HISTORY, COMPUTERS AND VIDEO

Problems with implementation and in-service in technology-related fields of education

The recent series The American Civil War has been the inspiration for experimenting with presentations executed with desktop video in history classes at De La Salle College, Cronulla in New South Wales. Using Amiga computers and the school video camera, students have been able to record the results of their investigations of the experiences of the young Australian soldiers who went off to war in 1914 on the computer screen. Through these processes, students are able to make a permanent and public presentation of their historical inquiries and create resources that their peers can use.

RATIONALE

In our present society, most people's knowledge of the past comes from film and television but the medium of communication for most professional historians is the written word. If history is to maintain its appeal in schools, but at the same time keep in contact with the findings and methods of historians, then it is our duty as history teachers, to train our students to re-tell the stories of the past in the medium of the future.

History is an inquiry-based discipline. The results of these inquiries, students communicate in their presentations. Over the years, I have witnessed many good presentations drawing on much original and interesting primary source material. But once the presentations were given, they were gone, lingering only in memory. Using computers to digitise the source material the students had gathered, shaping the resultant files with paint programs and using presentation software to link the material together offered a way of making those presentations permanent and public, especially when transferred to video.

In addition, desktop videos produced in this way provide students with new opportunities for developing other valuable historical skills such as empathy (i.e. for getting in touch with how people in the past experienced the events they went through). The process of scrutinising the photographs, documents and other memorabilia the students discovered in preparation for their video presentations often results in new perceptions about, and feelings for, the people who underwent the terrible experiences the students are re-creating.

Furthermore, through the experience in putting together videos by computer, students learn to master significant aspects of modern media. They learn the skills of telling stories through images, how to balance words and pictures as well as the ways in which technology can extend our current repertoire of oral and written communication.

Because the process of putting together a program requires the pooling of a significant range of skills, desktop video is very well suited to the development of co-operative learning strategies. Since the nature of the resources the students create can be interactive, the learning opportunities for students are further extended. The experiences described here helped to create a strong motivation environment for learning, since the resources that students created can be used by their peers to further their own learning.
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PROCESS

The students involved in the evolution of this program are Year 11 students attending a senior co-educational high school and studying the NSW Modern History course. Many of the students have used computers before, but mainly for word processing or games. All students adapted easily to the processes described below.

Working in groups, students were charged with the task of investigating the effect of the World War I on the lives of young Australians (often the grandparents of group members) both at the frontline and back here in Australia. Using photographs, documents and various memorabilia as well as interviews, letters and diaries, the impact of the war on the lives of individuals was reconstructed and through this, insight into its broader context was gained.

From the beginning the decision was taken to chronicle the results of the investigation on computer. This process began with storyboarding and scripting. Previous experience had taught us that careful planning of storyboards and constant re-writing of scripts ensured a much better final product.

Storyboarding and scripting were paralleled by the selection of appropriate visual source material drawn from the photographs, postcards, line drawings and various objects the students had gathered. As an interesting bi-product, concentration on visual evidence often caused the students to re-focus their investigations in ways that the exploration of written evidence does not.

All the visual documentation was digitised using the school video camera connected to an Amiga 2000 through an analogue to digital converter and saved to disk. The resultant images were then edited using Dpaint. Where necessary, Dpaint was also used to supplement the digitised images with drawings, maps and diagrams. The resultant image files were linked using either Scala or TV Show which were also used to effect titling and credits as well as generating ‘wipes’ between the images.

Some students quickly learnt to use the animation capacity of Dpaint. With this facility, they were able to include animations of soldiers coming up to the trenches and crossing no-man’s-land. By stamping each of the frames taken from a movie about ‘going over the top’ in the Battle of the Somme, they were also able to create a video-like presentation of the worst moment of trench warfare. Adding music drawn from the time also enhanced the impact of the presentations.

Completed scripts were recorded on a multi-track tape recorder allowing the integration of sound effects and
Partnership learning also involved the learning and sharing of skills and concepts between teachers and students. It has been our experience that in the areas of setting up computer hardware, adapting computer software and using video that certain students had competencies that put them in the role of teacher and the ‘teacher’ in the role of ‘student’.

CONCLUSION
These techniques have wide application to a number of curriculum areas particularly where student presentation of material is involved. Some students have already, under their own initiative, undertaken presentations in other subject areas using the methods outlined above. The fact that they can so easily take ownership of the technology offers enormous opportunity for the adaptation of these techniques to so many areas of student learning.

music with the narrative. A tape recorder was then connected through an audio jack to a VCR while the computer program was fed through a genlock onto the VCR so that the final presentations could be made on the classroom video monitor. Scala software proved especially beneficial at this stage since transitions between shots could be controlled by mouse.

Dumping to video has an added advantage. It provides the students with a product that they can return to those members of their families, or the general community, who helped them gather the original research material.

Discussion in all of these tasks, the students proved to ready learners and competent users—learning best from one another. Students were encouraged to learn from one another co-operatively in a partnership of learning. Those students who had research–library skills were paired with those who did not. Off-computer activities were directed at developing group dynamics.

While many students had had experience of computers for games and word-processing, few had used the computer as a creative tool. Here was an opportunity for shared learning: the teacher acting as facilitator on the more difficult task of coding; individual students contributing their skills in designing layouts, digitising visual material and sequencing the various components into a whole. A member from each group spent an afternoon learning how to digitise photographs with the school video camera, use a computerised paint program and save their work to disk.

These students then acted as peer tutors for other members of their groups. This interaction was supported by classroom organisation which is set up for group work. Three computers are located at strategic points within the room so that each group is able to gain ready access for digitising, editing text or using paint programs. Such an arrangement also gives me fluid entry into the activities of each group to assist in the planning and execution of ideas as well as an opportunity for monitoring the progress of individuals within each group.

POSTSCRIPT
The illustrations are by two students, David Miller and Glenn Piper, on the experiences of David's grandfather.

Most of the material used by the students is original source material they obtained from relatives etc. The students also used other materials to supplement their original material. Advice was sought to ensure copyright of these materials was not infringed. ♦