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Elizabeth Doyle

Dissertation submitted in part fulfilment of the
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Abstract

Digital video is a recent phenomenon in state schools in the United Kingdom. There has been an increasing move towards its use in education, mainly fuelled by the interest of a number of influential bodies and made possible partly by advances in technology and its subsequent affordability and partly by the heavy investment made in ICT in education in the last decade.

This dissertation looks at the literature surrounding digital video editing in education, where it exists, bearing in mind that the field currently remains relatively modest and is influenced primarily by the work of a small body of forward-thinking practitioners. The key themes of hardware and software, teaching and learning creativity, quality, affordances, moving image literacy and multimodality are examined in order to set the scope of the debate about the value of digital video work in schools.

A one-off extra-curricular digital video project undertaken by a group of six Year 8 pupils in an inner-London girls' school in early 2004 is described. One of the films created affords a significant amount of qualitative evidence, which along with interview data, is analysed with reference to the literature, in order to illustrate the application of the key themes in the pupils' work. The positive findings of this project are suggestive of relevance to a larger population, as reference to other, similar projects will demonstrate. Digital video, therefore, is confirmed as a valuable new tool for education.

In conclusion, the place of digital video editing in the ICT national curriculum is considered, and recommendations are made for the inclusion of digital video in the ICT field, both as a new aspect of ICT capability and as a possible catalyst for a change in the wider curriculum.

Chapter 1: Introduction

Moving image production is hands-on, multimodal, collective and gives immediate feedback.

(Harvey *et al* 2002: 94)

Digital video work in the UK curriculum first came to popular attention amongst teachers on 8th February 2002, with the TES¹ Online supplement. Amongst the offerings from the TES that week was a copy of the "Picturing Literacy" CD-ROM². Produced in conjunction with Film Education and Apple, and subtitled 'Digital Resources for ages 8-14', the CD contained editable clips from well known films such as Monsters Inc., ET and Ice Age. Along with the resources and a range of ideas for working with digital video in the classroom, a free QuickTime software key was on offer. Ostensibly aimed at primary literacy and secondary English teachers as a means of developing creative work with Information and Communications Technology (ICT) and literacy, it also aroused the interest of ICT teachers because of the potential of the technology for work in the ICT curriculum. However, at this stage, no immediate mechanisms for easy integration into the ICT curriculum were offered, and anecdotal evidence suggests that a 'Catch-22' situation ensued³. English and literacy teachers, often lacking the confidence to independently establish new practices with ICT, could not rely on pupils having learnt the necessary ICT skills in their discrete ICT lessons, while ICT teachers were slow to embrace digital video because of the lack of established links with the ICT National Curriculum.

Prior to this, from 2001-2002, Becta, the British Educational Communications and Technology Agency, ran its digital video pilot project, putting digital video hardware and software into fifty schools across the UK in order to gather

¹ Times Educational Supplement

²http://www.tes.co.uk/search/search_display.asp?section=Archiveandsub_section=Online+Educationandid=359295andType=0

³ at least in a number of schools known to the author

evidence on the impact of the use of digital video technology on pupils' engagement and behaviours. It also aimed to identify models of effective practice in inspiring and developing pupils' work with digital video. Around the same time, City Learning Centres were being established with Education Action Zone funding, and digital video equipment formed part of the offering of services to schools. An often-asked question at the time was, now that this technology is available, what should be done with it? A second question was often how such work should be judged, in order to justify its place in the curriculum. Without curricular legitimacy, digital video work could only find a place in extra-curricular clubs and projects.

It has been suggested that educational policy and practice has been hampered by the superficial preoccupation with technology for its own sake and that schools and teachers have a significant role to play in realising its full educational and creative potential (Buckingham 1999: 3). It is this exhortation that sets the research question for this paper: to determine whether digital video is a valuable learning technology or just a technology for its own sake. The aims of this paper are twofold. Firstly, to carry out a thorough literature review in order to identify the key themes associated with digital video work. Secondly, to carry out a small-scale research project to establish what it is possible for pupils to achieve when given the approximate equivalent of a half term curriculum block to plan, film and edit a short film.

The next chapter seeks to analyse the literature in this field, the nature of which is a matter of some interpretation. Crystallizing from the wider theoretical field, the problematic is the key region within which a work operates (Brown and Dowling 1998: 21). According to Brown and Dowling, the decisions made about the nature and specialization of the theoretical field 'are being made from the very start of the research and begin to place a bias on the data long before you

reach the stage of formal data analysis' (Brown and Dowling 1998: 92). The place of educational work with the moving image has traditionally been within media studies, itself arguably a subset of English (Bazalgette 2000b; Burn 2000). Following the advent of digital video and the possibilities offered by the new technology, it has been suggested that 'Information and Communications Technology increasingly involves accessing and manipulating moving images' (FEWG 1999: 36). This project, informed by the literature review, is situated in the region that is produced by the meeting of ICT with media studies. The quote at the start of this chapter is from 'Being Seen, Being Heard', a report which looks at young people and moving image production. The authors have encapsulated the nature of the field in this one sentence: the dynamic features of digital video work and some of the key areas for investigation: multimodality, pedagogy and the affordances of the processes involved.

Chapter three looks closely at an even more narrowly defined area: that of multimodality (Kress and Van Leeuwen 2001) and the way in which it has been harnessed into a new model for media text analysis by Burn and Parker (Burn and Parker 2001; 2003). Chapters two and three define the key areas of interest for this paper: hardware and software, teaching and learning, creativity, quality, affordances, moving image literacy, and multimodality.

Chapter four examines a project, undertaken by six students working with the author. The methodology involved in the planning and execution of the project is examined in order to allow for comparison with other studies and possible extrapolation to a wider sample. The purpose of the project was threefold: to introduce pupils to work with the moving image in a relatively structured manner, albeit outside the mainstream curriculum, with a view to adapting the project for use within the formal ICT curriculum; to offer pupils the opportunity to become producers rather than consumers of media and to examine the work

produced in order to determine how far it reflected issues from the key themes highlighted in the literature review i.e. whether work with the moving image belongs within the curriculum.

One of the films resulting from the project stands out for particular scrutiny, and forms the basis for chapter five. Techniques from the kineikonic model of analysis are applied in order to examine the film, and themes from the literature are highlighted in the pupils' work with the moving image in order to consider how the affordances of the digital video editing process are transformative. Roughly translated, this question reads to the layperson as: if you have x number of transitions, effects, tools and techniques, how does the combination result in something more than the sum of the parts?

Chapter six looks at the place of this kind of work with the moving image and considers where and how moving image work should be located within the curriculum. Issues of quality and assessment come to the forefront here, as such work merits little in the way of formal recognition in the ICT National Curriculum or level descriptors.

Items of interest which have been referred to in the text of the paper are included in full in the appendices at the end.

Chapter 2: Literature Review

According to Brown and Dowling, the theoretical field is the 'broad area of academic and/or professional knowledge, research and debates which contains your general area of interest' (Brown and Dowling 1998: 18). Reviewing the literature in this field poses a challenge, as the theorists and practitioners who write about digital video come from a range of areas of expertise. On the one hand, there are writers about ICT in education, such as Avril Loveless, who write from an ICT perspective. Then there are the quasi-formal bodies, such as Becta, Media Education Wales, the British Film Institute and Film Education, all of whom have differing, but related agendas. There are a number of practitioner-theorists, who write from a position of experience and are able to translate that experience into research, the results of which illuminate the field for those who follow. The difficulty is that the field is relatively small and dominated by a few major figures, who variously work with each other and with a number of the bodies mentioned. There are no polar opposites in this field, but rather, positions around a central sphere, with writers privileging different aspects of work with digital video in education.

This review focuses on teasing out the media and literacy angles in order to privilege ICT and the digital technology aspects of the field; however, if the review is to be free from the taint of 'superficial preoccupation with technology for its own sake' (Buckingham 1999: 3), then these aspects cannot be discounted, but rather built upon and used in an effort to exemplify the essential aspects of digital video. The key themes of hardware and software, teaching and learning, creativity, quality, affordances, moving image literacy and multimodality are therefore examined in order to set the scope of the debate about the value of digital video work. As a conceptual aid, a mind-map was

developed over the course of the literature search and may be examined to ascertain the author's links between the key themes (see appendix 1).

Digital video hardware and software

This section is not intended as a one-stop shop for advice about the use of specific hardware and software for digital video editing projects in schools. Rather, this section is intended to reflect the more general classroom management advice that is available about the use of hardware and software for digital video work. Leaving technical and financial considerations aside, any mini-DV⁴ camera for use with a Firewire (or IEEE-1394⁵) card and cable connected to a reasonably high specification computer should be sufficient for general use.

In the recent evaluation of their digital video pilot project Becta recommended that the ratio of digital video workstations to pupils should be 1:4, with four being the maximum group size for an editing task. Becta is also very firm about the value of having proper digital video peripherals, such as tripods, microphones and lights (Reid *et al* 2002). However, drawing a clear distinction between the two phases of digital video work is important – pupils can still benefit from editing tasks, without having undertaken any actual filming. It is this type of activity that was envisaged by the Picturing Literacy resources: the reworking of the available footage for the purposes of creating a new reading of the text. Pupils could just as easily work with footage they have been given by the teacher. In fact, many instances of good practice with digital video illustrate this model (Burn and Durran 1998; Burn and Reed 1999; Burn 2000).

The nature of digital video editing software is important to the success of the editing process. Digital video editing software must be easy to use (Buckingham

⁴ One of the most popular digital video industry standard formats for digital camcorders

⁵ The physical connection from the camcorder to the computer

1999; Sweetlove 2002; Potter 2004), and consideration must be given to the acquisition of the relevant technical skills (Sefton-Green 1999; Burn *et al* 2001; Sweetlove 2002). Sefton-Green and Parker highlight a key problem, integral to this area, by asking whether we should see 'editing in classrooms as a technological skills-based operation or an intellectual, cognitive-based application, or both?' (Sefton-Green and Parker 2000). Both, is probably the best response, with the proviso that the ICT skills are harnessed in the service of overarching, meaningful learning objectives.

Questions have been posed about the type of software that should be used, which range from criticism of the 'edutainment', age-specific type of software which was available a few years ago (Sefton-Green and Parker 2000) to practical work with iMovie in order to investigate the best ways to teach the software to young learners (Sweetlove 2002). It has been suggested that basic, non-linear, timeline-based software packages, such as Apple's iMovie or Microsoft's Movie Maker 2, are suitable for use with pupils at least up to the end of Key Stage 3 and that a step up from iMovie may be necessary for pupils at Key Stage 4 and beyond (Sweetlove 2002).

The features of digital video editing software are similar, irrespective of the software package available. There is a vast range of features available for use, such as the ability to name, order, reorder, crop, speed up and slow down clips; titles, credits and built-in special effects on clips and transitions between clips; the ability to incorporate sound files, both from an existing library of files, external CDs and as voice-over sound effects and narration (Burn and Reed 1999; Bazalgette 2000a; Sefton-Green and Parker 2000; Burn *et al* 2001; Reid *et al* 2002; Sweetlove 2002; Burn and Parker 2003; Potter 2004). Some examples of typical software interfaces are show below:

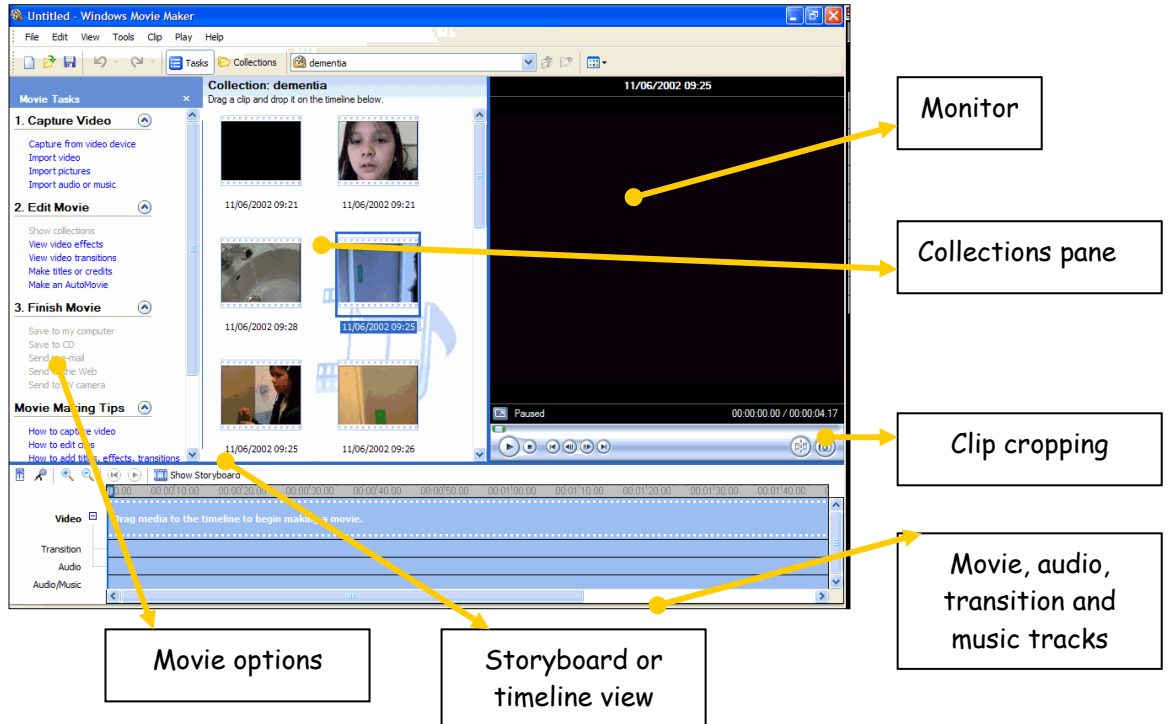


Figure 1: Microsoft Movie Maker 2

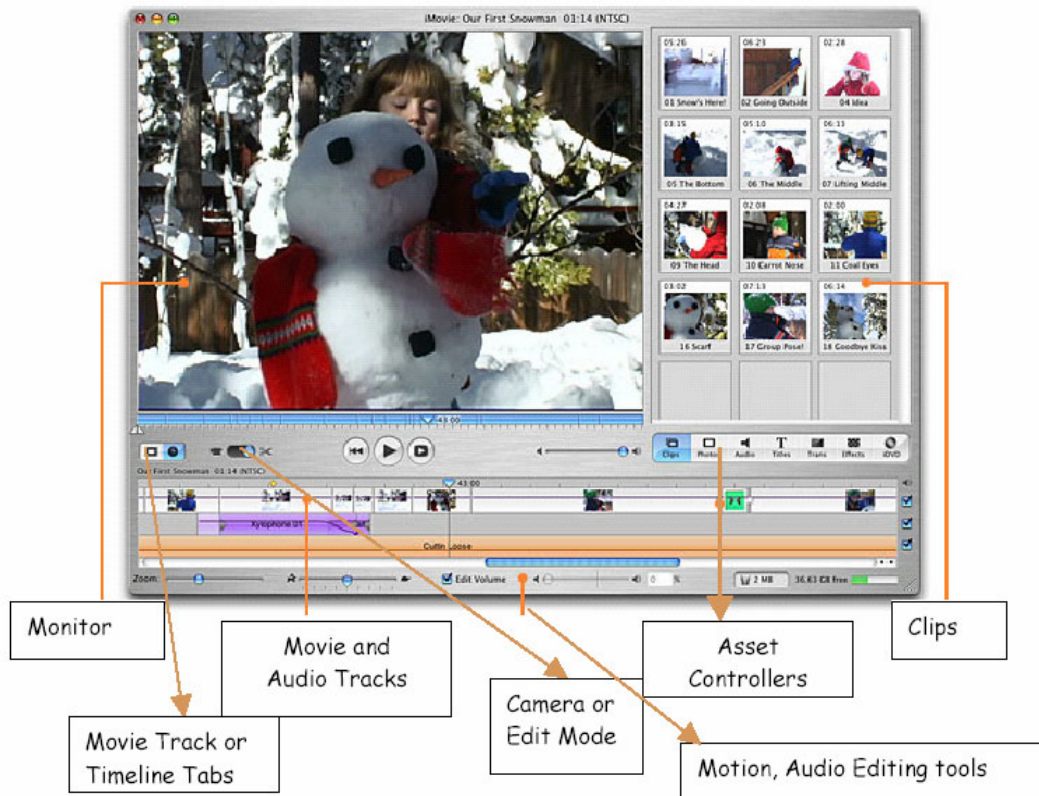


Figure 2: Apple iMovie 3

Teaching and learning with digital video

The vision that digital video theorists and practitioners share is one of transformational learning, where the technology is utilised not only to replicate traditional communicative skills, but to improve on them: to alter what is perceived as presentation, or communication, or literacy, as well as the location of those skills in a formal curriculum.

The ability to select, sequence, manipulate and re-form texts and to co-ordinate different layers of meaning will become increasingly important as the boundaries of existing media forms begin to blur and the sources of information and entertainment merge and multiply.

(Bazalgette 2000a: 49)

Whether the debate is localised in the ICT or media studies subject domains, the key imperative for work with digital video remains in the realm of what the pupils are doing with the technology. One of the tensions in the ICT curriculum has traditionally been the development of capability through an authentic context. Some schools have opted for the delivery of the requirements of ICT through a purely cross-curricular context; others have followed the pattern of discrete ICT lessons, especially since the launch of the Key Stage 3 ICT Strategy. Ideally, and increasingly, the focus has been on a mixture of the two, with National Curriculum requirements for ICT to be used in other subjects. Teaching and learning with ICT may well move beyond tightly packaged curricula and into a more meaningful amalgamation of subjects. The primary curriculum is one such example of subjects fusing, where a number of curricular requirements may be covered by using digital video in a significant way: citizenship, literacy, history and ICT.

Digital video is rarely seen, in educational terms, as a purely skills-based medium. Its value has been theorised and situated in the realms of accepted learning theories. Harvey, Skinner and Parker introduce the familiar concept of education as a social process (Harvey *et al* 2002: 94), where conceptual development occurs through social interaction. The Becta Evaluation Report of the Digital Video Pilot mentions the democratising facets of having an academy of editors, who can contribute feedback and ideas to the larger group, whilst working on individual projects (Reid *et al* 2002: 14). The social learning paradigm is echoed throughout the literature about digital video. Loveless focuses on collaboration and shared knowledge (Loveless 2002), in much the same way as Lachs uses the concept of collaborative learning in the wider multimedia arena although she also discusses constructivism in terms of constructivist psychologists arguing that people learn by making meaning, which is directly relevant to work with digital video, as well as arguing for a meaningful context for the authoring process in ICT work (Lachs 2000: 6). Cardus also prefaces his article on digital video in the classroom by mentioning that technology has developed to support collaborative learning and the development of the higher cognitive skills through watching, listening, thinking and dialogue (Cardus 2004: 21).

Cardus combines the twin ideas of constructionist creativity, with digital video as a tool which provides a canvas for pupils to tell a story (Cardus 2004: 21). In fact, Burn and Durran take the concept one step further to see the whole text as a social construction, rather than being owned by a single artist, in the manner of Eisenstein (Burn and Durran 1998: online). Shades of situated learning are apparent in areas of the literature, where learning with digital video is a function of the activity, context and culture in which it occurs, and the pupils quickly gain confidence and status through their active participation in the process (Sweetlove 2002; Potter 2004). This is particularly true of the literature from the

media studies point of view, where media production is more commonly theorised through notions of sociocultural life, as opposed to ICT, in the constructivist camp.

Models of progression and conceptual frameworks are a logical matter for consideration in such a practical area. Key to the theme of teaching and learning is the consideration of what should be taught, why and how, and where in the domain each set of skills lies. Much has been made of the recursive affordances of digital video (Burn and Reed 1999; Buckingham *et al* 2000; Burn *et al* 2001; Burn and Parker 2001; Harvey *et al* 2002; Burn and Parker 2003), highlighting the improvement in outcomes by having the opportunity to go back and re-edit footage. Indeed, if digital video were to secure a place in the ICT National Curriculum, it is this feature that would seem most familiar to pupils: the drafting and redrafting of work in order to present it in different forms and styles to make it suitable for its intended audience. As Harvey, Skinner and Parker are keen to point out; 'a one-off project is both a start and an end point and provides no sense of learning progression' (Harvey *et al* 2002: 91). The cyclical project structure in ICT (analysis, design, implementation, testing and evaluation) lends itself very well to work with digital video.

Planning is clearly important in work with digital video, although it would appear that there is generally a negative reaction to over-reliance on planning, with theorists focusing on the dynamic nature and spontaneity of digital video work and negating dependency on storyboarding as the ultimate method of planning (Burn and Reid 1999; Bazalgette 2000a; Harvey *et al* 2002; Sweetlove 2002; Potter 2004).

In 1999, the Film Education Working Group called for a model of moving image learning progression to underpin curricular planning, assessment, teacher

training, inspection and classroom resources (FEWG 1999). One of the most concerted efforts to provide a usable model of learning progression was presented by the BFI in partnership with Film Education and the English and Media Centre in 2000 (Bazalgette *et al* 2000). The publication, "Moving Images in the Classroom: A Secondary Teachers' Guide to Using Film and Television" focuses mostly on developing 'cineliteracy', or the ability to analyse moving images and to talk about how they work, drawing on a wide range of film and television viewing experience. It offers a sound starting point for teachers in the nine identified curriculum areas to begin using moving image resources in their lessons.

In a fascinatingly myopic way, the publication fails to include ICT as a discrete subject in the range of subject areas, choosing to take the approach that ICT is simply the technology that underpins practical work with the moving image (with the exception of Andrew Burn's section in Chapter 3 on creativity with moving images, where he argues that, keeping the creative possibilities in the frame, other arts' pedagogies need to be plundered to find suitable patterns for teaching and learning in the making of moving image texts). By doing so, it fails to consider how ICT as a subject, at least at Key Stage 3, could act as a vehicle for the advancement of moving image work in the curriculum. Curriculum tensions aside, this publication offers a five-stage model of learning progression for cineliteracy, which at every stage calls for pupils to actively engage in the digital video work, from basic sequencing at stage one to the creation of moving image texts for specific audiences and purposes in specific styles and genres at stage five.

Conceptually, another valuable contribution to the advancement of digital video work in the classroom can be found in the interim report on a Best Practice Research Scholarship action research project, where six teachers united to

evaluate a digital video conceptual framework they had developed. Transcending the curriculum debate, this framework attempts to ascertain the key aspects of digital video work and categorises the processes into *social roles and learning styles, creativity and literacies and communicative practices* (Burn *et al* 2001). Although it admits to gaps in two areas: the vagueness about editing being a literacy and how pleasure might be an integral part of cognitive activity, linked to the aesthetic effects the students are trying to create, this framework sets out a number of defining characteristics of work with digital video that support its inclusion in the curriculum.

Creativity in digital video

Creativity is one of the current buzz words in education, meriting its own section, denoted by an orange splat image on the National Curriculum in Action website⁶. The National Advisory Committee's 1999 report, 'All our futures: Creativity, culture and education' (DfEE 1999) led the government's drive to increase creative teaching to teach creativity. Their definition of creativity revolves around four key points: imagination, purpose, originality and value.

The nature of creativity also warrants a fair amount of discussion in the digital video domain. The Becta Evaluation Report of the Digital Video Pilot asserts that originality is a necessary but not sufficient precondition for creative work with digital video and offers the suggestion that clear constraints are likely to generate the best work from pupils (Reed *et al* 2002: 25). This echoes the position of Sefton-Green and Parker who maintained that the children involved in their project would have benefited from having more constraints set in their moving image work (Sefton-Green and Parker 2000: 59). Constraints in this sense are not a negative, limiting notion, but refer to practical boundary setting

⁶ <http://www.ncaction.org.uk/>

for the task at hand. Constraints involve setting the scope for a piece of digital video work so that pupils are clear about things like final film length and target audience. By working to a brief, pupils have much more freedom about approaching the task creatively and being able to demonstrate imagination and originality for a clearly defined purpose. As Burn maintains, 'something new needs competence in the conventions and techniques of that genre' (Burn 2003: 49). When a pupil is clear about what the accepted rules are, they can begin to use them for their own creative purposes. According to Hugh Morris:

Like music, writing, and two- and three-dimensional art, the best work comes from those who understand the conventions and language and know how and when to use, subvert or break them.

(Morris 2003: 53)

One of the features of the digital video literature as it relates to creativity is the apparent tension between theories of creativity. Moving away from the notion of divine inspiration, Sefton-Green summarises that 'the pedagogic perspective emphasises that creativity employs skills and that these have to be learnt' and harks back to the social nature of education (Sefton-Green 2000: 224). This theme is further elaborated by Burn, who maintains that creativity should be seen as a transparent process, which can be unpicked (Burn 2003: 44) and also that:

Creativity might be a loose label to cover the processes by which people represent and therefore transform aspects of their world and themselves through the representational resources the culture makes available to them.

(Burn *et al* 2001: 37)

Digital video, as a representational and therefore transformative technology, seems to offer tremendous potential for pupils' access to creative communicative practices. Editing as a creative process is a recurring motif in the literature around digital video. Various described as 'central to the creative process'

(Bazalgette 2000a: 45) the 'key creative act in the production of moving image texts' and 'at the heart of competence in any moving image language' (Sefton-Green and Parker 2000: 8).

In line with the DfES focus on creativity, then, and irrespective of where in the curriculum it would be located, work with digital video would seem to offer a tremendous amount of scope to support creativity in the curriculum. In her review of creativity with digital technologies, Loveless explores a range of examples of how digital technologies are being used creatively and summarises by stating that, although it is outside of the scope of her review, there are some useful indications of the potential of ICT in creativity and learning (Loveless 2002: 23). However, she also highlights a concern that is relevant to the next section of this review: the tension inherent in the assessment of creative activities.

Quality in digital video

The principle of value arising from the earlier definition of creativity begs the question of quality in digital video. Assessment is an integral part of education as we know it, forming the benchmark by which pupils, their parents, schools and ultimately, employers, measure relative achievements. Assessment is also a theme often discussed in relation to digital video (Sefton-Green and Sinker 2000; Burn 2000; Loveless 2002; Harvey *et al* 2002; Reid *et al* 2002).

Harvey, Skinner and Parker's publication, "Being Seen, Being Heard: Young People and Moving Image Production" devotes a chapter to just this topic, based on a round-table discussion. Starting with the queries 'can we expect a polished end-product?' and 'should we be thinking about 'standards' at all?' they offer a

very full and frank exploration of the problems inherent in assessing moving image work (Harvey *et al* 2002).

There is a range of possibilities as to what might be assessed, for example whether the work shows consideration of audience, which is a familiar theme from ICT, and the appropriateness of the media product relative to the audience or purpose for which it was created (Harvey *et al* 2002); whether the work showed a structured approach (Reid *et al* 2002) and whether it is culturally authentic (Potter 2004).

Clearly, as with other forms of ICT assessment, credit needs to be given for process as well as outcome, especially where work has been subject to redrafting and revision. Loveless questions how these processes and outcomes of work might be evaluated and points out that ICT capability assessment generally is also problematic (Loveless 2002: 5). The aforementioned social style of education throws up other problems: if group work and cognitive apprenticeship form part of the learning, then where does the credit for success go in the assessment process?

As well as the problems associated with what might be assessed, there is the issue of how it might be assessed, relating back to models of progression and the need to provide authentic learning within a set domain. Sinker quotes Buchanan (1994) in saying that 'teachers are rightly uncomfortable about assessing those aspects of children's' art which are concerned with meaning, values and attitudes' (Sefton-Green and Sinker 2000: 207).

There are very few vehicles for the accreditation of work with digital video in the current curricular climate. Burn points out that video work relating to poetry writing and performance is not eligible for submission for English and Media

Studies at GCSE, although it might be eligible for admission as coursework for Art and Design (Burn 2003: 50). Certainly there is very little scope for digital video work at Key Stage 4 in ICT either, with the main foci being on information systems for coursework and factual recall for formal examination. If digital video is to warrant a place in the provision for UK pupils, assessment will need to be built into a model of progression.

The affordances of digital video

A perceptive question at this point would centre on the affordances of digital video editing. Affordances are attributes which provide potential for action. It must be noted that 'constraints and affordances are complementary and equally necessary for activity to take place' (Kennewell 2001: 106), which further clarifies the previous section on constraints for creativity. Affordances can be theorised as abstract tools which allow the constraints of a situation to be surmounted. Beyond the highly motivational aspects of pupils becoming engaged with the 'assembly and trimming of shots, the construction of transitions, the articulation of soundtracks' (Burn and Parker 2003: 16), what is it about this technology that makes it important for education?

Writers are at great pains to extol the virtues of digital video, and it would seem that there are many. The drawbacks are mostly to do with problems of access, provision, extended as opposed to one-off projects and lack of curricular legitimacy.

The interactive nature of digital video is widely mentioned, as 'highly plastic, fluid and reversible' (Burn and Parker 2001: 177); in terms of selection and the provisionality of the editing process (Burn and Reid 1999); as flexible (Reid *et al*

2002; Sefton-Green and Parker 2000) and in terms of the immediate feedback which pupils experience (Reid *et al* 2002; Harvey *et al* 2002).

Being able to experiment with the technology, revise and rework material (Burn 2001; Sefton-Green and Sinker 2000) is broadly termed as 'recursive' and is widely accepted as one of the major affordances of digital video (Burn *et al* 2001; Reid *et al* 2002). The arguments are normally against the idea of this process being merely skills-based, pointing towards an overall swing away from assembly towards a vision of editing being a process of redesign, although work with the moving image has also been described as a new skill (Reid *et al* 2002).

Representation is also a major theme in the dialogue about affordances. The presentational aspects and possibilities have wide-reaching implications for pupils' expression and communication (Reid *et al* 2002: 17). The trend towards seeing digital video editing as a new literacy demands new languages for the future (Burn *et al* 2001: 36) because the affordances of digital technologies enable users to do things that could not be done as effectively, or at all, using other tools (Loveless 2002: 3). These affordances have implications which transcend the current situation of curricular segregation. It may well be time to re-imagine the curriculum in terms of the desired competencies that a graduate of the National Curriculum should possess.

Cineliteracy: moving image literacy

The origin of the term 'cineliteracy' has been accredited to the BFI by Parker (Parker 2002: 40). Moving on from the notion of print literacy, moving image literacy is cited as a language (Sefton-Green and Parker 2000: 8); the language of the medium (Reid *et al* 2002) and discussed variously in terms of literacy (Sefton-Green 1998; Reid *et al* 2002); visual literacy (Burn 2000: online) and

the visual sentence (Burn and Parker 2001: 161). The ability to 'read' the moving image 'text' forms the basis for the argument that work with the moving image is a form of literacy, hence Bazalgette's declaration that cineliteracy is as basic an entitlement as literacy (Bazalgette 2000b: 31).

It is apparent in the reports of various projects that pupils have demonstrated surprising reserves of knowledge about the moving image, even when they have had no explicit opportunities for analysis. It has been suggested that 'children learn to read the languages of the media through everyday consumption' (Sefton-Green and Parker 2000: 11) and that their previous viewing of television and film makes work with digital video empowering (Sweetlove 2002: 8). In other words, pupils' experience of popular culture gives them a head start on the path to becoming 'cineliterate'.

The Film Education Working Group has identified four competencies of cineliteracy: analytical competence; contextual knowledge; canonical knowledge and production competence (FEWG 1999: 31). Broadly summarised, these equate to being able to anatomise⁷ moving image texts in order to understand how they are constructed, how they fit into the broader social and historical context and being able to compare them to a range of appropriate films. Production competence refers to being able to go one step further and use the previous competencies to produce meaningful moving image productions. The idea of competencies is echoed in the BFI evaluation report of the Becta digital video pilot project, where it is maintained that cineliteracy is demonstrated through the similar themes of cultural competence, making meaning with moving image texts and also technical competencies (Reid *et al* 2002).

⁷ Term coined by Andrew Burn and James Durran at the Education Day keynote lecture, Digital Generations Conference, Institute of Education, 29 July 2004.

Digital video has so far been somewhat hijacked by media studies in that the focus has been on the literacy angle rather than the technology angle. This can be seen in the internal tension in media studies between theory and practice (Burn 2000). Moving away somewhat from the traditional English and media studies angles on literacy, the question about cineliteracy and its place within the production of moving image products arises: how cineliteracy translates into digital video work. Clearly, a formal process of teacher-led instruction is one obvious route, but, as Reid, Burn and Parker point out, it is good practice to use the software to introduce the language (Reid *et al* 2002). Sweetlove and Touhey provide an example of Year 8 pupils' use of metalanguage in a project, demonstrating their acquisition of the cineliteracy competencies outlined above:

After the group's brief introduction to the software they quickly began to use technical terms, such as *framing, timeline, transitions* (dissolves, fades, etc.) There were also references to camera movement: *close up, pan, high angle*. The group used terms to discuss their text and also made references to other films that used similar techniques and devices.

(Burn *et al* 2001: 42)

In this excerpt, pupils are benefiting from authentic learning, getting their hands on actual film clips and moulding them into new forms and styles, instantly putting theory into practice. The new 'creative options' (Loveless 2002: 6) provided by digital technologies are changing the face of what it is possible to achieve with pupils in a classroom setting.

The key themes outlined in this chapter have pulled together a range of concepts that revolve around the central idea of digital video in education. When considered in relation to digital video, it is interesting to question to where the field might logically progress. How do hardware and software, teaching and learning, creativity, quality, affordances and moving image literacy combine into

something useful for education? Sefton-Green presents a crucial clue when he points out that the language of evaluation is beyond linguistic, that it is concerned with the aural and visual too (Sefton-Green and Sinker 2000: 223). It must be remembered that the moving image is infinitely richer than any print literary which has gone before it and that new patterns of analysis are required in any consideration of work produced in the digital medium. Multimodality is greater than the sum of any of the parts mentioned so far. From multimodality springs the kineikonic model of analysis, both of which will be considered in the next chapter.

Chapter 3: Multimodality and the Kineikonic Model of Analysis

If digital video is to avoid being tagged as a novelty technology because of the ease and speed with which a piece of work that looks good can be produced, then a deeper understanding of moving image work requires that a complex cognitive toolkit be utilised. Multimodality offers one such starting point, and the kineikonic model of analysis builds on it to provide the relevance to digital video.

Multimodality is a recurring theme in more recent writing relating to work with the moving image (Sefton-Green and Sinker 2000; Loveless 2002; Harvey *et al* 2002; Burn 2003; Burn and Parker 2003; Buckingham 2003; Potter 2004). These authors all refer to Kress and Van Leeuwen as the primary authorities on multimodality. Kress and Van Leeuwen have developed a multimodal theory of communication, moving on from the historically preferred single mode of writing (monomodality) to include the range of other modes: image, sound, music etc. and focusing on 'the semiotic rather than the technical element' (Kress and Van Leeuwen 2001: 2).

As Burn and Parker point out, 'semiotics is based on the idea that similar understandings can be developed for systems of communication other than language' (Burn and Parker 2003: 1), so it makes sense that in a paper where the aim is to consider whether digital video work has a value in the curriculum, rather than being a technology for its own sake, that we make use of cognitive frameworks which look deeper than the polished end product. As Buckingham asserts: 'good effects' can mask a lack of content – and even of *thought* about what the product is intending to communicate' (Buckingham 2003: 186).

Kress and Van Leeuwen describe four domains of practice (*strata*) in which meanings are dominantly made: discourse (socially constructed communicative codes), design (the choice of mode(s) to be used to realise discourses), production (the material medium used to realise the design) and distribution (the method of delivery; re-production) (Kress and Van Leeuwen 2001: 4). Discourse and design are primarily content strata relating to mode, with production and distribution being expression strata relating to medium. Engaging in a semiotic reading of a multimodal text raises issues of control over the design, 'and also of the manner, the characteristics of it, and of the differences of that experience as a result of its modal realisation' (Kress and Van Leeuwen 2001: 132). Although their book is not about digital video or the moving image directly, they do suggest a relevant issue for the multimodal agenda: 'what differences have multimodality, or the affordances of the new technologies for that matter made in this respect?' (Kress and Van Leeuwen 2001: 132). It is this question that leads to a consideration of the kineikonic model of analysis, with a view to looking at the differences that are made by digital video technology not only to multimodal productions, but ultimately to the discourse of education.

Burn and Parker aimed to develop a model of the social semiotic grammar of the moving image:

...we argue that the moving image has its lexicon of images; and its grammatical systems of combination in space and time. There is no word for this as yet – we propose the term *kineikonic*– a combination of the Greek words for move and image.

(Burn and Parker 2001: 159)

One of the reasons for the development of such a grammar was to make it as useful to practitioners as possible. In this way, theory can inform practise in the classroom and formalise and legitimise pupils' work with digital video. One of the dangers of working with digital technologies is the erroneous perception that the

work produced is of lesser value. Less ICT-capable persons tend to look at a piece of work and assume that because the computer enables it to be produced with a few mouse clicks, very little in terms of creativity or originality or even educational value is being developed. A method of analysing moving image work can make the processes of development visible as well as demonstrating creative competencies. If, as Burn and Parker maintain, the moving image has a lexicon and a grammar for combining the image morphemes, then this can be taught and shared in order to enhance the status of the technology and the purposes for which it is used. In a society such as ours, where multimedia, hypermedia and multimodality are changing the nature of communication, it is vital to have a framework in order to make sense of the changing communicative practices.

Applying the kineikonic model is an example of working with Kress and Van Leeuwen's strata, but recognising that 'moving image is an extended process of design and production' (Burn and Parker 2003: 26). Each stratum stage can be analysed, as well as the finished text, which allows for a consideration of 'the relationship between mode and meaning' (Burn and Parker 2003: 19). Burn and Parker suggest that the data for an analysis can include storyboards and design materials, filmed processes of design and production, interviews with participants and screengrabs of the timeline (Burn and Parker 2003: 27). With digital video work, a range of features can be analysed in order to consider how they contribute to making meaning: the film work, the editing, music, drama, action, images, text, effects, movement, speech etc., with the overarching principle that the editing process itself allows for the creation of a text which is more than simply the sum of its constituent parts.

Digital video seems an ideal technology for the demonstration of multimodality. It allows design to be an ongoing factor of work with the moving image – a case for changing ideas and the ready interplay of ideas and software exploration. It

allows for a convergence of different modes and technologies: if there's no suitable clip at hand, then we can record a voice-over, or add some text, or a moody music soundtrack. No suitable picture – then we can flick over to a graphics package and customise or create something suitable, benefiting all the while from instant feedback. Film finished, we can opt to send it by email, save it to CD-Rom, author a DVD, distribute it in the internet, save it back to tape (mini-DV or VHS). The possibilities at, and across each stage are endlessly exciting.

The next chapter is devoted to a digital video project carried out in March 2004. Having made the case for studying 'visual and audiovisual semiotics' (Burn and Parker 2003: 1), the whole of chapter five is an analysis of one of the pupils' films, using the kineikonic framework for the social semiotic reading, as well as highlighting some of the key themes of the literature review in practice.

Chapter 4: The Digital Video Academy Project

Introduction

In order to see how far elements of the key themes from the literature review were apparent in pupils' digital video work, The Digital Video Academy Project was planned and took place in the run-up to Easter 2004. A small group of six Year 8 pupils from an inner-London girls' school was selected and each pupil was approached separately to verify their interest in participating in the project. All six pupils were positive about the opportunity to create their own film.

The objective of the project was to enable pupils to plan, shoot and edit a film of approximately three minutes, about a subject of their own choosing.

The following schedule was distributed (see appendix 2 for full handout).

Week beginning 8th March	Session 1: Analysing film sequences
Week beginning 15th March	Session 2: Storyboarding your movie
Week beginning 22nd March	Session 3: Organising shots/props and filming
Tuesday 30th March	Session 4: Digital video editing at the City Learning Centre
After the Easter break	Session 5: Evaluating the project

Table 1: project schedule

This chapter aims to describe the methodology of the project, leaving the analysis of pupils' work to chapter five.

Project context

The empirical setting deserves consideration, since Brown and Dowling assert that conclusions made about the empirical setting allow generalisations about the empirical field (Brown and Dowling 1998: 29). This project was planned as a one-off, extra-curricular activity for a small group of pupils, although it was envisaged as a test-bed for a possible new scheme of work, which could be adapted and improved as a result of the project. The school is a very successful, all-girls state secondary school, with a mixed sixth form, located in inner London. ICT is taught as a discrete subject in a shortened Key Stage 3, with Years 7 and 8 having one timetabled fifty-five minute lesson of ICT per week in mixed ability groups.

Limited video editing facilities were available in the school: four Windows machines running Adobe Premiere and, at the time, one ICT teacher's laptop running Microsoft Movie Maker 2. The school had access to a video editing suite at its local City Learning Centre, with six Apple Power G4s running iMovie 3. The choice of software and operating system was significant. Ideally, the project should have run on a Windows platform, using Microsoft Movie Maker 2 in order to integrate seamlessly with the pupils' past experiences, but as this could not be achieved at the school, using iMovie on the Apple platform at the CLC was a viable alternative. Adobe Premiere was felt to be unsuitable at this level because of its relatively less intuitive interface. In order to ensure that time spent learning the new software was kept to a minimum, the suite at the CLC seemed the most suitable location for the video editing segment of the project. The availability of six workstations had an impact on the size of the sample, and therefore limited the project to six participants.

The title and nature of this project were inspired by some conclusions which were drawn in the BFI evaluation report of the Becta DV pilot project. It was suggested that:

'one of the learning affordances of digital video work is the potential for collaborative work... [but that] ...enabling pupils to work alone is sometimes important... [although it can] ...militate against the social aspects of learning...One solution is to establish an 'academy' of editors, where pupils work on single projects...and are encouraged to share work in progress...'

(Reid *et al* 2002: 14)

Given the constructivist nature of digital video work, it seemed appropriate for the pupils to work alone so that they could focus on their films and develop their digital video skills, and yet still be able to take advantage of peer mentoring, as advocated by Sweetlove (Sweetlove 2002). In fact, one of the surprising features of the project was that the pupils spontaneously banded together into three small groups of two. They seemed to enjoy having someone to work with and to constantly share ideas with. It may well have removed some perceived pressure: they were, after all, still in school mode, despite not actually being at school.

Sampling

Brown and Dowling assert that 'attention to sampling procedures is a necessary prerequisite to establishing or questioning the validity of claims which generalize beyond the sample itself' (Brown and Dowling 1998: 29). As the nature of the project was more qualitative than quantitative, the sampling procedures employed were not designed in such a way as to allow for extrapolation to a specific body of pupils, but neither was it a case of a purely opportunistic sample. Although gender was fixed (the pupils were girls in an all girls' school),

issues such as race, prior attainment etc. did not form part of the sampling criteria.

The criteria for selection were that the pupils should demonstrate enthusiasm for ICT, that none of the pupils selected should be part of a friendship group or pairing in their timetabled ICT lessons with any of the other pupils selected and should not have done any digital video editing before. The sample was drawn from a pool of forty-four Year 8 pupils, all taught by the author and therefore selected to meet the first two criteria from professional knowledge of the pupils. The third criterion was met through questioning each pupil prior to asking them whether they would be interested in participating in the project.

Data collection and analysis procedures

The framework for analysis of the moving image allows tremendous scope in the data that can be used to inform the analysis of the work. Burn and Parker suggest that, apart from observations of the filming and editing process and the final piece of work, a range of data, including storyboards and other design materials, interviews with participants and screen grabs of editing software, can all be examined to provide further qualitative and quantitative evidence for scrutiny (Burn and Parker 2003: 27).

Session 1

During session one, the pupils were given a booklet (see appendix 3 for example), which introduced them to the concepts of the project. It contained sections on analysing film sequences, storyboarding, a film editing glossary, camera shots, framing and filming tips and the twenty questions which were subsequently used with the pupils to evaluate their films.

A selection of CD-ROMs from Film Education⁸ was demonstrated in order to look at the way in which a piece of footage was assembled. The pupils were given the task of reading through the booklet, analysing some film and/or television footage in preparation for the next session and thinking about the kind of film that they would like to make.

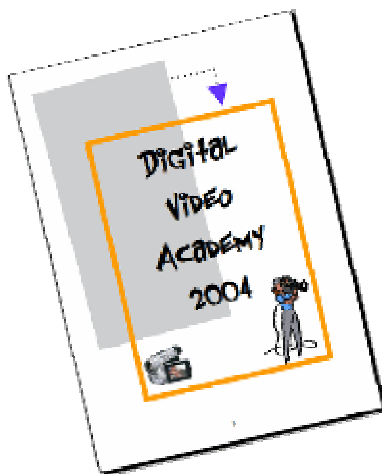


Figure 3: Project booklet cover

Session 2

Session two involved a discussion of footage that the pupils had analysed and plans for their own films. At this session, it became clear that the pupils had already started to split into pairs, with one group intent on creating a horror film, another on a personal safety topic linked to their civics (PSHE⁹/citizenship) lessons and the other two pupils each considering making a film about the school.

The pupils were asked to prepare for filming the next week, and to organise any props, locations and actors they might require for their film. At this point, it was sufficient for them to have a clear idea of their requirements. Storyboarding

⁸ <http://www.filmeducation.org/index.html>

⁹ Personal, Social and Health Education

would have lent itself well to a classroom setting, but drawing out formal plans would have meant an addition to the normal curriculum load for these pupils, and was therefore dispensed with.

Session 3

Session three involved the pupils filming their footage. By this point in the project, there were three distinct groups of pupils. The group shown in Figure 5: Pupils filming during session three (below) had decided to create a film to be shown to the new cohort of Year 7 pupils, based on a day in the life of the school. The two pupils involved had combined their efforts in planning the film and had produced a detailed shot list (see Figure 4: Example shot list below), which they added to during filming. The pupils decided to type out a list of all the places they wanted to film, which they added to and improvised as they collected their footage. This particular group were very organised, turning up faithfully to borrow the camera at various times during the day. They particularly wanted to film the clock in reception at the start and end of the school day so that they could use the clips in their film. While they were capturing footage, they wrote down the relative clip position so that they could keep track. As can be seen below, they filmed three clips in the ICT corridor – clips 58 to 60.

The pupils had all been advised to shoot ample footage, as there would be no chance to go back and re-shoot any shots on the editing day because the editing was taking place off-site at the local City Learning Centre. They had been advised to note down shots and to try to think about camera angles and to shoot the same scene from several angles where possible. Later viewing of the pupils' films showed that this advice had been heeded and used to good effect in all three of the films.

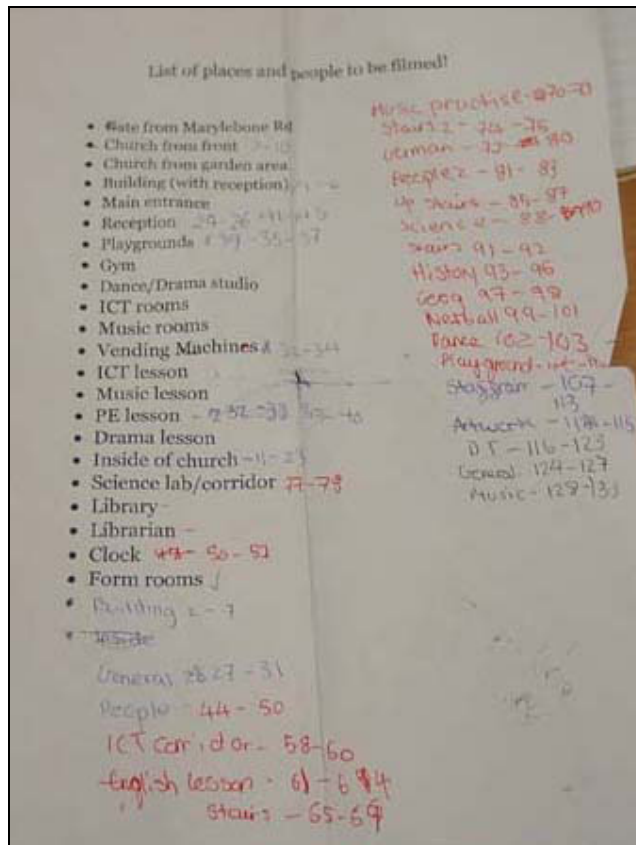


Figure 4: Example shot list



Figure 5: Pupils filming during session three

Session 4

The pupils spent the day working with their footage at the local City Learning Centre, accompanied by two ICT teachers. They received an initial hour of training on iMovie from the centre's manager, who had repeated this exercise with many groups of pupils and was able to give the benefit of his experience. As well as this source of support, the pupils were given printouts of Apple's 'iMovie at a Glance' (see appendix 4), which gave a brief overview of the different elements of iMovie. The pupils spent a total of six hours at the City Learning Centre, including time for refreshment and lunch breaks.

The City Learning Centre manager gave a thorough introduction to the software, covering:

- The shelf and naming clips
- Cropping clips
- Titles, text: formatting, speed fading positioning and rendering
- Transitions
- Effects
- The timeline view and clip view
- Slow motion
- Clip volume
- Saving

Audio was covered during the last hour.

Group one worked on a horror film trailer. Their film is analysed in depth in chapter five. On the whole, their film was the most sophisticated in design and outcome and lent itself well to an in-depth analysis. It was also the only film that kept to the initial three-minute brief and the only film not to use music.

Group two created a film about a day in the life of the school, to be shown to new Year 7 pupils. It shows morning registration, the school church, lessons, clubs and home time. A complete fluke led them to select the track "Fly By" by Blue as the soundtrack to their film. One of the pupils clicked through a number of songs until she reached this one. The pair watched their film through with this soundtrack, excited by the coincidental matching of parts of the song to parts of their film, such as the slow start and end, one part where footage of some girls dancing matches almost exactly the tempo of the song that that point and a rap sequence which ended exactly in time with one of their transitions.



Figure 6: Group 1, 2 and 3 work in progress

Group three created a film about personal safety, taking inspiration from a recent civics (PSHE/citizenship) lesson. They put together two pieces of drama, the first highlighting bullying issues and the second about the danger of strangers. This group chose to have outtakes at the end, and their film had a fun and vibrant feel to it. It was very much dominated by one of the pair, who seems to have put her stamp firmly on the film. The music chosen for the intro clip, "Can't Stop" by The Red Hot Chilli Peppers, set quite a lively, almost rebellious tone to the film, echoed by this film's quite provoking scripting.

Session 5

Session five involved an individual interview with each of the pupils, in order to watch the film with each pupil and work through the list of twenty questions that formed the evaluation section of the project booklet. The questions ranged from influences to strengths and weaknesses. Two of the transcripts can be seen in appendix 5.

Outcomes

The project was successful in that six pupils, who had never done any video editing work before, were able to engage in the process of planning, filming and editing their own short film. They worked collaboratively by choice and the pairings worked fairly well, although the dangers of one pupil overshadowing the other are apparent. Grouping is one aspect that was not factored in, and is one area that teachers would have to think carefully about for their own classes.

The pupils selected hadn't used video editing software before (although it subsequently turned out that two of them had had a brief look at Movie Maker when they knew they would be doing a digital video project), so it was interesting to observe the ease with which they picked up the video editing software skills. The time constraint on the project is roughly equivalent to the amount of time that could be spent in a traditional half-term curricular block, and suggests that incorporating digital video work into the curriculum may be more of an achievable prospect than it was previously considered.

The pupils' independent choices of film topic show that they are very open to using new technologies to reinforce learning or even to learn in very different ways. The possibilities for highly creative digital video work in citizenship have been suggested by group three, while group two's efforts would fit very nicely

into the ICT curriculum, especially if the pupils had a chance to re-edit and make the film more suitable to the new Year 7 parents, thus exhibiting the ability to meet the needs of different audiences.

The language of the moving image was apparent through pupils' discussions of filming and editing, where they used specific terms with ease very early on in the day. The software session seemed to reinforce the language they had been given in the booklet. Pupils' intuitive understanding of popular media came very much to the fore, and it was surprising how knowledgeable they were about films and the devices used. One fascinating discussion focused on the camera work that was apparent in news broadcasts – how they seemed to break some of the rules, such as not zooming while filming, and why that might be acceptable given the time constraints that news reporters are under.

Although this was a very small scale project, with quite general and humble aims, the work that the pupils produced demonstrated a number of very positive and exciting features, all of which were achieved because of the project. While it is not possible to say conclusively that digital video is a valuable new tool for learning based on such a small scale, the outcomes are certainly suggestive. All of the key themes from the literature were apparent across the three groups of pupils, but one film in particular stood out as a rich example which could illustrate the key themes fully. It is this film that forms the basis for discussion in the next chapter.

Chapter 5: Analysis of “Face It”

Far from merely celebrating the creation of something, anything, with a camera and a digital video-editing package, the danger of which is highlighted in the recent Becta report (Reid *et al* 2002), the climate of educational technology seems ready for a shift towards the analysis of digital video work in the curriculum. Quality and creativity are catchwords, and require deeper attention to be paid to pupils’ work in order to identify, describe and define good practice in the field.

“Face it” is a piece of footage created by Rebecca and Imogen¹⁰, two Year 8 pupils who took part in an extra-curricular project in March 2004. The pupils were selected for the project on the basis of their effort and enthusiasm during discrete ICT lessons, and took part in several planning sessions prior to capturing their footage in the week immediately before the editing day, which took place in the Video Editing Pod at the local City Learning Centre.

The project was open-ended in its nature. No specific theme was set, although early discussions seemed to settle each group’s choice quite quickly. Rebecca and Imogen arrived at the first planning session bubbling with enthusiasm about the possibility of a horror movie, and although their planning seemed somewhat erratic, their final film is clearly recognisable as an attempt at horror.

Purists might argue that thirteen-year-olds, equipped with a low-end mini-DV camera and without access to proper lighting or accessories, could not possibly produce a piece of film worthy of much attention (Masterman 1980; Ferguson 1981 quoted in Sefton-Green and Sinker 2000: 131), but as analysis of Rebecca and Imogen’s film will confirm, limitations are generative (Sharples 1999, quoted

¹⁰ Pupils’ names have been changed in order to respect their privacy

in Reid *et al* 2002: 8) and the resulting film is rich in audio, visual and semiotic material, as well as being testimony to the pupils' ICT capability.

One of the central questions here is how far the technology can be said to drive the results of moving image work. If the process of filming, capturing and editing a piece of work is as simple as pressing buttons in the right order, where does the skill come in? How can such a piece of work be said to be creative? Burn argues that creativity in relation to moving image work is a valuable counterbalance to functional approaches (Burn 2000: online). Creativity in this context is noticeable by its transformational effect, and idea which will be developed later in this chapter.

The kineikonic framework for analysis allows tremendous scope in the data that can be used to inform the analysis of moving image work. Burn and Parker suggest that, apart from observations of the filming and editing process and the final piece of work, a range of data, including storyboards and other design materials, interviews with participants and screen grabs of editing software, can all be examined to provide further qualitative and quantitative evidence for scrutiny (Burn and Parker 2003: 27). A number of these will be used in the analysis to augment the evidence provided by the pupils' short film.

“Face it” – A film by Rebecca and Imogen

“Face it” is a three-minute trailer for a fictional eponymous movie. It situates itself firmly in the horror movie genre, using macabre elements to fuel anxiety and suspense. Interviews with Rebecca and Imogen (see appendix 5 for interview transcripts) confirm that they had very firm ideas about their choice of genre and the peer audience at which they were aiming, although they didn't script the film or its plot fully:

Rebecca ...because it was only a trailer we didn't really think it completely [gestures with left hand in circular motion] through, like the whole story, it was just these two girls that were dead...

As can be seen in the methodology section in chapter four, Rebecca and Imogen initially paired off quite quickly, and as they knew each other fairly well, were able to discuss ideas in between planning sessions:

Imogen Well, we were talking on the bus, we were just thinking of an idea, and we wanted, like, a scary film and we thought well how can we link it to the school...

Their initial pairing doubled to include some friends, Sally and Angela¹¹, in the cast, who make substantial appearances in the film as the 'two girls that were dead'. Despite the lack of material design, such as a storyboard, Rebecca and Imogen were very clear about the types of scenes and shots they wanted (see Figure 7: Rebecca and Imogen's shot list, below) and went out of their way to gather props, manipulate the school environment to suit the film and make good use of timely pre-filmic elements, such as the flying bird in scene 20, to develop the atmosphere of the film.

¹¹ Pupils' names have been changed in order to respect their privacy

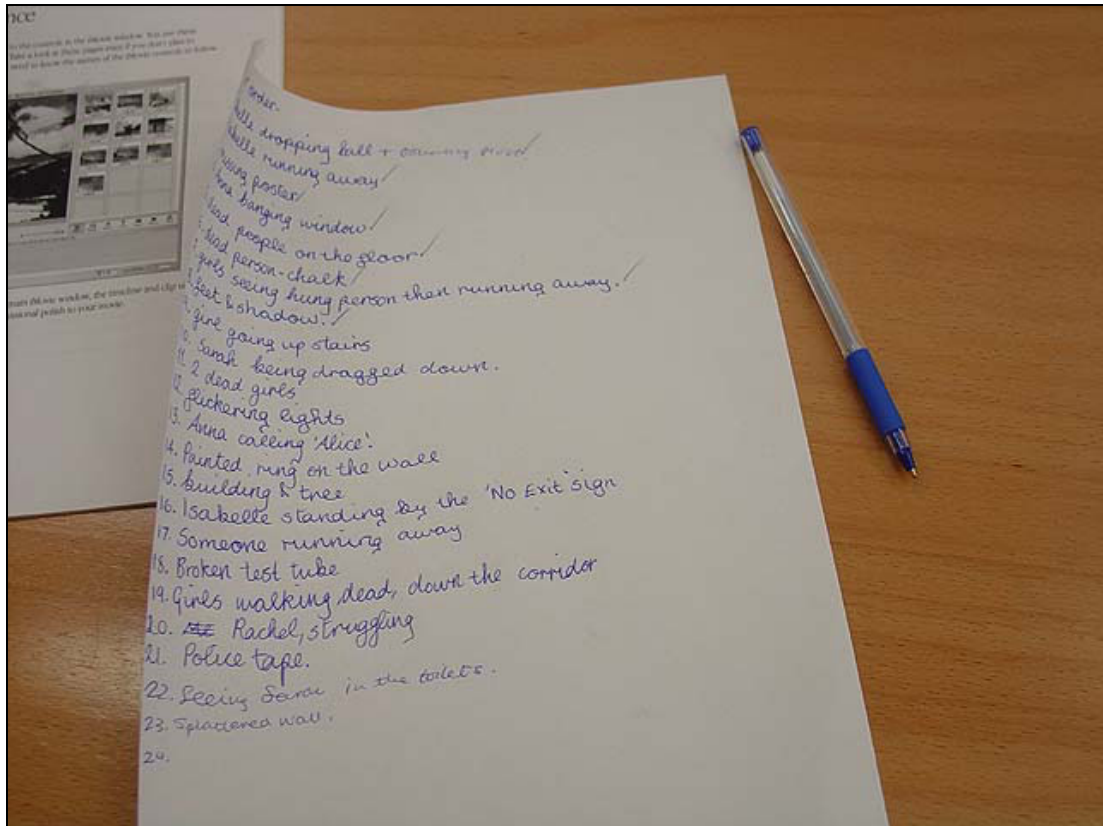


Figure 7: Rebecca and Imogen's shot list

Storyboards are graphical representations of the shots in a film sequence; they illustrate a number of features relating to the subject to be filmed, along with written notes and directions. Normally laid out on paper (although there are computer programs suitable for storyboarding, such as Picture Power¹² and Dave Baugh's Movie Storyboard application¹³), they are very similar in appearance to a comic strip.

The use of storyboards in digital video editing projects is debatable. Proponents for storyboards place their use high on the priority list (Cardus 2004, Becta¹⁴, Media Education Wales¹⁵), recommending a structured approach to the whole process, scripting the contents of the footage right down to the shot level, but

¹² Available from <http://www.englishandmedia.co.uk/>

¹³ Available free from <http://www.dvined.org.uk/>

¹⁴ Becta ICT advice online <http://www.ictadvice.org.uk/>

¹⁵ http://mediaed.org.uk/posted_documents/Storyboarding.html

others are less fervent about their use, preferring for pupils to demonstrate only the awareness of the type of shot needed by generating a shot list (such as Figure 7: Rebecca and Imogen's shot list, above) and relying on a certain amount of spontaneous improvisation (Burn and Reid 1999; Bazalgette 2000a; Sefton-Green and Parker 2000; Burn *et al* 2001; Buckingham 2003; Burn and Parker 2003; Potter 2004). The difficulty with storyboards seems to be their similarity to writing rather than visual media:

If there is an analogy with language here, it is partly,...about working in a visual medium; but it is also about working in a time-based medium, and it is this feature of visual rhetoric, shared with speech but not with writing, that the storyboard, a more writing-like form, is least well equipped to help with.

(Burn and Reid 1999: online)

Bazalgette is vehement in his opinion on storyboards when he says that 'first of all there's the well-worn notion that the basis of film or TV drama is the storyboard. It isn't. The filming process is often one of creating enough raw material for the editor to work from...it is the editor who stitches together such things as exchanges of looks, the rhythm of body language and gesture matched to the script' (Bazalgette 2000a: 46). Storyboards, it would seem, may actually inhibit the creativity of the editing process and negate spontaneity.

Rebecca and Imogen's film, "Face It"¹⁶ was analysed shot by shot using a kineikonic analysis framework grid (see appendix 6). A table was created, using columns for scene number, descriptions of the filming and editing effects in use, then columns for pre-filmic material, pro-filmic material (as per Metz (1974) quoted in Burn and Parker 2003: 24) and sound, with a final column for a still image captured from the film for illustrative purposes. The grid allows for a structured 'reading' of the film.

¹⁶ The film is available on the accompanying CD-ROM

Opening credits: 00:00:00 to 00:00:27

The film opens onto a bare brick wall, which fills the camera frame. The shot is held for a second, with a low, desolate wind effect in the background. A black screen replaces the opening shot, with a stark white centred credit fading in and then out for a total of two seconds. The brick wall shot returns, but this time a basketball bounces off the wall and onto the ground out of shot, with a slight rise in wind volume. Another set of credits follows, this time falling from the top of the shot with an interesting bouncing letter effect, followed by another instance of the lone basketball.

The first eighteen seconds of the film are worthy of comment as they contain little but a series of repeated images and sounds, and yet, at this stage, the scene is set. Bleak images of brick walls and the eerie wind lead the viewer to develop a certain set of expectations. The horror genre is being adhered to quite faithfully, by the attempt to build suspense and make the audience jump with unexpected events. In this micro-world, an innocent basketball takes on sinister characteristics as its presence and purpose become questionable. The modes of filming, editing, sound and image have combined to form the kineikonic mode, but at this stage, no single mode takes precedence over another.

This opening set of shots is no happy accident. They have been designed and compiled as part of the larger enterprise, and a surprising amount of effort must have been devoted to the orchestration of such shots. Imogen elaborates clearly about their intention with this opening sequence:

Imogen You know at the beginning there was a basketball [*gestures*] and you saw something [*raises both hands as if to frame a shot*] and a

name came up so it was kind of [*gestures*] kind of [*gestures*] um, it would make you jump if you were in a cinema [*gestures*] the bang of the [*ball against the wall*]...

Rebecca and Imogen, informed by their own experience of the discourse of the horror genre, have isolated key semiotic material that can be recreated without recourse to sophisticated props or techniques. The noise of the basketball striking the wall takes on an enhanced role in the sequence, as does the brick wall. Provenance¹⁷ is at play here. Rebecca and Imogen have imported the wind effect from the traditional horror context in order to prompt connotation. The addition of the sound effect crystallises the darker elements and forces the audience into a state of anticipative unease.

From 00:00:18 to 00:00:27, a range of new images is introduced to the audience. For four seconds from 00:00:18, we are presented with a shot of a crumpled photo of two smiling girls. The wind effect continues in the background, defamiliarising the pleasant image as we realise that there must be a negative connotation. At this point it is difficult to accept the image at face value. A very effective multimodal device is in operation. The modes, image and sound, work together subversively. The sound and the image are saying different things, and the realisation of this contributes to the heightened horror effect.

From 00:00:22 to 00:00:27, the names of the girls playing 'the dead girls' drop into the centre of the shot, across the two girls. The camera zooms in to the girls, who stand, unsmiling this time, in the centre of a dimly lit corridor. The sudden switch from the smiling still image to the ghoulish alternative is effective. This time the dramatic mode is at play. Burn and Parker suggest that 'the semiotic principles informing the whole process are those of the kineikonic mode,

¹⁷ Provenance: where signs come from (Kress and Van Leeuwen, 2001)

so that all movements...are modelled by...the camera...and the intentionality of the envisaged edit' (Burn and Parker 2003: 18). The design process has allowed Rebecca and Imogen to make playful use of the modes. With limited resources at their disposal, they have opted for strikingly contradictory shots and have directed Sally and Angela to perform in different ways for the different instances of the visual mode, obviously keeping a close reign on what will work best in the video editing suite.

The concept of the discourse of horror has been a common theme so far, but never as apparent as in this shot, where, intentionally or not, the girls mimic a widely recognised element from another movie. Imogen was frank when acknowledging her horror influences:

Imogen Well, there's the Texas Chainsaw Massacre, err, but don't put that, because it's an 18 [*laughs*] umm, I dunno, just a lot of scary films like that - ooh yeh - there's a really rubbish film called Killjoy [*shakes head and snorts*] really terrible...

Although she doesn't directly credit Stanley Kubrick's 1980 film version of Stephen King's novel 'The Shining', the shot of the two girls in the corridor is remarkably similar. The shot is so significant in Rebecca and Imogen's film that they use two other versions of Sally and Angela in the corridor later in the film.



Figure 8: Similar shots of girls in corridor¹⁸

It is worthwhile to consider the horror genre as a theme, since so much of Rebecca and Imogen's time and effort went into trying to replicate the conditions necessary for a horror film. David Buckingham suggests that horror has quite a wide audience and is popular with young people. Many children, according to his research, actively seek out horror films, as they possess considerable 'adult' status (Buckingham 1996: 98). There seems to be a great deal of kudos to be gained from claiming to have seen them.

From the interview transcripts, it seems that Imogen was very much the driving force behind the fascination with the 'distress and delight' of horror. She became quite animated while discussing *The Texas Chainsaw Massacre* and made a point of offering the film's rating, which, as an 18-rated film, she should not have had access to. It tells the story of a group of teenage friends terrorised by a chainsaw-wielding psycho. The other film (*Killjoy*) that Imogen mentions and

¹⁸ 'The Shining' photos courtesy of <http://www.archiviokubrick.it/film/shining/index.html?main=foto>

dismisses as 'really rubbish' is also rated 18. It is loosely relevant in that its subject matter is a high school student who finds herself in the presence of a demonic clown.

Rebecca, on the other hand, makes no similar claims:

ED How far does your film reflect the kind of person that you are?

Rebecca Um [*shifts in seat*] not very much [*smiles*] because I'm not very, um I normally get scared when I see a scary movie [*smiles and laughs*] but weird [*smiles*] ...that's kind of me...

Despite Rebecca's reticence, she defines herself as 'weird', allying herself with Imogen's horror ambitions. Determined and creative, Rebecca's role in the production of the film is pivotal, as she is more organised than Imogen and could be seen methodically writing lists during the project, organising props and extras, while Imogen took the more dominant directing role. Both girls appeared in the film, playing up their respective personality traits.

Setting the scene: 00:00:27 to 00:00:41

The next section of the film opens with a long shot of Imogen standing in the centre of the school playground facing the camera, holding a basketball. She drops the ball, which bounces four times. A cross dissolve is used to connect the two shots, and as they merge, Imogen shouts "Go, just go", turns and runs away from the camera. The wind effect continues in the background for the first shot, but stops as the shots dissolve into each other. Imogen appears dishevelled, and one of her shoes is left on the ground as she takes flight.

The next shot cuts to the picture of the two girls, but this time text can be seen: the poster is a missing poster, with a reward offered. The camera zooms in and it is possible to read some of the text. Following this is a cut to an angled shot of the school building, dark against a light background, acting as a forbidding context shot. Another cut brings the two girls back into shot; this time they are backlit by a fluorescent light, leaning over a metal banister, staring straight ahead in a gloomy angled long shot from below. The sound of running feet can be heard in the background.

This section seems to herald the main plot development. The suspense has been cranked up and a number of questions have been stimulated. We now know that something has happened to the two girls: the poster portrayed them smiling, yet they are unsmiling when we encounter them in the film.

Imogen's appearance is mysterious and the wind has now disappeared, not to return until 00:02:36. Rebecca and Imogen chose to keep the audience guessing as part of their effort to be true to the trailer convention:

Imogen `cos we tried not to give away the whole thing, to do shots of things that happen in it but not actually what was going on...

This approach gave them a great deal of freedom from having to spell things out to the audience. It is also in keeping with horror trailers generally, which offer titbits to the audience in order to tantalise them into seeing the movie. Rebecca and Imogen's trailer, however, is quite long at three minutes, and doesn't make much of an attempt to encourage the audience. It is more of a collage sequence of related shots. Its real interest lies in the multimodal interplay.

Interestingly, Rebecca characterises the plot uncertainty as a strength of the film:

ED OK, what are the strengths of your film?

Rebecca Um [*raises eyebrows*] it's not the same, it's just, you don't really know what's going to happen, I don't, 'cos um, [*shifts*] I don't know how to explain it [*puts hand to mouth*] strengths...it's kind of funny but no, like, no, when you scream it's a shock, kind of, like, you know, it's funny one minute but it's scary the next...

Rebecca takes quite a reflective stance about the film. She recognises that there are opposing and confusing elements, but has no problem with the film being both funny and scary. Buckingham points out that this is normal in the horror genre. He quotes Brophy (1986) in suggesting that horror could be described as a 'genre about genre': it is suffused with intertextual references, with self-reflexivity, and with a parodic and deliberately excessive use of clichés (Buckingham 1996: 135). Buckingham further suggests that humour and self-parody are ways of drawing attention to the conventions of the text itself. Rebecca and Imogen's film seems very conscious of itself as belonging to the horror genre and works very hard to develop cliché-type scenes. The girls were well aware of the use of such devices from early in the project:

Rebecca ...we were going to get a flock of pigeons [*gestures*] flying away, but um, we couldn't really find that [*laughs, puts left hand to face, touches hair*] and I could just imagine that in a scary movie, like all these pigeons [*gestures*] flying away [*smiles*]...

The very fact that the girls chose to focus on horror is interesting. Buckingham mentions Carol Clover's 1992 study of the dynamics of victim-identified slasher movies. Clover apparently discusses the convention of the 'last girl' in modern horror (Buckingham 1996: 111). Imogen's interview revealed that she had a similar idea in mind with her film:

Imogen Oh, yeah, it's a bit like that in some scary movies, and it's like there's usually more than two, but we just had two people and they kind of, they keep getting picked off and it's like in the end there's [gestures] only one left or they, they get separated and they kind of [raises right hand to scratch side of chin]

And also:

Imogen Well, it was like, someone, and they don't really know what's happened to each other but they're sort they're looking for the person and they don't know the danger's coming get [gestures] and they're still looking for them and then the group gets smaller and they go lets go this way [gestures] and lets go that way [gestures] and look for them...

ED Right, so that's the kind of direction you would have been heading in if you were to make it into a full film

Imogen [Nodding] yeah

It has been suggested the concept of the last girl revolves around literally, the last girl, finally standing up to her fears and destroying the monster. The fascination can perhaps be interpreted as a need for adolescent girls to play out

and thereby master fears (Buckingham 1996: 111). There can be no doubt about the unique position of digital video for work like this.

The creative element here has been the accomplishment of recognisable clichés in the moving image work. If the girls had been asked to draw horror sketches, or write a play, one might conceivably expect clichés to be present: it is easier to write about or draw such scenes than to actually make them happen. Rebecca and Imogen have synthesised their understanding of the genre with the affordances of the digital media to produce an intricately crafted film, far in excess of expectations.

Sinker asserts that young people encounter and inhabit a landscape of knowledge created by a range of new media and a pattern of cultural connections far richer and more complex than those enshrined in the traditional curriculum (Sinker, in Sefton-Green and Sinker 2000: 195). This begs the question of whether and how such knowledge would be manifested without the affordances of technology. Pupils no longer need to be passive consumers of popular culture; they can be active in producing it themselves. The only obstacle lies in facilitating their enterprises in a more formal manner. This project was a one-off, extra-curricular experience for six pupils. What about all the rest? This issue will be discussed later, in chapter six.

Plot development: 00:00:41 to 00:02:50

The central section of Rebecca and Imogen's film is devoted to the development of the plot. Working out what the film is about requires some creativity on the part of the audience. Rebecca and Imogen have edited their scenes together to allow audience interpretation rather than opt for a linear storytelling approach.

A series of images is built up: Sally with red stripes across her face, black stockinged feet walking in a darkened room, chalked outlines of a body on the playground, shots of an alleyway, with Sally and Angela, a 'hanged' body (Imogen), Rebecca crawling up some stairs, Sally and Angela lying on the floor, Angela inside a large room, a broken test tube, the girls in the corridor, a disembodied hand pushing open a toilet door to show Sally sitting on the toilet, still with the red stripes across her face. The viewer is left with the impression of mysterious and macabre events taking place in the school.

Creative editing

This central section is interesting for the choices that the girls made while editing. In a recent action school-based action research project, one of the participants suggested that digital video editing is like a 'jigsaw puzzle' (Burn *et al* 2001: 44) The analogy is quite apt: segments of footage are taken up, examined and slotted together with another piece of the puzzle that shares some similar feature, although it fallaciously suggests the existence of a predetermined structure. Digital technologies have been represented in more creative terms: digital bricolage¹⁹ (Burn and Parker 2001: online), weaving (Loveless 2002: 19), each giving the sense of taking the materials that are available and fashioning them into something new. As Imogen succinctly elaborates:

Imogen It came together, because before it was just shots, we didn't... they were either long or short; we had to cut them down and make them all fit together...

¹⁹ specifically relating to the digital video editing process

Burn and Parker have recently offered a more exciting model, that of the multimodal mixing-desk, where the modes are blended through the editing process (Burn and Parker 2003: 23). This moves away from the idea of piecing together and moves into the reconceptualisation of the individual modes. The basic material can be shaped in an infinite number of ways. Rebecca and Imogen found this and evidence of their success with the transformation of their footage recurs throughout this central section.

At 00:01:03, footage of an angled long shot of Sally and Angela walking along an alleyway has been slowed down and text representing a CCTV time code has been added via the editing software to invite chilling connotations. Rebecca explains:

Rebecca Oh, also we did slow motion, um, for the CCTV camera, um, because that's what they do, yeah [*touches back of head*]...

This text, which can be considered to be intermodal, doesn't just combine to make new meanings with the other modes in the shot, but changes the meaning of previous and subsequent shots. We are used to seeing CCTV footage used in crime programmes on television, the grainy footage capturing the last known movements of the vulnerable, and crimes being committed by hooded villains. The girls make use of this cultural significance to transform their raw footage and harness it for higher-impact use.

It has been argued that editing is the key creative act in the production of moving image texts. Sefton-Green and Parker assert that:

...editing lies at the heart of competence in any moving image language because it is the central process in possible meaning-

making activities. Editing allows 'writers' of moving image media to manipulate at both the syntactical level and in terms of larger units of sense. Understanding how editing creates meaning is crucial in interpreting moving image narratives.

(Sefton-Green and Parker 2000: 8)

Rebecca and Imogen show quite a sophisticated understanding of the power that the editing process has over the transformation of footage and its contribution to the film's atmosphere:

ED So, what special effects did you use?

Imogen Uh, would you include cutting down the shots? So it's kind of suspense? By making them quick, or...

Imogen showed awareness of how editing can change the rhythm of a piece of moving image work. According to Burn and Parker, rhythm is an important aspect of the kineikonic mode and they suggest that van Leeuwen (1985 and 1999) has some thought-provoking ideas on this (Burn and Parker 2003: 27). Imogen understood that fast-changing cuts add to the pace, in this case creating a sense of suspense. Imogen, with her mind clearly on the editing process, staged an elaborate mock hanging (see Figure 9: 'Hanging' scene shots: body and legs, below), by capturing the top half of her body in a mid-shot, apparently strangled by her school tie. She then heightens the effect by capturing her legs from the calves down, suggesting her hanged body dangling from the railings behind her. As the two shots were quite brief, Rebecca and Imogen cut them together to try to suggest continuity: that they were part of a hanging body.

Rebecca ...and also trying to um [shifts] how we would be able to see Imogen hung because um [shifts]... we did it in two separate shots [gestures] her head and her legs, but it was really quick so you don't really see it...



Figure 9: 'Hanging' scene shots: body and legs

The affordances of digital video

Scenes like these are testimony to the affordances of the digital video editing process. Rebecca and Imogen had to deal with the constraints of the situation, but as Kennewell points out, 'affordances and constraints are complementary and equally necessary for activity to take place' (Kennewell, 2001: 106). Editing is clearly a creative activity, and the idea of constraints seems to be a common theme in both. It has already been noted that, in terms of creativity, limitations are generative. Creative work doesn't just happen in a vacuum, but is circumscribed by rules, conventions, requirements, and context. (Sharples 1999 quoted in Reid *et al* 2002). Projects such as these, which are open-ended, allow for a great deal of freedom. A three-minute time limit provides a constraint, as does the lack of access to props, equipment, locations etc. – the type of film

equipment that these young media consumers are familiar with seeing used in professional films and television programmes. Rebecca and Imogen have both made references to these production difficulties, but have also engaged in experimentation, pushing the limits as far as possible in order to realise their original aims.

Affordances, then, which can be defined as 'the attributes of the setting, which provide potential for action' (Kennewell 2001: 106) are equally important. Given the constraints, and the resulting rise in creative experimentation, what are the affordances of the digital video editing software and what impact do they have on the process?

Digital video editing software packages are many and varied, but share a common set of functions. They will normally have storyboard and/or timeline views, where video clips and still images are added from a holding 'shelf' or 'bin'; special effects, transitions, titles, credits and audio can all be added to the emerging film, and sections of film can normally be speeded up or slowed down, as appropriate. All the participants of the Digital Video Academy project had seen Microsoft's Windows Movie Maker 2 as an example during one of the planning sessions, and used Apple's iMovie 3 during the project at the local City Learning Centre.

In the screen shots (see Figure 10: Movie Maker 2 and iMovie 3 screen shots, below) the similarities are obvious. They both have monitor windows where the clips can be viewed; the collection of clips is visible and clips can be dragged down to the timeline at the bottom of the screen. Both programs allow the project to be viewed in either storyboard or timeline views. Movie Maker 2 uses text links to aid the editing process and facilitate the use of effects, transitions, titles and credits, whereas iMovie 3 uses an icon-based tab mechanism on the

bottom of the shelf area, allowing the user to select either clips, photos, audio, titles, transitions, sounds or switch to iDVD for distribution purposes.

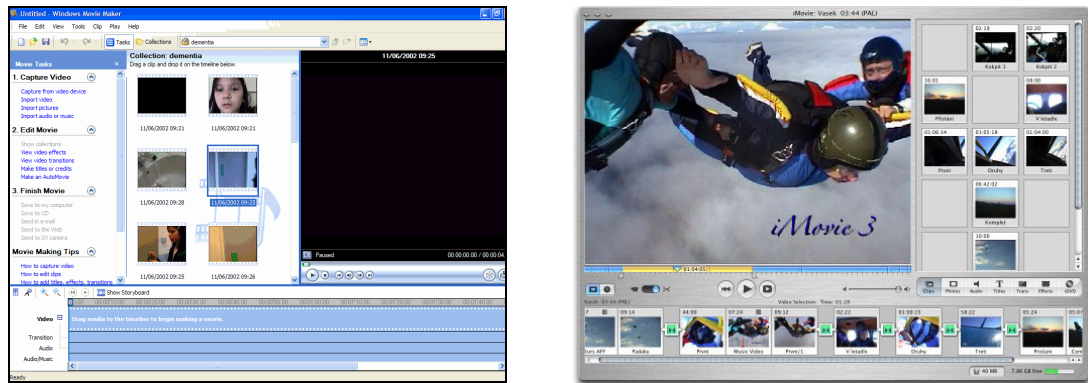


Figure 10: Movie Maker 2 and iMovie 3²⁰ screen shots

The girls' perception of their experience of using the software is interesting:

Imogen If you knew how to use the program, you just had to click a few buttons and that was it really. It's really simple, even if you don't really know how to use it, 'cos I didn't...

Rebecca Um well the editing it was really frustrating, like on the CCTV camera we also wanted to make it black and white but we tried about 3 times and then when it finished processing it [*gestures*] it just went away again [*smiles, moves head*] um yeah, like being impatient, like just letting the computer [*gestures*] work because if you just like, click the button lots and lots of times it just like slows down even more...

²⁰ iMovie3 screen shot courtesy of <http://www.mujmac.cz/images/imovie3.jpg>

ED And they were quite powerful machines. So the software was quite limiting, then?

Rebecca I didn't um, actually I would have also, have um liked to have a bit more time because there was a lot of aspects of the computer that we um couldn't really um, use, because we needed to get the [*gestures*] film done first and then add the effects...

ED So it's a case for going back and re-editing...

Rebecca Mmm... [*touches hair*]

ED How did the software that you used affect what you wanted to do? Did it stop you (apart from the black and white thing) from doing anything you wanted to do?

Rebecca Well no, because I wasn't really sure, before we went into it I didn't know what the computer was going to be like. When we got in there, I was like, surprised about all the things that you could do [*touches hair*] actually it gave me more of a choice of what I could do, so kind of the opposite...

ED So that's my next question – how far did the software give you ideas and how far did you have ideas...so the software gave you ideas?

Rebecca [*touches hair*] Yeah, we just looked through it and then um tested it out and said oh um [*gestures*] maybe we could use that or

maybe we could use that and we tried them out to see which ones fitted better for the film...

Rebecca and Imogen's comments relate to the functionality of the software: the different features it allowed them to incorporate into their film, such as effects, transitions and audio. As beginners to the process of digital video editing, they have very little to say in terms of a critique of the software; they were not at the stage where they aspired to more sophisticated elements in their work, although Rebecca's frustration at being unable to render the CCTV scene in black and white once it had been slowed down might well be the burgeoning of digital video editing software evaluation skills. In preparation for the project, Rebecca spent some time exploring Movie Maker, and gave her comments about how it compared to iMovie:

ED So how would you say that Movie Maker compared to iMovie?

Rebecca Um, I thought um the iMac thing was much more advanced. Probably Movie Maker would be good for someone that hadn't really done it before and just wanted to muck around and see what it was like but then iMacs are more technical, but, but sometimes what comes with technical, when its technical it gets more confusing and it takes a longer time to load, but it didn't seem too long to load, definitely iMac was better...

But of course, the affordances of digital video editing are not simply to do with functionality. Knowing which buttons to press is a desirable skill, but not the primary goal for the use of Information and Communication Technologies (ICTs)

in education. The development of pupils' capability²¹; the knowledge and understanding of which ICT tools and techniques are appropriate for a particular task and the ability to manipulate these tools and techniques for a specific outcome are the foundation of ICT in schools.

The key points to identify are the affordances of the digital video editing process, which might help to assess the value of using digital video in the curriculum. It is helpful to start towards the traditional media production end of the scale and to consider the use of signification as an affordance of the process. Work has been done comparing traditional analogue editing systems to digital technologies (Burn and Durran 1998). Although fascinating, the debate does not have a place here as analogue systems formed no part of the project, although reports of outcomes with non-linear software are in line with the findings of the project under discussion. Signification, the intention or expression of meaning, is just as valid with digital technology as with analogue, although the evidence suggests that the interplay of affordances provided by digital technologies makes the process of signification easier.

Using the kineikonic analysis framework, it has been possible to see how Rebecca and Imogen's film makes sophisticated use of semiotic material and artful manipulation of multimodal techniques. It is worthwhile considering signification as an affordance in that the digital video technology makes possible the increasing complexity of the work. With such tools to work with, the balance shifts from performance and the factors of production (actors, dialogue, lighting etc.) to the post-production and editing process, where layer upon layer of meaning can be added, adapted, improved in the greater service of the message by the multimodal interplay. Although Imogen's disappointment with the lack of

²¹ See Loveless, 2002 for a fuller discussion of perspectives about ICT capability

material props with which to make their film scary is obvious, she fails to realise the beauty of the signification processes they employed:

Imogen Uh, we didn't have enough, we had limited things, props and stuff and that made it, well, I don't know quite what it did to it, it wasn't quite so believable [rubs eye] Rather than having someone lying dead with blood all around them, they were just lying there and it wasn't that believable, so that, it was kind of [rubs face] that, bit...I don't know [trails off]...

Without realising it, Rebecca and Imogen's film demonstrates classic Hitchcock suspense structures, as described in a similar project:

Hitchcock's classic suspense structures arguably rest on a dialectic between concealment of the terrifying image (such as the silhouette, or the partly revealed injury) and shocking revelation of it ... sometimes the in these films the frightening thing is not so much explicit images of horror as suggestive, tantalisingly empty images...the play of semiotic structures of concealment and revelation...

(Burn and Reed, 1999: online)

Rebecca and Imogen's film has several scenes that are faithful to this type of imagery: the basketball scene at the beginning of the film, the hidden stockinged-feed girl walking in a shadowy room at 00:00:47, the hands slipping slowly back down the staircase at 00:01:58. Each demonstrates an intuitive grasp of these structures, surprising because the girls received no prompting or material that would have encouraged them to experiment in this direction. It would seem to suggest that the girls had absorbed a tremendous intuitive

understanding of the structures of the horror genre from their experiences of commercial horror films. Lachs suggests that being a consumer of others' creativity makes us all potential experts and that the hours spent watching television can be used as a starting point and as a source of motivation for multimedia curriculum work (Lachs 2000: 50). Parker neatly summarises this as 'aggregated cultural capital – that out-of-school knowledge related to popular cultural forms' (Parker 2002: 44).

Burn and Reed highlight 'the crucial gift of digital media: their provisionality, and plasticity, allowing for real redrafting, reconsidering, continual remaking, experimentation, shaping, polishing' (Burn and Reed 1999: online). Discussions of the affordances of ICTs and, more specifically, digital video editing, have highlighted the dynamic nature of the process (Burn and Reed 1999; Sefton-Green and Parker 2000; Kennewell 2001; Burn 2001; Reid *et al* 2002; Burn and Parker 2003; Potter 2004). A whole set of affordances of digital video editing revolves around the ease with which the film can be manipulated. The ability to revise the piece of work, tweaking in order to get just the right effect, is central to the process. Rather than a lengthy process in order to effect a minor change, the digital video editing environment allows revision with the click of a button. Rebecca and Imogen made great use of this facility in their film, but even so, were able to identify a number of features that they would go back and amend, if given the chance.

Having been so deeply immersed in the project on the editing day, Rebecca and Imogen were able to step outside their production roles and view their film with a sense of objectivity when they received digital copies of the film after the Easter break.

ED Um, I was going to have a look at it with you, just to see what it was like...

Rebecca I looked at it and...it was really um, it was really different from when we saw it on the um, when we were at the thing [City Learning Centre], it was like...[tails off]

ED Why was that?

Rebecca Because I, I, um, we sometimes forgot to erase some of the sounds and some bits we didn't mean to put in, like um, when we were running to the church and someone shouted "church" and then we dropped the glass and I said "ok, ok" and then um and then um Imogen was doing the American accent and when she saw the police tape, we, we weren't really meant to put that in...

Rebecca clearly accepts that there are opportunities for revision of the work and gives no sense of having failed to make the perfect film at the first outing. She demonstrates in these comments and others, earlier in this chapter, that provisionality is part of the process – the ability to be able to experiment and change the work and if necessary, to discard chunks in order to improve the final outcome. Some of this willingness comes directly via the nature of the ICT curriculum in school – the cyclical processes which pupils use in ICT lessons – the drafting and evaluating of products in order to identify improvements, but some of it comes from the plasticity of the digital video editing environment. Pulling clips down onto the timeline, shuffling them, cropping them, adding effects: the process is transitional, holding true for a moment in time while the editor analyses it critically and accepts or rejects that instance of meaning-

making. Imagination and creativity are no less apparent in the production of the moving image than in any other field of artistic endeavour.

Final scene 00:02:50 to 00:03:00

The final scene shows Imogen running to a set of gates. As she reaches them, she throws her hands apart in a wide gesture and shouts "face it". The camera cuts to a medium close up of Imogen with a pained expression and she shouts "she's dead". The camera cuts to black and Imogen's voice says "they all are" before "FACE IT" zooms in, in red capital letters, followed by "COMING SOON". The same wind effect from the beginning of the film, which started again at 00:02:36, continues to the end of the film.

There is scope in this final section to consider the use of sound as a mode. Practically speaking, in terms of the organisation of the editing day, sound was the very last aspect of the film to be worked on. The girls were advised to get their timeline sorted out first, then work on the effects, leaving sound to the last. Part of this is due to the digital video editing software: once sound is laid down on the timeline, it is less versatile than image clips. If an image clip is deleted, the other clips shuffle together and maintain the flow of the film, but sound does not automatically realign itself, therefore forcing the development of sound to belong at the end of the process.

Clearly, a film which privileges sound over image will demand a different way of working. A music video for example, starts with the piece of music and the imagery is organised around it. The recent launch of a competition in the United Kingdom has seen Adobe and MTV join forces in the Boom! Music Video

Academy²² initiative, where the aim is to bring 'popular culture, creativity and inspiration into the classroom by challenging British school kids to create their own music video as part of the national curriculum'. A choice of four music tracks is offered and pupils must create a music video for their chosen track. This way of working offers an obvious set of constraints and affordances for creative editing and demands closer attention to be paid to sound as a mode.

Rebecca and Imogen did think about sound and were aware of its importance in the film.

ED What special effects did you use?

Rebecca The wind flying in the background and then um, um church bells
[*touches mouth*]...

ED What did they add to the story?

Rebecca Well the wind just added um a kind of an eeriness and the church
bell um [*pauses*] not sure, it just seemed to fit, [*shifts*] because
we already had a church bell going on in the background [*waves
hand*]...

Of the three groups of pupils involved in the project, Rebecca and Imogen were the only ones who chose not to use music in their film. They were far more interested in keeping their film true to the horror trailer genre. Very little overt sound is used in "Face It": the sound of the basketball bouncing, the recurring wind effect, footsteps, some shouting, a few phrases here and there and the piercing scream at 00:01:57. Then, in the final, very brief scene, we have the

²² <http://www.boomacademy.co.uk>

wind effect, Imogen shouting “face it...she’s dead” and a voice-over of Imogen saying “they all are” in a flat tone. This sudden abundance of sound adds a sense of urgency to the end of the film, mimicking the build up to main events of a film.

Rebecca and Imogen use voice-over effects twice in the film, privileging the sound mode over the others for two significant sections. The piercing scream at 00:01:57 (see Figure 12: Piercing scream shot, below) was added to the soundtrack towards the close of the project, in order to shock the audience. It replaced the recorded audio on the film clip, which was also a scream, but not as piercing. The girls spent several minutes discussing the pitch and duration of the scream, and rerecorded it several times until they felt it was of suitable volume and intensity. They seemed to take a great deal of pleasure in this element of the work, a point which a number of authors have also made about work with digital video (Buckingham 1996; Bazalgette 2000a; Burn *et al* 2001; Reid *et al* 2002).



Figure 11: Adding the voice-over scream

Sound as a mode operates in sophisticated ways that textual representation of the same message could not. It is similar to the idea of performance. Much can be read into the tone of voice and manner of delivery. Voice actors, as with any other actors, have to concentrate on subtle nuances in order to portray their characters. Imogen's delivery of "they all are" is monotone, with an air of finality and despondency that could not have been emulated so effectively or so succinctly in any other mode. The fact that the girls chose to record this sound clip at the very end is interesting because it operates on a number of levels. Firstly, it allowed them to expand the footage they had recorded. They did not have footage containing this phrase, so they were able to creatively use the affordances of the editing process to supplement their work. Secondly, it allowed them to change the message that was being delivered. The existing soundtrack contained "Face it, she's dead". Using the voiceover allowed the girls to broaden the scope of message from one girl being dead to a number of people being dead. Thirdly, their decision to add the voiceover to the black titles section, with no visuals whatsoever, allowed them to add significance to the message. It leaves the audience with a chilling echo, which, arguably, could not have been reproduced by any other single mode.



Figure 12: Piercing scream shot

The analysis of Rebecca and Imogen's film has allowed for a practical application of some of the major themes that currently populate the digital video in education debate. It has offered the opportunity to see creativity in action and to see creativity, as Burn says, 'as a technical, transparent process which can be unpicked and learnt by anyone. The mystery of creativity is replaced by the transparent exploration of representation which can be analysed' (Burn 2003: 44). The affordances of the editing process have been exhibited through the achievements of the pupils in the project, and more importantly, as valuable processes and outcomes. Having illustrated the value of work with digital video, the next chapter will consider the place of digital video in the ICT National Curriculum.

Chapter 6: Digital video in the ICT National Curriculum

The 2000 change in the subject Information Technology (IT) to Information and Communications Technology (ICT) placed a new emphasis on communication. Plowman and Stephen point out that 'communication is now seen as a central component of ICT capability and clearly depends on both 'traditional' and 'new' literacies – the processes by which we create and share meanings with and through ICT' (Plowman and Stephen 2004: online). If an argument is to be made for the legitimisation of digital video in the ICT subject area, then it is the communication element that will form the most obvious link between the two. Burn maintains that 'one thing we can continue to do is to explore the analogy between language and the moving image: both are 'semiotic practices' – ways of communicating which can be analysed and taught' (Harvey *et al* 2002: 35).

Sefton-Green suggests that, 'unlike literacy or media education, where the climate is heavily proscriptive, ICT is usually defined in terms of acquiring a range of practical competencies and curriculum content is frequently vague. From this point of view, it seemed worthwhile exploring whether digital editing could offer ICT education a range of activities to develop ICT skills. In general, the ICT field needs to integrate more creative and artistic activities within its remit' (Sefton-Green and Parker 2000: 9).

According to Loveless, 'we must recognise that digital tools and media are recent tools which we are still exploring' (Loveless 2002: 24). The recurring theme here is that ICT is widely perceived as something of an 'underdog' subject (or even if, in some cases, as not being a subject at all) – practical, but not rigorous; useful but not creative. Finally, with the advent of new digital technologies such as

digital video, there is a chance to redress the balance and to marry the creative and meaningful focus with open-ended software skills.

The current state of digital video in schools could be described as transitional. Harvey, Skinner and Parker suggested that ‘...many young people may have access [to digital video] through ICT teaching’ (Harvey *et al* 2002: 100). Access is certainly a point worth considering. Earlier, it was suggested that, leaving technical and financial considerations aside, any mini-DV²³ camera for use with a Firewire (or IEEE-1394²⁴) card and cable connected to a reasonably high specification computer should be sufficient for general use, an idea with which Bazalgette (2000a) concurs. However, it is still the case that many schools are under-equipped or ‘making-do’ with rapidly aging technology, particularly in the current funding climate. Digital video makes heavy demands on hardware and its inclusion in the curriculum would have financial implications. However, Sefton-Green maintains that ‘work with digital arts has significant *transferable* value – that the quality of the learning is, quite simply, worth the cost’ (Sefton-Green, 1999b: 153).

Of course, it is not simply a case of all or nothing. The Times Educational Supplement brought out another digital video supplement on 14th May 2004, again with free CD ROM containing resources, access to a free online course, downloadable resources and a number of articles about creativity. Pupils may not get the full digital video experience of planning, filming and editing, but they can still learn the language of the medium and develop their facility with multimodal affordances by using simple software and a library of existing resources.

²³ One of the most popular digital video industry standard formats for digital camcorders

²⁴ The physical connection from the camcorder to the computer

Nationally, there has been a push in the last five years to bring digital video into schools and there continues to be interest in the possibilities. Becta has examined what is happening and continues to foster interest and enthusiasm in digital video through a range of methods, such as the Creativity with Digital Media²⁵ awards, and the ICT advice website²⁶. They have produced one CD-Rom already: 'Teaching and Learning using Digital Video', with another one, 'Digital Alchemy: Using Digital Video Assets across the Curriculum' in the pipeline this year.

Sefton-Green and Parker said in 2000 that 'ICT education is beginning to transform the traditional curriculum' (Sefton-Green and Parker 2000: 40). The recent Ofsted report, "ICT in Schools: The impact of government initiatives five years on" would seem to broadly agree, citing improvements in areas such as teaching, ICT capability, resources and application of ICT, but admitting that the gap between the best and worst ICT provision is unacceptably wide and increasing (Ofsted, 2004).

Using some of the findings of the Becta Digital Video Pilot Project, the DfES has now adapted the Key Stage 3 ICT Strategy to take notice of the emergence of digital video and are suggesting it as an optional amendment to sample teaching unit 7.1: Using ICT, although they have only produced a small selection of resources for use in the classroom.

At the more visionary end of the scale, John Potter considers that there is a case for changing the curriculum rather than simply trying to incorporate digital video into the existing curriculum:

I agree that [digital video] can't be easily analysed in terms of the ICT. It is a New Literacy and we maybe need to look at it in that way.

²⁵ <http://www.becta.org.uk/creativityawards>

²⁶ <http://www.ictadvice.org.uk/>

It is not a case of what the curriculum can do with DV it is really a question of the way DV can move the curriculum. Children are learning to "write" with movement, sound, lighting, text, gesture, speech, soundtrack etc. (and sometimes re-interpreting subjects and re-presenting ideas about them) and we need new ways of looking at it all.

(Potter 2004: mailing list post)

We do need new ways of looking at digital video in the curriculum, but a case must be made for getting pupils working with digital video now so that pupils, teachers, school managers and policy makers cannot fail to see the potential.

We need to lobby for new sample units so that as broad a range of teachers as possible can facilitate digital video work in their classrooms. It is not sufficient for hobbyists and enthusiasts to reinvent the wheel every time in order to bring a new creative element into their teaching. There is ample scope here for some of the large organisations such as Becta, Film Education, the BFI and the DfES to invest further in some high quality curriculum planning, using principles of best practice and sound pedagogy, which could be made available nationally. A highly positive aspect of the Key Stage 3 ICT Strategy has been the electronic resources which accompany each sample unit, as they can be adapted and reused, allowing for teachers to exercise their professional judgment in preparing high quality lessons.

Even given the issues that surround quality in digital video, and the difficulty in assessing such work, the ICT National Curriculum order for ICT needs to be updated in order to recognise the burgeoning of digital video. It is important that pupils' work is valued and that they have assessment criteria by which to self-evaluate. Addendums to the level descriptors are required to recognise and reward pupils and provide a stable benchmark. The QCA National Curriculum in

Action²⁷ website is an ideal forum for the sharing of digital video work which has been assessed against the level descriptors.

In the meantime, it is vital to get digital video into the classroom and to get teachers and pupils using it. The digital video community is an altruistic one, and there is already a wide range of resources online that can be adapted for use in ICT classrooms.

Staff training will be a vital factor in pushing the agenda for digital video. The Key Stage 3 ICT Strategy has made a start, but it must go much further. ICT co-ordinators need to cascade digital video skills in schools. At the recent Digital Generations²⁸ conference at the Institute of Education, Pedro Hernández-Ramos from Santa Clara University spoke about the way in which he taught digital video to trainee teachers. It seems logical to incorporate digital video competency into the teacher training curriculum, a sentiment which was backed up by the Film Education Working Group as far back as 1999.

²⁷ <http://www.ncaction.org.uk>

²⁸ <http://www.ccsonline.org.uk/mediacentre/Events/main.html>

Chapter 7: Conclusion

The recent development of digital video work in schools has prompted interest and enthusiasm in educational circles. Despite the increasing publicity, there has been a relatively small range of resources available to support digital video work in the classroom. The aims of this paper were twofold. Firstly, a thorough literature review was carried out in order to identify the key themes associated with digital video work. Secondly, a small-scale project was carried out to establish what pupils could achieve when given the approximate equivalent of a half term curriculum block to plan, film and edit a short film. Outcomes from the project were analysed according to the identified key themes in order to determine whether digital video is a valuable learning technology or just a technology for its own sake, and a number of points made about the future development of digital video work in the ICT curriculum.

The literature review identified a number of major areas of significance in the digital video field: hardware and software, teaching and learning, creativity, quality, affordances, moving image literacy and multimodality, each of which were examined in order to appreciate the scope of the debate about the value of digital video work.

Building on the multimodality theme, the kineikonic framework for analysis was discussed and used to examine one of the films from the project in order to see whether the work produced had any intrinsic value other than it being a technically and aesthetically pleasing outcome from an enjoyable project. The film contained a rich tapestry of semiotic material, which demonstrated that there was far more going in the pupils' work than detractors would suggest. Adding another layer of analysis to the film, all of the key themes were illustrated in the pupils' work, both in terms of process and content. Although

hardly conclusive evidence, the findings are at least suggestive of extrapolation to a wider body of pupils, seeming to endorse digital video as a valuable learning tool, deserving of a formal place in the ICT curriculum.

As well as simply taking its place in the ICT curriculum, digital video has the capacity to expand the creative and communicative scope of ICT as a subject area. Generally considered as a subject that privileges process over content, digital video could enable the ICT field 'to integrate more creative and artistic activities within its remit' (Sefton-Green and Parker 2000: 9). Fusing some of the traditional processes of media production with the affordances of digital video editing software environment could mean a new and more meaningful direction for ICT.

Of course, large scale ambitions are well-intentioned, but take time to come to fruition. In the meantime, it is important that digital video work in some form is included somehow in the ICT provision for pupils in order to maintain the momentum and drive the process forward, with the ultimate aim of a rethink of the National Curriculum and its attendant assessment instruments, the inclusion of digital video in initial teacher education and a formal forum for the dissemination of high quality learning resources based on best practice and sound pedagogy.

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