

SECTION D:

Making Contacts with other Schools, Providers, Experts and International Links



Whatever your situation, there will be a time when you need to find someone to video conference with. So how do you go about making contacts?

THE GLOBAL LEAP WEBSITE

The DfES 'Video Conferencing in the Classroom Project' was set up to explore the potential of this communication tool, to facilitate pilot projects with a range of schools and providers, and to share good practice and advice with colleagues across the UK through training, conferences, written information, and direct support to individual schools. One part of the project was to develop www.global-leap.com as a resource for teachers wishing to develop the use of this powerful communication tool across the UK, and internationally.

THE WEBSITE INCLUDES:

- **A directory of schools** across the UK and internationally with video conferencing capability wanting to develop video conferencing in their classrooms. Any school in the UK or Internationally which can make a successful video conference connection can register their details on the Global Leap directory, and then take part in the project activities and receive regular newsletters and information from the project.
- **A monthly programme of video conferencing activities and events** which are offered to schools by a range of colleagues and providers taking part in the project. These lessons can be booked on line. The number and range of these activities and events are growing all the time. If your school has a particular area of expertise, for example an advanced skills teacher or experience in a particular area of special needs provision, that they would like to share with colleagues and pupils in other schools via video conference, please send details of your sessions to global-leap.com so that other interested schools can see what you are offering and link up with you. Customised sessions can also be posted on the events pages for other schools to sign up to.
- **Contact details of video conference activity providers** around the world who deliver interactive lessons directly into the classroom. Some have off-the-shelf sessions ready to deliver, some are prepared to customise these sessions to suit your specific requirements and some may be interested in taking part in joint projects.
NB Global Leap has not worked with all of these providers. It is the responsibility of each school to assess the quality of the provision offered and its relevance to the National Curriculum. Please note that some providers charge for their video conference events.
- **Information and tips** on successful video conferencing
- **Information and contacts** for other projects
- **News on related projects** - schools can also share their own project successes and ideas with other colleagues through the website and find partners to work with, both here and abroad.

- **Links to other useful websites.**
- **Technical advice and support**, on request and by arrangement.
- **Professional development and training**, by arrangement; either via video conference to your school or, if enough notice is given, a personal visit might be possible.

The 'Video Conferencing in the Classroom Project' museums and galleries programme has enabled a range of UK museums to offer lessons directly into the classroom. Global Leap offers a daily diary of events available to schools registered on the website www.global-leap.com.

The education departments in our museums often only have quite small numbers of staff available to cover an extensive programme of activities for schools, including visits from school groups. However, they have identified a number of days/times to support the 'Video Conferencing in the Classroom Project'. They try to be flexible within those allocated days to meet the individual needs of schools, but at the present time it is difficult for them to arrange days and times to order. This of course may change as further funding and additional staffing become available.

Please do not expect our colleagues to rearrange their busy diaries to accommodate your class. Try to be flexible, and if necessary negotiate lesson/room changes with one of your own colleagues and make full use of the sessions as listed on the website.

AUTOMATED TEST FACILITIES

An automated test facility offers an opportunity for you to test your video conferencing system by dialling into an 'unmanned' far end ISDN or IP address which will have a live picture or a video running.

Global Leap's automated test facility numbers are ISDN +44 (0) 0208 868 8963, or IP 80.68.35.5.

Many vendors also have their own automated test facilities, so check what facilities they offer when you buy your system.

BEING PROACTIVE

It is well worth looking for your own experts. Many individual organisations often have access to video conferencing equipment for their own business purposes, but have simply not thought about exploiting the resource to develop relevant contacts with schools across the country.

The potential for direct input into the classroom from local and national companies and organisations is enormous. For instance, you could set up video conference sessions to discuss careers and employment, business, marketing, industry, health, local government and politics and many more topics.

If you find a successful link to support your curriculum, share it with other schools in other parts of the country. Interested organisations can offer sessions further afield to a wider audience via www.global-leap.com.

BEING FLEXIBLE

You need to be flexible as well as pro-active to find suitable video conference links. It may require some extra detective work, but the rewards for your pupils are worth the effort. To reject a willing partner from a school in another country on the grounds that “we don’t do French on Tuesdays” is rather a short-sighted response, but unfortunately not unheard of.

DEVELOPING EXISTING PARTNERSHIPS

Most schools will already have strong existing relationships and long-standing contacts with partner schools. Using video conferencing as a communication tool can often add another dimension to these relationships.

Sometimes it might be worth considering purchasing a second piece of video conferencing equipment which you can then lend directly to a partner school, or a number of partner schools. This is often the best option to consider if you want to set up video conference links with a school in Europe which doesn’t already have equipment, and the potential benefits can justify the expenditure.

Other useful sources of help and advice for finding partners:

- Many schools seek to form links with others in Europe by taking part in a Socrates - Comenius Project. European-funded initiatives involve schools in three or more countries linking to work on cross-curricular projects. These often involve real visits and are ideally suited to including video conferencing as part of the project. For more information, visit <http://www.britishcouncil.org/education/schools/index.htm>. You may find it useful to contact the International Education Office in Gloucester, Tel +44 (0) 1452 427 204 for advice about some of these initiatives and other sources of funding.
- Funding is possible to support a North/South Project through The Department for International Development <http://www.britishcouncil.org/education/schools/index.htm>. The International Education Office in Gloucester (details above) can give further details.
- Your Local Education Authority may have advisory staff who can give you details of any relevant international links, projects or initiatives that already exist in your area.
- Local technology colleges and associated specialist schools, through the Specialist Schools Trust, www.tctrust.org.uk, are often involved in the development of curriculum video conferencing. They have contacts in the UK, Europe and worldwide.
- The Department for Education and Skills has a number of initiatives which enable schools to develop exciting projects in relation to ICT, for instance Excellence in Cities, www.standards.dfes.gov.uk/excellence, which could be a good starting point in your search for a partner school.

- Ten Regional Broadband Consortia are establishing Broadband technical services across geographically-grouped LEAs, where local/regional video conferencing is being promoted. See the Building the Grid website:
<http://broadband.ngfl.gov.uk/>
<http://buildingthegrid.becta.org.uk/index.php?loclid=143#res94>.
- Twinning groups. Your town may already be twinned with another town in Europe. These links might be a good starting point for finding video conference contacts. Contact your Local Authority.
- Using a general internet search to find contacts. Put in a search for 'your topic' + video conference + education. Follow up the results.
- Other useful sites include:
www.kn.pacbell.com
www.globalschoolhouse.org
www.un.org/Pubs/CyberSchoolBus/
<http://www.schoolsnet.com>
www.britishcouncil.org
www.ilearn.org
www.globalteenager.com

Other international websites and organisations that might be useful in finding partners are listed on www.global-leap.com.

If you find a website that might be useful, please send it to www.global-leap.com so that it can be added to the list and share the information with other colleagues.

SHARING EQUIPMENT

Finally, if you manage to find a contact but they do not have video conferencing equipment, they may be able to arrange to use someone else's video conferencing facility or to borrow some equipment, providing you already have suitable connectivity in place at your school.

Working together, you could try a number of approaches:

- The RBC or LEA in your contact school's area should have details of schools with video conferencing capability. One of these schools might be prepared to let you use their system. You could visit their school site with your class. Many areas have City Learning Centres (CLCs), where they would be delighted to facilitate your video conference link, by arrangement.
- Universities or higher education institutions usually have video conferencing facilities and may be prepared to make them available to your intended partner school. They may even want to join the project in some capacity.
- Video conference equipment resellers and suppliers have access to 'rooms' all over the world which they hire out to businesses by the hour. Identify and contact a video

conferencing company or reseller near you, or near your partner school, and approach them with your request. You might find that they will support your project for a reduced charge, or even free of charge. This is often the most practical and feasible solution for some parts of the world, where video conferencing technology may not be generally available in the schools.

- Local businesses may have video conferencing facilities they would let you use. Use the local press to make an appeal or approach parents who may have connections with the companies. Local businesses are an excellent source for supporting many curriculum areas with opportunities to access experts from a wide variety of people in workplace environments.

Continued exploration and evaluation of international connectivity issues and practical and effective classroom use of video communication

This section reflects some of the recent experiences gained by the 'Video Conferencing in the Classroom Project' working on international links. It is not intended to reflect the situation across all countries but is simply a series of snapshots. Other schools working in different places may have had different experiences.

Commentary

This report is an illustration of the practicalities of making successful international video conferencing links, so that it becomes possible to see and, more importantly hear clearly. It is based on personal experience and discussions with classroom teachers from different countries around the world. The examples are based on teachers' experiences and not technicians'. It is important to realise that technical expertise is not the priority in the classroom; resources need to work reliably and effectively, with little more expertise than the regular 'plug and play' knowledge of the average user.

Japan

Illustration 1

Demonstration of video conferencing technology and introduction of the 'Video Conferencing in the Classroom Project' to teachers from 60 countries around the world.

- Two options were available at the venue, ISDN and 10Mb SDSL (Broadband).
- Laptop PC hardware was used with a Logitech webcam.
- ISDN tested and working.
- SDSL tested and working with no video conference firewall restrictions.
- The option chosen was SDSL using 'SightSpeed' video conference software. The connection lasted 90 minutes and both the audio and video were good.

Illustration 2

Demonstration of an IP broadband videophone using domestic ADSL connection to link to the UK. In this case a little technical support and knowledge was required in the first instance to put the correct IP settings into the phone, subnet mask, default gateway, etc. The call was initiated at 256K.

Technical note: The system in London was an ADSL connection with a contended maximum

downspeed of 256K. The picture was satisfactory but the audio was terrible. The call was terminated and reconnected at 128K. On this occasion both audio and video were satisfactory.

Illustration 3

Domestic laptop with webcam. Link to the UK using internet-based software 'SightSpeed'. On this occasion the video image refresh was slow and the audio was unintelligible. Using the chat facility both parties cancelled the video send facility. It was then possible to complete a reasonable conversation. By using the MS-DOS command 'tracert' +IP address it is possible to identify the number of locations the packets of data has been routed through before arriving at its destination - on this occasion it was 30, so it was hardly surprising that the quality was poor.

Subsequent attempts to test a variety of systems and software have produced mixed results.

Queensland, Australia

The situation in Queensland is similar to the situation experienced by schools in the UK. The example given here is a high school in Brisbane connected on the broadband network but unable to make links outside of the restricted area of the network. This particular school has chosen to put in its own SDSL communications link. The network administrator at the school had the necessary privileges to manage the firewall and make connections to other locations. The frustration experienced by this teacher when trying to link to other countries, including the UK, is partly due to the high expectations teachers have when working with communications technology.

Victoria, Australia

In Victoria the distance between locations and the isolated nature mean many places within the region use ISDN connections. Although broadband in a variety of forms is being developed it seems unlikely in the foreseeable future that this means of connection will change. A concern was that the local school managers had chosen to use a system that was not very user friendly, and on occasions the technology got in the way. Video conferencing is a potentially important resource in this region.

South Africa

Schools in Johannesburg are keen to bring the world into their classrooms. However, in township schools, linking directly to the classroom is not available just now and unlikely to be available in the near future. Video conferencing can be arranged with the support of local companies. ISDN is available, although the call costs makes this solution out of reach for the majority of schools unless the UK school makes the call or other sponsorship has been arranged. Connectivity is most likely to be a dial up modem which does not offer the bandwidth suitable for classroom-quality video conferencing.

Brazil

Teachers from Brazil reported advanced connectivity and plenty of hardware, but with little or no training for teachers, the potential of this resource is not being realised.

Poland

Limited access to ICT in the classroom. ISDN is the choice for video conferencing connection. Teachers taking part in a major European project relied on the University to provide the video conferencing equipment and the connection to their partners.

Finland

Although connecting using broadband is possible, the choice for classroom-quality video conferences is still ISDN. There does not appear to be a general culture of video communications. The teachers I spoke to were not aware of other schools using video communication extensively in their classrooms.

Greece

Schools in Greece reported a range of issues and concerns with connectivity. In the schools I visited neither broadband nor ISDN was available. The schools involved in the international project I observed relied on a local company to support their video communication activities.

Czech Republic

In Prague the schools' connection was ISDN. It was therefore quite easy to make a connection using a videophone. Links to the UK were easy to establish and teachers seemed impressed with the quality of the video link and the enthusiasm of their students. Teachers from other regions of the Czech Republic reported that ADSL was becoming available to them in their schools. There was a lack of knowledge, however about the possibilities and issues involved in video communications using ADSL.

France

Video communication is successfully being practised in several schools across France. The preferred connection in these schools is RNIS (ISDN). Over the last year the 'Video Conferencing in the Classroom Project' has worked with teachers in Rodez and Lyon, as well as providing advice to teachers attending a British Council seminar in Paris and developing a partnership between schools in Rural Lincolnshire and schools in Poitiers. ADSL is available in some regions and might be considered as a starting point in some instances.

Germany

Broadband connectivity is available in the schools working in the 'Video Conferencing in the Classroom Project'. However ISDN has continued to be the choice for connection because of the firewall restrictions and lack of Quality of Service available within the UK schools

USA

Success with ISDN and ADSL creates the conditions for a range of opportunities for links with schools in the UK. The bandwidth across the Atlantic creates the right conditions for classroom-quality connections. The choice of ISDN or broadband means that success should be achievable for a range of curriculum activities. Teachers should identify the connectivity option that works best in any particular case. I have used broadband and ISDN to different locations and have been very pleased with the results.

New Zealand

The schools in New Zealand use broadband to make regular video communication links to support curriculum activities. Links to the outside world are achieved by dialling through a gateway.

Jamaica

During the last year we have been involved in testing for projects linking UK schools to partners in Kingston and Brownstown. Godwin Junior School in Newham has been pro active in

developing a video communications link. Initially the school used the facilities available at the University of Technology in Kingston. The school purchased a videophone for Mona Heights School and funded an ISDN line. This continued to present connection difficulties. The limited success of ISDN has meant a re-think of the connection opportunities. The school in Kingston has now installed an ADSL connection. The Brownstown schools are also moving towards the ADSL solution. The telecommunications company monopoly of connectivity on the island means that ISDN and ADSL connections are relatively expensive.

Canada

Schools involved in the project have access to broadband, although when joining a conference in October 2003 the choice of connection to the UK was ISDN. The schools in Labrador have broadband as their connection, but they link to the rest of the world through an ISDN gateway.

Alaska

Speaking at a conference in Anchorage the link was achieved by connecting successfully using ADSL. The report from the delegates was extremely favourable.

Conclusions

For the teacher in the classroom, the priority is making technology transparent, reliable, successful and easy to use. Where the chosen solution is user friendly and reliable, teachers will feel confident to use it. However, if it remains necessary to have a level of technical expertise to ensure success, it is unlikely that teachers will stampede to use video communication in their classrooms.

This analysis contradicts the recognition by teachers of the possibilities of this powerful technology and their enthusiasm to use it to enhance and support the curriculum. Schools are very excited about the possibility of linking and developing video conferencing as an integral part of their curriculum development. It is important that teachers in the UK recognise that connectivity issues experienced in different regions of the world might not exactly match their expectations (e.g. it is often thought about Finland that 'Everyone has video communications' or about Africa 'remote locations have no connectivity,' but you cannot generalise about connectivity issues).

Around the world teachers are excited by the possibility of bringing the world into their classroom. The concerns of teachers are adding value to the curriculum and embedding ICT and video communications into their lessons. As we have discovered here in the UK, the technology is nothing by itself without the teacher in the classroom having the vision to use ICT and, in particular, the video communication resource in their classroom effectively. It is also important to recognise that video communication is just one resource in a wide range of communication facilities available in the classroom.

School managers must also understand that connectivity issues will extend or restrict the number and range of potential partners their teachers can work with. An 'either/or, ISDN/broadband connectivity' scenario will inevitably result in frustration, time wasting and failed links. Retaining the option of an ISDN link is advisable, and will remain essential for reliable 'classroom quality' links to many partners at the present time. Anything less than 'classroom quality' will be restricting and frustrating for teachers who are desperate to develop creative links and content, and develop their confidence and expertise in this exciting area.

Most new video conferencing equipment can use BOTH connectivity options, so retaining an ability within the school to use BOTH options is most cost effective in terms of teachers' time and energy and also the most practical in the long run. Teachers are severely restricted in the amount of time they have available to them, so a reliable, easy-to-use solution is much more important than other considerations. Gateway solutions need to be reliable and easily accessible to the busy classroom user, otherwise it becomes another layer of technology to contend with.

Mike Griffith September 2003