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# Capturing creativity using digital video

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# Abstract

This paper evaluates the use of a creative learning activity in which postgraduate student teachers were required to collaboratively make short digital videos.

The purpose was for student teachers to experience and evaluate a meaningful learning activity and to consider how they might reconstruct such an activity within their own teaching practice in their placement schools. Within UK primary schools (children aged 4 to 11 years) there is currently an increasing focus on creativity within teaching and learning and a desire to use ICT to enhance learning. This led the teacher educator in this case study to introduce a learning activity in which students created a short advert using digital video.

The nature of creativity is considered, as is the collaborative element that frequently forms an element of creative learning activities. This collaboration was an integral element of the digital video activity. An existing framework of 'meaningful learning' is used to inform the analysis of the students' responses to the learning activity.

Student responses show that they valued the experience and developed a desire to use digital video in their own classroom practice on school placements. The combination of positive student responses, the collaborative nature of the activity and the scope for it to support meaningful learning make digital video a powerful tool for supporting creative teaching and learning

# Introduction

The technology for creating digital video is becoming ever more affordable and the software to manipulate footage is becoming ever easier to use; this is manifested in the popularity of websites such as YouTube (www.youtube.com). While the National Curriculum (DfEE, 1998) for Key Stages 1 and 2 does not include specific reference to the use of digital video within the ICT programmes of study, many schools are realising the potential of digital video to enrich teaching and learning. A digital video activity was included in a teaching session with the twin aims of modelling a creative teaching activity for initial teacher trainees that they could adapt and implement in their own practice and also as a creative, meaningful learning activity within higher education. While it is difficult to separate these two elements, this paper explores how the digital video activity contributed to these aims.

# Adverts – lights, camera, action

A digital video activity was undertaken with a group of student teachers on a postgraduate, school-centred, initial teacher training programme. The activity was designed to explore the links between the use of ICT to exchange and share information (DfEE, 1998) and the use of ICT to support the teaching of English to primary children. The group consisted of 24 students, and questions asked during the introduction to the session revealed very limited experience of digital video in any capacity and none at all in educational settings. There were five Digital Blue cameras available and each student was supplied with a laptop by the training centre.

The objectives of the session were:

- to understand the nature of the exchange and sharing information element of the National Curriculum for ICT
- to be able to use digital video to support exchanging and sharing information
- to understand the range of resources available to support the teaching of English.

The task of creating an advert for any object in the room was introduced to the students. An advert was chosen as the context, due to its crosscurricular links to persuasive writing and the English curriculum (which was a theme of the day's workshops) and also because the format of adverts is generally 30 seconds or shorter, thus limiting the expectation for elaborate films requiring too much footage and editing.

The session took place over a morning and was structured in five parts as follows:

- 1 introduction to the task and brief analysis of video footage
- 2 planning the activity
- 3 shooting footage
- 4 editing
- 5 film festival.

The analysis of video footage involved watching a series of TV adverts and identifying visual and auditory elements present (moving images, still images, sounds effects, speech, voiceovers and text). These were then set as required elements in the students' work, thereby creating a set of criteria by which the finished products could be assessed. Reid, Burn and Parker (2002) argue that effective digital video work must build on a sound understanding by teachers of 'the language of the moving image' although Hernández-Ramos (2007:37) describes a digital video activity where there were many cases of quality work from students who had not engaged with this kind of process. The author recognises that an element of analysis of existing work would be beneficial in classrooms in order to support children's learning. Consequently it would be helpful for this process to have been modelled with students.

The planning stage was felt to be relevant and important, as one of the learning messages for the students was the link between visual literacy and written literacy and for them to identify similarities and differences between them. However, Hernández-Ramos (2007:36) when working with students, deliberately gave 'no time to prepare a script outline or storyboard', possibly indicating that this planning stage is not crucial to a successful outcome.

In light of findings by Reid, Burn and Parker (2002:10) that it is easy to spend too much time filming and gathering footage, the shooting footage stage was time limited. The resource-rich setting meant that all groups could gather footage at the same time and the portable nature of the equipment meant that some groups were able to gather footage from outside.

The availability of resources in school was discussed and students were asked to consider how they would manage similar activities in schools where there might only be one camera available, as was the case in the schools studied by Reid, Burn and Parker (2002).

Students used the Digital Blue Movie Creator software to download and edit their footage. It was at this stage that they had the opportunity to add the required text, voiceovers, music, etc. The fact that all films were completed within the time available suggests that the software is straightforward to use (and the students had a basic level of ICT competence to operate it). The use of easy-to-use, yet powerful, software was identified by Hernández-Ramos (2007:37) as a key aspect of students gaining a sense of accomplishment. Although other alternatives, such as Apple's I-Movie and Microsoft's Movie Maker exist, the Digital Blue Movie Creator seamlessly interfaces with the cameras and provides a good range of easy-to-administer editing tools. One benefit of using Digital Blue cameras connected directly to laptops was that footage was captured directly to the computer. The majority of digital video cameras require footage to be transferred to computers in real time, which can be quite time-consuming.

Finally, the film festival was an integral part of the process. This was an opportunity to share each other's work and to receive feedback on their work. It was also felt to be important in order to emphasise the importance of audience when making links between visual literacy and written literacy.

All of the groups managed to create an advert in the time allocated, although some aspects of filming and editing were rushed as deadlines loomed. As a conclusion to the activity described above, a plenary session was held to allow the students to reflect on what had been a busy morning. This was structured around questions, including the following:

- did the ICT support your creative learning? If so, how?
- how could this activity be applied across the curriculum?
- how important was the element of collaboration?
- did you allocate roles to each team member? If not, would you encourage children to adopt roles?
- how might you adapt it for different situations such as low resource settings or Key Stage 1?

The activity had been designed to allow opportunities for the students to work in creative ways and to encourage them to consider how the activity would translate into their own classroom practice.

#### Creativity in primary teaching

Facer and Williamson (2004:3) highlight the increasing profile that creativity is enjoying in primary education where they list a variety of initiatives to promote creativity. The Qualifications and Curriculum Authority (2008) provide a justification for the importance of creativity on the basis of improved self-esteem and motivation, preparation for life and an enrichment of school life. While creativity has become something of a buzzword, and to define it too rigidly might be counter-creative, it is helpful to have a definition which provides a guide to what creative activities are, in order to facilitate the analysis of the activity. This guide will be based on notions of creative learning in primary classrooms, but the underlying principles are believed to be relevant to initial teacher trainees as well as HE students in general.

There are contrasting views about what exactly constitutes creativity (Reid, Burn and Parker, 2002:7; Facer and Williamson, 2004:4; QCA, 2008) although some agreement can be reached on the following aspects:

- an element of originality
- having some value
- being created for a purpose.

Other elements such as imagination (Facer and Williamson, 2004:4) can easily be justified as having a role in the definition. For the purposes of this paper, the three bulleted points above have been used to encompass the notion of creativity.

The need to establish a degree of clarity about what constitutes creativity is highlighted by Reid, Burn and Parker who found practitioners who:

... equated creativity with originality and freedom from constraint.

(Reid, Burn and Parker, 2002:8).

While it can be seen that originality is an important aspect of creative work, many teacher educators would be unhappy about promoting freedom from constraint as a key factor. Indeed, there is evidence to suggest that well-defined constraints or design briefs can play an important role in leading to high-quality work (Reid, Burn and Parker, 2002:8; Hernández-Ramos, 2007:36), hence the students in this study were given a specific task to achieve.

A further consideration is raised when considering using ICT as a tool with which to promote creativity, as there is a temptation to see anything done with any relatively new form of ICT as creative as a function of its 'newness' (Reid, Burn and Parker, 2002:8; Sutherland et al., 2004a:413). This appears to be especially true of digital video; indeed it can be argued that using tools that are unfamiliar can have a negative impact on the quality of pupils' work. Overemphasising developing skills in the practical use of ICT, and appreciating the increased motivation that such tools can promote, may lead to a diminished focus on the content (Reid, Burn and Parker, 2002:9).

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Conversely, it is suggested that digital technologies can prove to be a catalyst to encourage teachers to think in more depth about how best to support creative learning activities (Facer and Williamson, 2004:5).

A response to these differing perspectives is to develop a programme of study where skills can be taught and later applied to creative projects; indeed, such a structure would exemplify good practice in ICT education. The students in this study discussed this issue as they considered the implications involved in conducting a similar activity in schools. All agreed that there would need to be a separation of the learning and application of skills for children that was not present in the students' experience.

It is something of a truism to note that technology alone will not make an activity creative; the key element in achieving this is the quality of the subject teaching (Sutherland et al., 2004b:410). However, it cannot be denied that often the use of new technologies can have a significant motivational factor on users, in turn leading to increased engagement and the likelihood that quality teaching and learning will take place. From observations, it was apparent that there was a strong link between the use of digital technology and the motivation levels of the students.

While the advert that the students created was original, it would be hard to justify it as a creative product, as it had little value or purpose beyond being shared amongst colleagues; however, the process of creating the advert is easier to justify as creative. This is particularly so in relation to the value and purpose as it allowed the students to reflect on their own learning and to consider how they might implement similar learning opportunities in their own classroom practice.

#### Meaningful learning

Karppinen (2005:233) outlines six elements that are considered to be indicative of meaningful learning (especially in relation to working with digital video). Meaningful learning is:

- active
- constructive and individual
- collaborative and conversational
- contextual
- guided
- emotionally involving and motivating.

Underpinning these elements is the belief in a constructivist approach; that learning is the:

... process of constructing knowledge is a process of meaning-making, not of knowledge-reception.

(Karppinen, 2005:238)

This constructivist approach is evident in the students' activity, for example by inviting them to reflect on the activity in relation to their own practice, they were being given the opportunity to be active in their own learning. Another example would be that the learning had a clear context so was clearly related to their own practice in primary classrooms.

It is believed that the aspect of collaboration and conversation was particularly relevant in relation to this study because of the way the task was designed and also because of the way in which the use of ICT supported a collaborative approach.

# The role of ICT in collaboration

An understanding of how ICT can contribute to learning means that more informed decisions can be made regarding its incorporation into curricula. There is a variety of frameworks through which this can be analysed (DfEE, 1998; DfES, 2004; Loveless, 2002:3; Loveless, 2007:7); however, one theme that can be found in all these different frameworks is that of ICT as a tool to facilitate communication or interaction. It is important to recognise that this can be interpreted as communication between distant users of ICT (for example, via email) or between users of one piece of ICT equipment (for example, a pair of pupils using a digital video camera). Likewise, interaction can be interpreted as interaction with ICT or interaction between users of ICT.

Facer and Williamson (2004:18) summarise this by describing the potential of ICT to allow users to:

... externalise ideas through collaboration.

(Facer and Williamson, 2004:18).

In this study, the communication and interaction took place between groups of users who were sharing ICT resources to complete a collaborative task.

Collaboration is not unique to ICT-based activities; indeed, Loveless (2007:12) recognises it as having a key role in creative learning. Loveless (2007:12) also outlines the notion that the process of collaboration implies that understanding is 'transformed' through this process. The use of digital video in creative learning and in particular the choices that need to be made as part of the editing process, mean that it is hard to engage in a digital video project without engaging in some degree of collaboration. There is also an interesting link between the transformation of the users' understanding when working on a digital video project and the transformation of the material in the editing stage. Facer and Williamson (2004:4) outline a definition of collaboration that makes reference to transformation of ideas leading to new knowledge, shared meaning, reflection and justification of ideas. It is argued that digital video is a tool that can easily facilitate these elements of collaboration.

Collaboration has been recognised by schools which have used digital video in practice; indeed:

more than half of the schools involved mentioned the fact that the editing work undertaken in groups provided a forum for discussion which was both purposeful and pupil centred.

(Reid, Burn and Parker, 2002:10)

The study by Reid, Burn and Parker (2002:10) also found that teachers became adept at managing group work to encourage collaboration, for example, by setting up roles for the activity (for example, director) and swapping children into and out of these roles. Roles were not established for students undertaking this activity and the impact of this formed a topic for reflection at the end of the session.

#### What impact did the activity have?

Student feedback has been used as a means of evaluating the effectiveness of the activity. This will be used as evidence to support the inclusion of digital video in wider practice. Feedback is in relation to their practice in schools and is being used as a measure of their meaningful engagement with the activity.

The students involved are asked to provide feedback on their sessions on a termly basis. In the case of their ICT sessions this meant that they were providing feedback on three, full-day ICT sessions, of which the digital video session formed one half of one day. The feedback relating to the digital video work was very positive. Students were asked:

What would/have you used in school from these sessions?

Out of 21 responses, 10 mentioned the use of digital video. This represents nearly half of the responses, although the digital video session only represented one-sixth of the time spent with the students.

In some cases the students provided a rationale for why they would want to use digital video in school. Two students mentioned the collaborative nature of the activity, which supports the argument that there were elements of the activity that represented meaningful learning. One student mentioned the importance of having an audience for the finished product and how this would motivate children. This was of interest, as it was believed that the film festival would provide an example of how the finished product could be shared in a school setting, rather than being worthwhile in itself; however, it further supports the notion that the activity was a creative one. One student referred to the ease and speed with which results could be obtained (ideally these gains could be used to focus on content rather than process).

Four students referred to the fact that the activity had been enjoyable and how this had provided a motivational stimulus. The quantity of feedback from the students relating to the digital video session appears to indicate that the students valued the session. However, what is less certain is whether the students valued the session because of its relevance to their aim of achieving Qualified Teacher Status or because the nature of

the activity meant they were engaged in meaningful learning. The inability to separate out these points is a weakness of the evidence being used.

Becta (British Educational Communications and Technology Agency) (2003:2) in a review of the literature, notes a number of sources that identify increased motivation as a key benefit of using digital video in the classroom. Personal observations of student engagement during the session would support the assumption that increased motivation led to the large proportion of references to the digital video session in the students' feedback.

Reid, Burn and Parker (2002:6), provide further support for the importance of motivating pupils. They note there is:

...widespread evidence from the pilot that using digital video dramatically increases the motivation for learning and engagement of a wide range of learners.

Likewise, Karppinen (2005:244) makes the link between motivation and emotionally involved learning. While it can be argued that the students were motivated during the digital video session and there is research evidence to suggest that pupils will be motivated if they work with digital video, there is a question over whether the students will actually go on to use digital video in schools despite the number of comments to this effect in their evaluations. This point is eloquently made by Hernández-Ramos (2007:39):

It must be acknowledged that these kind of short, intensive experiences by themselves are unlikely to turn future teachers into users of technology in their classrooms, despite the fact that the vast majority of participants report high levels of satisfaction and motivation to learn more about digital video.

(Hernández-Ramos, 2007:39)

While there was a high number of respondents who expressed a desire to use digital video in schools, Hernández-Ramos (2007:34) questions the number of students who will actually go on to use it in practice once qualified. But, without experiences such as the one outlined in this study, students are unlikely to develop confidence with technology with a diminished sense of anxiety about integrating it into practice. Furthermore, Hernández-Ramos (2007:39) highlights the implication that sound pedagogical skills and a good working knowledge of digital video are essential if digital video is to be successfully incorporated in classroom teaching.

While the evidence from the study only provides a suggestion that the students will use digital video in their own teaching, it is strongly believed that the use of digital video represented meaningful learning for the students.

# Implications for practice

The feedback obtained from students, along with the level of engagement noted while they were working on this project, indicates that the students found the activity worthwhile and provides some evidence to support the idea that the activity was creative and meaningful. Furthermore, the evaluations indicate that enjoyment of an activity appears to play a strong role in encouraging students to transfer their own learning into classroom-based practice. In addition to this, I would argue that the collaboration and interaction involved in the activity were crucial to its success, as students' learning was enhanced by the transformation of their understanding through interaction with their peers.

Despite the benefits outlined above, the activity was not without its conflicts and areas for development. Two aspects that present themselves for attention before this activity is delivered again are both related to the post-activity discussion:

- students should be made aware of the difference between using new technology and creativity. Activities will need to be developed that will encourage them to identify what aspect of the new technology is contributing to supporting creative learning rather than focussing on the technology alone.
- students will need to be encouraged to reflect on the activity and to think about how they could apply their learning to crosscurricular activities which promote creativity in the classroom.

### Conclusion

The use of digital video with students was enjoyable for both students and tutor. It allowed students to engage in a creative activity while experiencing the modelling of a creative approach to primary teaching.

Students were able to complete their activity within the time available, which, coupled with evidence from observing the students, indicates that the technology is accessible and inclusive. The use of digital video does not require advanced ICT skills and is applicable to a wide range of students.

It is important for initial teacher trainee students to realise that digital video should not be seen as an ICT activity, rather that they should see the value of it across the primary curriculum. Like many aspects of ICT, it is difficult to work with digital video without having some content that lies outside the ICT curriculum, making it an ideal tool to be utilised in other curriculum areas. This point is emphasised by Hernández-Ramos (2007:37) who outlines the strength of the link between digital video and 'interdisciplinary collaborations'.

In relation to Karppinen's framework, this digital video shows many characteristics of meaningful learning. This is supported by evidence from feedback from student evaluations and from tutor observations. Due to the ease with which the technology can be used and its apparent benefits to student engagement and learning, the author suggests that digital video activities show potential for fostering meaningful, constructivist learning with all students.

#### References

All websites accessed 06.06.08.

Becta (2003) What the Research Says about Digital Video in Teaching and Learning. Coventry: Bectahttp:// partners.becta.org.uk/upload-dir/downloads/page\_documents/research/wtrs\_digitalvideo.pdf)

Department for Education and Employment (1998) Teaching: high status, high standards. *Requirements for the Courses of Initial Teacher Training*. Circular 4/98. London: DfEE.

Department for Education and Employment (1999) *The National Curriculum for England: Key Stages 1 and 2.* London: DfEE.

Department for Education and Skills (2004) Excellence and enjoyment: learning and teaching in the primary years. *Learning to Learn: Progression in Key Aspects of Learning*. London: DfES.

Facer, K. and Williamson, B. (2004) *Designing Technologies to Support Creativity and Collaboration*. Bristol: Futurelab (www.futurelab.org.uk/resources/documents/handbooks/creativity\_and\_collaboration.pdf)

Hernández-Ramos, P. (2007) Aim, shoot, ready! Future teachers learn to 'do' video. *British Journal of Educational Technology* 38(1): 33–41.

Karppinen, P. (2005) Meaningful learning with digital and online videos: Theoretical perspectives. *AACE Journal* 13(3): 233–250.

Loveless, A. (2002) A Literature Review in Creativity, New Technologies and Learning: A Report for Futurelab. Bristol: Futurelab (www.futurelab.org.uk/resources/documents/lit\_reviews/Creativity\_Review.pdf)

Loveless, A. (2007) *Creativity, Technology and Learning: A Review of Recent Literature.* Bristol: Futurelab (www.futurelab.org.uk/resources/documents/lit\_reviews/Creativity\_Review\_update.pdf)

The Qualifications and Curriculum Authority (QCA) (2008) (www.ncaction.org.uk/creativity/).

Reid, M., Burn, A., and Parker, D. (2002) *Evaluation Report of the Becta Digital Video Pilot Project*. Coventry: Becta. (http://schools.becta.org.uk/upload-dir/downloads/page\_documents/research/dvreport\_241002.pdf)

Sutherland, R., Armstrong, V., Barnes, S., et al. (2004a) Transforming teaching and learning: embedding ICT into everyday classroom practices. *Journal of Computer Assisted Learning* 20: 413–425.

Sutherland, R., Robertson, S. and John, P. (2004b) Interactive education: teaching and learning in the information age. *Journal of Computer Assisted Learning* 20: 410–412.