

# Video conferencing in the Classroom

# Case Studies of Effective Practice

## Case Study Three The Ridings High School

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# ICT Research

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## School background

The Ridings is a mixed comprehensive secondary school which caters for students from Key Stages 3 through to 6th Form (11-18). The school is located in a semi-rural area on the northern outskirts of the Bristol conurbation. This is a large school with 1850 students on roll and 130 teachers (FTE).

The students are mainly drawn from white UK backgrounds with just under 5% from non-white heritage. A recent school inspection described the Ridings as a very good school with excellent leadership and above-average educational standards as well as commendable provision for personal and social development. The school achieved Technology College status in 1998. Each faculty is well equipped with up-to-date networked computer facilities or is in the process of upgrading older systems. A recently completed technology block houses a number of fully equipped networked ICT rooms, conference suites and a fully equipped CAD/CAM facility as well as a dedicated video conferencing room.

## History of video conferencing in the school

The initial impetus for using video conferencing came from a desire to develop further existing links between the 6th Form and the University of Bristol. In 2002 the opportunity presented itself to arrange 'virtual tutorials' with history and politics lecturers, replacing the need for them to physically visit the school.

These early explorations were largely driven by an enthusiastic (and still committed) staff member who saw in these exchanges a vision for the future. The school principal also took an active interest in these new initiatives and as word spread, staff from other faculties began to explore its potential. Since that time the use of video conferencing has grown to encompass all key stages and several subject areas, with the number of faculties which are beginning to explore the technology steadily increasing. video conferencing activity now ranges from regular contact with subject experts and with other schools in the UK to contact with international schools, organisations and institutions. The involvement of global-leap.com, which offers a range of video conferencing opportunities and support to schools, was cited as being critical to this process.

In May 2005 the school will attain recognition as an International School which will incorporate, from 2006 onwards, an International Baccalaureate-based curriculum for post-16 from 2006. Video conferencing is seen as core component of these developments.

## Philosophy of video conferencing use

Video conferencing is seen as offering the potential to expand the horizons of students by exposing them to new and different experiences, knowledge and perspectives. From an early position where

video conferencing was a relatively isolated activity developed by one or two enthusiastic teachers, the policy is now towards a much more integrated approach.

This is regarded as a natural development of the school's policy towards the use of ICT to support teaching and learning. ICT is embedded into the curriculum across all year groups and curricular areas. Video conferencing sits within this more general application of ICT and is now regarded by many teachers not as an exotic extra but as a real tool for learning. This fits within a broader culture of innovation and creativity which is core to the school's teaching and learning philosophy. These developments, initially achieved through a combination of supportive and the enthusiasm and commitment of a small number of 'champions', are increasingly becoming more embedded into the policy and practice of the school as part of its emergent vision of the Ridings as an 'eLearning School'.

## **Video conferencing equipment and location**

The main video conferencing equipment is a fixed system located in newly-built technology building. The video conferencing room is large enough to hold comfortably two classes of students. The conference is viewed on a large projection screen.

## **Current patterns of use**

While it was the history faculty which first began the explore the educational capabilities of video conferencing, it is now used to support a broad range of subject areas - geography, politics, citizenship, German, French and PE - with other subjects showing an interest in examining its potential. As a consequence, the frequency of video conferences has risen steadily, for example while there were around six conferences in the whole of the first year, more than twenty were scheduled in the first term of the second year.

The link with Bristol University still exists, but the school now communicates with a wide variety of UK organisations and institutions, which include the National Archives, the Imperial War Museum, the Cabinet war rooms and the Wellcome Trust, as well as with subject experts in other local authorities.

A major use of video conferencing (particularly in the lower school) is organised on a whole-class basis. However a broad range of other arrangements – class-to-class, group-to-group and individual-to-individual – have been employed. These include regular links with a Norwegian school as part of a Comenius partnership as well as exchanges with students at schools in America, Russia, Germany, Italy, Australia, and France. Teachers at the school also use the technology to plan joint sessions with staff at the far-end locations.

## **Examples of effective practice**

A regular use of video conferencing in the school is to facilitate communication with experts at a variety of locations. An example of this approach was an observed conference – the first video conferencing experience for his group of students - which formed part of a Year 8 history topic focusing on regional economic activity. The session was led by an LEA subject advisor in West Yorkshire. Prior to the conference the students had examined aspects of economic activity in their local district and similar factors in the W. Yorks area using web materials provided by the advisor. The video conferencing session, organised via global-leap.com, was designed to build on these discussions, examining similarities and differences between the two areas, the former being largely characterised by farming or the shipping industry.

The conference (involving some thirty students) began with a brief résumé of key issues illustrated with a series of slides displayed on the large screen. This was followed by an open question and answer session between the students and the far-end tutor, who periodically updated a 'web-chart' which charted key points raised by the students. Despite the 'distance' imposed by the technology,

the advisor was able to employ a range of pedagogical styles to involve and encourage students' participation.

Although this was a reasonably large group and a session which lasted for approaching an hour, the majority of students appeared to be attentive and involved throughout the session. Indeed in talking to students afterwards a number expressed a wish that the conference could have lasted longer, allowing them time to further develop their thoughts. Post-conference discussion also revealed that most of the students (a random selection of those involved) had clearly learned a good deal from the session. The students unanimously rated the session as '9 out of 10' in terms of both enjoyment and learning.

It was quite fun and exciting to use the technology – and listening to someone different who new all about the (W Yorks) area was better because (our) teacher could only learn about it from books

Year 8 student

The 'near-end' teacher took a facilitating rather than instructional role during the conference, clarifying questions, selecting students to ask or answer questions and so on. This 'back seat' role also allowed the teacher to monitor students' behaviour more than would typically be possible. He attested afterwards that a number of students who were normally reluctant to engage in class discussions were much more engaged during the conference. Some of these had asked questions or offered thoughtful responses, indicating that a number had engaged in greater reflection and 'high level thinking' than would typically be the case.

Kevin didn't really want to do it at first, but in the end he asked (the advisor) a question

Year 8 student

Students and staff at the school have also recently participated in a number of high-profile international events, most recently a global link with a school in Karachi, Pakistan, witnessed by (and reported on) BBC News 24 as part of its recently launched 'World Class' ([www.bbc.co.uk/worldclass](http://www.bbc.co.uk/worldclass)) initiative. Other conferences have included an exchange with an MEP, the Turkish Ambassador in London, an interview with a US senator and a UN-sponsored global conference.

The latter was one of the most impressive recent events, a day-long global forum in which 6th form history and politics students from the school – the sole UK and European representatives - joined other young people from around the world to discuss the issue of international co-operation on AIDS.

It really put things into context [...] we hear the statistics all the time about how much AIDS there is in Africa [...] but until you actually speak to people (who have experienced it) you don't really realise how it affects people's lives [...]. You would never be able to get the same kind of information from reading a book

Year 13 student

As part of a second Comenius project, other international exchanges have included a class-to-class exchange between Year 9 geography students and their counterparts in a Japanese school, and discussions about the Third Reich between German students and Ridings' 6th Formers, who were also involved in discussions with US high-school students in Georgia on a series of issues relating to cultural and religious identity and practice. Students involved in the latter conference commented that the session had helped them to move beyond stereotypes about 'Americans from the Deep South' through a process of dialogue in which cultural similarities, as well as differences, were revealed. The conference concluded with students in both countries independently negotiating a series of topics for future discussion.

'The conference gave an insight into things we just wouldn't know if we didn't have the opportunity to do video conferencing'

Year 12 student

## Management of video conferencing

### Co-ordination

The co-ordination of video conferencing activities has until recently mainly fallen to the member of staff who was the first 'champion' of the technology. As the frequency of video conferencing and the number of faculties involved has increased, a number of others have become involved, so while the 'lead teacher' retains the overall coordinating role, around half-a-dozen staff are now involved in its management. Members of this (currently relatively informal) group offer support and training for interested staff, help to identify appropriate partner schools or sources of expertise for video conferences which match curriculum needs.

### Integration into the curriculum

At the time of writing the position of video conferencing in relation to curriculum planning was in a state of transition, from an approach which mainly centred around the organisation of 'one-off' events to a much more embedded model. Thus while video conferencing sessions have hitherto been targeted as specific elements of a curriculum topic, the further integration of the technology will involve encouraging teachers to consider opportunities for its more regular inclusion. This shift is characterised, for example, by the incorporation of video conferencing in schemes of work for history, with the languages department soon to follow suit.

### Mainstreaming

Although video conferencing in the school is already 'high profile' at an institutional level, the task now is to move it into more mainstream use. This desire to broaden video conferencing usage necessarily raises the issue of how best to achieve this goal. The general – and deliberate - approach to this taken is to encourage rather than require faculties and staff to embrace video conferencing, with a concomitant emphasis on the need for the use of video conferencing to be 'meaningful and relevant'. Opportunities to witness or try out conferencing, coupled with the modeling of good practice by those who have used video conferencing, represent important contributions to this process.

As an example of this more embedded approach, the languages department was reported to offer an effective model, having established a regular schedule of sessions with a school in Germany for authentic language exchanges, with plans to extend this to schools in France and Spain.

Video conferencing is a global gateway, a portal which facilitates immediacy [...]. In the daily run of school it can be hectic, really busy and tightly schedule, but with video conferencing (students) can take an hour out to go and talk to Germany about the 3rd Reich and then go back to their regular lesson. It gives [learning] an incredible, innovative edge.

Teacher

### Technical issues

Video conferencing connectivity is via a dedicated (ISDN4) line. Internet access is via a high-speed (2Mb) connection provided by South-West Grid for Learning (SWGfL), moving to 10Mb in the near future. Bridging between ISDN and internet-based (IP) connections is facilitated by global-leap.com.

Currently the technology is robust, with relatively few technical problems of any serious nature. Regular users of the equipment are familiar with the various system controls, are confident in basic procedures (for example making connections between the school and far-end locations) and minor troubleshooting. A full technical team is available in the case of any major difficulties.

### Future plans

Plans for the immediate future include increasing the number of video conferencing units with an eventual aim of installing a system in each faculty, which will meet the growing demand on the current facilities and enable much greater flexibility of use.

A recently formed 'Innovations' group is exploring a range of ideas to position the school as an eLearning institution which sets it apart from other schools in the district. The attainment of International School status is also helping to drive these developments, with video conferencing forming a central plank to both projects. The full and enthusiastic support and involvement of the senior management team, curriculum leaders, the governing body and parents is critical to these developments.

We have come a long way [...] but I won't be happy until it becomes as normal as switching on a TV or using a video in a lesson

Teacher/video conferencing co-ordinator