Second, overall this imaginative activity is purposeful: that is, it is directed to achieving an objective. Third,

these processes must generate something original. Fourth, the outcome must be of value in relation to the objective.

Dust's excellent review of the literature on creativity for the National Endowment for Science, Technology and the Arts presents a number of other definitions of, and processes for, creativity. These are summarised under a general definition of creativity being 'a creative product produced by a creative person as a result of a creative purpose' (Dust 1999, p.2). Quoting Gardner she discusses the idea of a 'crystallising experience' in the development of talent and ability. These experiences link people with the materials of a field in such a way that strengthens interest and increases understanding. Crystallising experiences can only occur, she suggests, if the right opportunities are presented (Dust 1999, p.16).

The Reflecting Others project placed the creative ideas and experiences of young people at the heart of a creative process. The final product of the project, the installation, was not just a reflection of their views of others, but also a reflection on themselves. Technologies were only tools or vehicles for their imagination. As they employed them in various creative tasks, imaginations and experiences have been stretched and challenged. Used in this way, they have empowered pupils with the skills needed to express and communicate feelings about themselves and others. As Kim, a Year 9 girl, put it, "There are many more ways of expressing yourself rather than just talking". For some pupils this has led to a redefining of their own views about other people, both within and outside their normal range of experience. As their teacher, I hope that for some young people this project was a crystallising experience, one that they will not forget and which might lead them to continue working within these fields in the future.

Burnard (Burnard 2000) suggests that a pupil's willingness to compose is facilitated by creating an environment within which they can express their creativity. The closer these activities are to pupils' immediate experiences the greater the potential for creative responses and processes to occur. In this study, carefully chosen starting points that drew on pupils' own identities, communities and environment enabled them to reflect individually and collaboratively through the use of digital technologies.

For learning should be perceived as meanings negotiated amongst learners as well as between learners and their teachers. Teachers should, therefore, try not to impose their values but rather encourage the children to discuss and develop their own. Our aim should be to facilitate a form of music education that focuses on genuine experiences of children *being* improvisers and composers rather than acting out a pre-defined model. Subsequently, we must encourage and assist the children to think critically and creatively. (Burnard 2000, p.21)

Ultimately, within this case study I placed tremendous value on representing pupils' creative work in an authentic way, with minimal interference or adaptation by anyone. In Burnard's words, this project represented a 'genuine experience of children *being* composers'.