

## **DARTFISH CROSS-CURRICULAR CASE STUDY** by Matt Topliss of The Hayesbrook School and Kent Schools Advisory Service

*How can we make our students more independent in their learning?  
How can we improve their evaluation skills of their own work in all subjects?  
How can we free staff to actually teach instead of demonstrate?*



Dartfish is a video analysis software programme that was originally designed to enhance and improve performance in Sport. It has been trialed extensively within PE and now other subjects have shown that here too Dartfish can be highly effective in the teaching and learning in many subjects.



Research is currently being undertaken in Science, Design and Technology and Art to assess the relevance of the technology in these areas. As well as these three Drama, Dance, Geography, Media Studies, History, Behaviour Management, Management of Additional Educational Needs and the Training of Teachers have seen some use of Dartfish to enhance their delivery. These are exciting times as the software can be used across Key Stages 2,3,4 and 5 from primary schools to Sixth Form colleges.



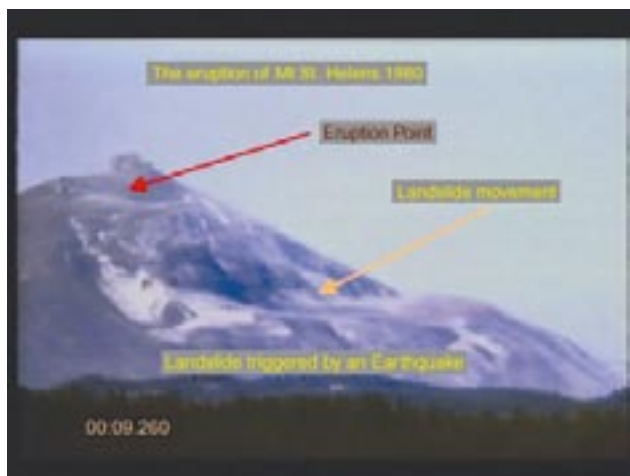
The software allows teachers to hand over the learning to the students who can make decisions on what they are seeing either from their own work, the work of others in the group or pre-prepared teacher demonstrations.

## Technology

A good example has taken place in Technology. A group are working on the design and manufacture of a wooden box. Dartfish can be used to produce a video task card that includes visual video of the step needed to mark out the joints on the box as well as using audio teaching points to guide the students along the way. The group will then follow the video releasing the teacher to move around the group assisting where it is needed instead of demonstrating at the beginning of the lesson and vital points being forgotten or lost. Time is saved as the video can be slowed down, stopped and restarted by a teacher who is now free to answer questions and assess learning as it happens.

## Teacher Training

Teacher Training and Behaviour Management can be aided by Tagging elements of the lessons and good practice so that CD ROM resources can be quickly produced, viewed, analysed and learnt from. Video Portfolios can be produced as evidence against QTS standards and feedback on lesson observations is permanent and relevant for trainees, established staff and mentoring.



Above is footage used as part of Geography lesson on the Eruption of Mount St. Helens in 1984. Students can clearly see the cause of the eruption is the labelled landslide.

## Sciences

In the Science Lab gone are the days of the teacher demonstrating a practical that fails or happens too quickly for the class to observe. Using Dartfish practicals are guaranteed as chemical reactions can be filmed before the lesson and placed in playlists. Time Delay can be used in demonstrations of experiments so that students get immediate instruction on the sections of the experiments that they are undertaking.



Above is a Producer Task Card that is used in AS level Science to teach an Aseptic Technique. The group had had difficulty with a complex lesson and Dartfish has been used to aid the demonstration of the technique whilst the group are working themselves.

## Arts

In the Art room complicated actions can be slowed and sketched by students who then produce detail from the moving image they have been asked to draw. In Drama Coursework can be recorded and slowed, reviewed and evaluated by performers. Facial expressions can be copied and exemplar material can be viewed at the click of a mouse by independent learners. Landslides and volcanic eruptions have been slowed in Geography and re-enactments of famous historical events can be acted out and filmed and reviewed by students. Presentations can be recorded, edited and stored by Dartfish.