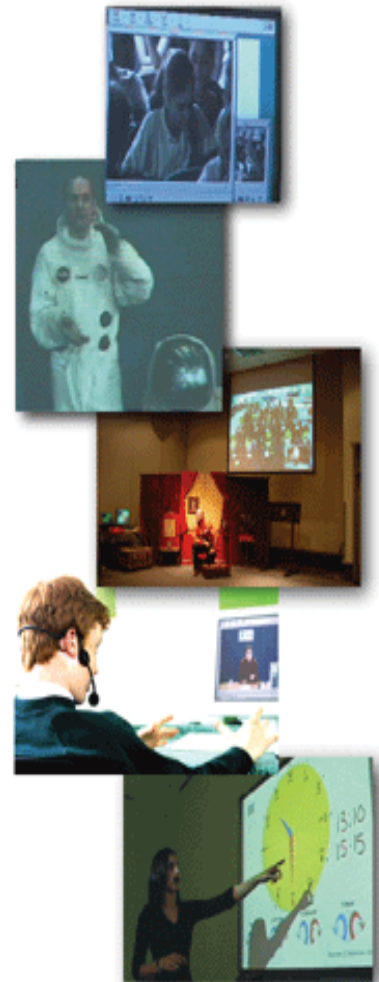


ATHENA@seaz.bham.org.uk  
www.ATHENA.bham.org.uk  
*Opening new doors to learning*

# GETTING STARTED WITH VIDEO CONFERENCING



# CONTENTS:-

---

**Forward**

**Practical ideas for videoconferencing in the classroom**      **page 4**

**Safe practice in the use of videoconferencing**      **page 13**

**Good practice in the use of videoconferencing**      **page 16**

**Videoconferencing audit proforma**      **page 25**

## ***FORWARD***

We are rapidly approaching a time when the potential for videoconferencing technology to be present in almost every classroom and ultimately, almost every home, is becoming a reality. In a few years time, high quality video conferencing across schools, workplaces and homes will be commonplace. The challenges and opportunities this presents cannot be underestimated, ignored, or left to chance. The ability of video conferencing to take place over the internet (as opposed to being confined to conventional telephone lines), with many sites participating at once, and cheaply, will change the way we view and interact with the world.

For educationalists, the opportunities are there for the taking. The creation of local, national and international learning networks; the delivery of support services, professional development and training; access to a breathtaking array of content providers; the facility to engage with the world in new and exciting way - all will open up new doors to learning, offer new ways of working, and fundamentally change the way teachers teach and pupils learn. The convergence of videoconference technology with Internet, with Interactive Whiteboard technology, Visualisers and direct teaching will lead to powerful learning experiences. The ability of videoconference to enable true collaboration (across schools; across countries; across the globe), true multi-presence, true sharing of resources and ideas will lead to a tangible increased awareness of place, identity, community and true global citizenship.

These are not speculations. There are already an increasing number of schools for whom video conferencing is transforming the learning experience. There is a growing body of work and understanding that explores the creative application of the technology to the classroom environment and is providing evidence that articulates good practice, the impact on pupil learning and on teaching pedagogy.

This pamphlet brings together a number of updated articles relating to the practical use of videoconferencing in the classroom, including ideas to get started, tips to make sure the videoconference experience has maximum impact, and ensuring the videoconference facility is used safely.

Geoff Turrell  
July 2007

## ***Practical Ideas for videoconference Projects***

Videoconferencing offers great potential for enriching children's learning in ways that cannot easily be replicated by other means. It is a communication tool that is capable of unlocking new doors to learning whilst removing some of the more physical and perennial barriers to sustained increases in attainment. In the process, videoconferencing offers extensive additional learning opportunities across the learning spectrum, from the infants school to the Higher Education college and beyond.

For the primary school in particular, videoconferencing has an impressive portfolio of practical applications that begins to justify the growing enthusiasm for the technology. A technology that can support existing learning, extend educational opportunities and radically alter the way children interact with one another and with the world outside their classroom walls.

For newcomers to the world of educational videoconferencing, it can sometimes appear to be a daunting world of equipment, technical jargon and loosely defined activity. Such misgivings are easily dispelled once a few case studies or practical applications are demonstrated that are firmly rooted in the very best educational practice.

The following examples are designed to give some indication of the range of practical videoconference activities that are already part of the flowering videoconference learning networks emerging across the country.

The practical application of videoconference technology to education may be characterised by the following types of activities:-

- 1) Expert projects – Projects that bring an 'expert' into the primary classroom
- 2) Buddy Projects – Projects that twin two (or more) schools
- 3) Phoenix Projects – Projects that bring historical figures and cultures to life
- 4) Light Sabre Projects – Projects that enable a primary school to easily access curriculum content and outcomes beyond their current capacity.
- 5) Hot Seat Projects – projects that put individuals in the hot seat
- 6) Transition Projects – projects that focus on the transition from one educational phase to another.
- 7) Utility Projects – Projects that exploit videoconference software and hardware tools.

### ***Some suggestions to get started:-***

***Expert projects*** – Projects that bring an ‘expert’ into the primary classroom

As the number of schools with videoconference capability expands, so do the possibilities of ‘expert’ teachers sharing their expertise, specialisms and enthusiasm beyond the classroom walls.

The obvious first expert is the teacher themselves. It is possible for a teacher in one school to deliver a particular lesson (or series of lessons) to several schools at once. This can be done directly (one school connects directly with another) or through a broadcast, or bridge facility (one school arranges for several other schools to connect to a ‘bridge’ facility at a pre-arranged time)

Some educational organisations are already beginning to offer schools the opportunity of taking advantage of pre-prepared units of work (museum and art galleries, support service personnel, independent educational consultants etc)

Links to such organizations can be found at the ATHENA website [www.athena.bham.org.uk](http://www.athena.bham.org.uk). Or in the ‘Videoconference in the classroom’ document

There are also many useful videoconference directories available which list organisations willing to share expertise and offer ‘virtual tours’ of specific locations (zoo’s, marina’s, art collections etc.). These directories can be located by typing ‘Videoconference Directories’ into any popular search engine. Bear in mind that the organisations listed often request a payment for the facility they offer and can also be located overseas.

#### ***Example One ‘Through the Eye of the Cyclops’***

***Theme:-*** Myths and Legends/History/Writing/Religious Education/Science

***Context:-*** A short (30 – 45 minute) ‘virtual exploration’ for children from the host school and the Natural History Centre (part of the National Museums and Galleries on Merseyside)

***Content:-*** Well in advance, the museum is contacted and the focus for the conference discussed in the context of the children’s previous knowledge and the lesson objectives. A date and time is arranged for the conference and the children pre-prepare material relating to ancient and modern Myths and Legends. At the time of the conference, the museum staff show children examples of fossil relics held by the museum which may have given rise to some of the mythical figures littering ancient stories about minotaur’s, unicorns and Cyclops. A discussion session follows where children are invited to share their insights as to how some legends and mythical figures may have originated.

## Example Two *'The Egg Challenge'*

*Theme:-* Science/Design Technology/ Report Writing

*Context:-* A collaboration between the school class and a Science and Technology department in a University or College of Further Education. A short (30 – 45 minute) link with the University Department.

*Content:-* The children are set the following challenge as part of a Design Technology lesson - 'Design and make a device that will lift an egg 1 metre from the ground'. Well in advance, the University department is contacted and the conference structure discussed in the context of the challenge that has been set for the children. A date and time is arranged for the conference and the children demonstrate their devices across the videoconference link. It is the task of the University 'experts' to comment and judge the devices. A collective score is given to each device based on quality of:-

- a) Construction
  - b) Function
  - c) Aesthetics
- 

## ***Buddy Projects*** – Projects that twin two schools

These types of project lend themselves to a whole range of short and long-term collaborations spanning small group to whole school work. They also create scope for whole school, management and professional development initiatives.

The Projects require two schools to establish a long-term commitment to developing videoconference links. The more diverse and distant the schools, the more scope there is for generating richly diverse curriculum activities.

## Examples One *'Improving Staff Meetings'*

*Theme :-* Professional development

*Context:-* Across two schools.

*Content :-* A joint staff meeting. Agree to observe a staff meeting via videoconference, perhaps with a particular focus (Content, structure, management of staff meetings) or within a particular topic (discussion about behaviour management, school development planning, assessment etc.)

## Examples Two '**Harvest**'

*Theme* :- Growth/nutrition/health/climate

*Context*:- Across two schools situated in different countries. This project lends itself to short, once a month, conferences.

*Content*:- Children plant a variety of indigenous vegetable seeds. Children in the twinned school do the same. They take photographs, record progress etc..Each month the classes in each school report on the progress of the seedlings/plants/vegetables.

At a pre-arranged period of time, each school harvests the vegetables and sends them to the twinned school – along with some appropriate recipes, preparing and cooking instructions. When the vegetables are received, the school's arrange a lengthier conference to cook and taste the vegetables and dishes created.

## Example Three '**Biographical buddies**'

*Theme*:- Biographical writing/Geography/Local History/developing communication skills/SEN

*Context*:- Small groups of children (three to six) across two schools are selected for two short conferences two weeks apart.

*Content*:- Each child is invited to bring to school three very different objects that collectively say something specific about the child (eg. A favourite toy, an article of clothing, and a book). Each child in the host school is paired with a 'buddy' in the remote school and asked to 'show and tell' about the objects they have brought in. Between the two conference dates, each child is asked to produce a short biographical piece of writing that describes the character of their Buddy in the light of the object they have chosen. This piece of writing is then used as the basis for the second videoconference link, in which the prepared piece is reads out and discussed between the buddies.

---

## **Phoenix Projects** – Projects that bring historical figures and cultures to life

Julius Caesar, Joan of Arc, Winston Churchill, Boudicca meet in virtual space to compare notes, their legacies, to show some of their trophies and each to explain why they should not be thrown out of the historical boat. Phoenix projects enable historical characters and cultures to come to life through modern actors and enthusiasts acting in role. At its most creative, a phoenix project can bring mythical, fantasy and imaginary characters to life.

There are many freelance and independent educationalists that are currently engaged by schools to bring history, science, geography and art to life in a visual, interactive and entertaining way.

Equally, there are many organisations that employ enthusiasts versed in the detail and context of historical periods of characters who are willing to share their enthusiasm in a role-playing context.

Examples One:- *'Lord Shaftsbury'*

*Theme:-* The Victorians

*Context:-* Across a cluster of local schools. This project lends itself to short one or two session conference lasting up to 45 minutes each.

*Content:-* A character dressed as Lord Shaftsbury delivers a short presentation on the employment and education of young children in the mid 19th Century. He shows photographs of the living conditions of some families and allows close examination of some of the commonplace household objects from the period.

He gives a short demonstration of a writing lesson delivered in a 19th Century classroom. This is followed by a questions session relating to the issues raised and a comparison between then and now.

Examples Two:- *'Amy Johnson'*

*Theme:-* Biography/History/Technology

*Context:-* A primary school class linked to the Science Museum, London for a single 30-45 minute conference.

*Content:-* Amy Johnson tells the children about her life and her journey from Croydon to Darwin in May 1930. Real photographic evidence is shown as the story unfolds. Children are invited to ask Amy questions. Following the session, children compile a biography of Amy Johnson, or plan a journey to Darwin for today.

---

***Light Sabre Projects*** – Projects that enable a primary school to easily access curriculum content and outcomes beyond their current capacity.

These projects have the potential to give children in the primary school, direct access to equipment they do not always have access to because a) it is too expensive b) it might be dangerous c) they do not have room for it c) they lack expertise in its use  
Many secondary schools, Universities, City Learning Centres and commercial partners are able to provide access to computer controlled lathes, routers, sewing machines, vacuum formers,

printers etc. These machines are often controlled through software programs that are in turn accessible to younger children. Projects that enable children to design and plan in their own school, and then transfer their ideas to the remote partner for construction or fabrication, can perfectly model the developmental cycle, and provide a tangible, practical outcome.

### Examples One '*Boat hulls*'

*Theme:-* Science – Forces

*Context:-* Between a Primary school class and a Year 10 GCSE Design Technology class. This project lends itself to a number of short (5-10 minutes per child) conference sessions between named individual pupils across the schools. This project assumes that the secondary school has access to lathe equipment capable of being linked to a computer.

*Content:-* Children produce a number of design projects relating to boat hulls (profile, type and thickness of material). The children discuss their designs with the Year 10 students across the videoconference link. The primary children then revise their designs and use a suitable CAD/CAM design package to produce some rendered prototypes. The prototypes are sent to the Year 10 students as a file. The year 10 students supervise the cutting of the boat hulls from selected materials. The finished hull is sent to the primary school and the children conduct a series of trials to assess the stability, buoyancy and water resistant characteristics of their designs. The project lends itself to a number of extensions which may lead up to the children racing their finished boats across a course.

### Example Two '*Symmetry in patterns*'

*Theme:-* Mathematics (Rotational and reflective symmetry, fractions, angles etc) /History (Tudor History)/Art and Design

*Context:-* Between a Primary school class and a secondary school technology class. This project lends itself to a number of short (5-10 minutes per child) conference sessions between named individual pupils across the schools.

*Content:-* Children investigate Tudor costume and embroidery patterns (<http://home.earthlink.net/~pkmarmor/blackwork/#TOC>). Children design repeated motifs in the style of 16th Century needlework. The designs are discussed and transferred across a videoconference link to the secondary school. The design technology pupils at the secondary school arrange for the motif's to be machine embroidered on material, and sent to the primary school pupils.

**Hot seat Projects** – similar to the ‘Expert Projects’, the Hot Seat Projects invite people to the host site to speak about a topic relating to their area of expertise and to provide a stimulus for children to interact with them. They are effectively put in the ‘hot seat!’. Numerous examples exist of musicians, poets, writers, sport professionals, journalists and politicians being quizzed by children across a range of topics.

Example One ‘**A journalist writes**’

*Theme:-* Writing/Genre/journalism

*Context:-* Across a cluster of local schools. This project lends itself to short, one or two session conferences lasting up to 45 minutes each.

*Content:-* Children have been studying journalistic writing as part of the national curriculum writing content. A journalist from the local newspaper has been invited to the school. The journalist is introduced and explains the kind of work they are involved in, how they became a journalist and what particular skills they feel are important to the work – with examples. Children from the participating schools take turns to ask questions about journalism and the key characteristics of journalistic writing.

Example Two ‘**Poet Corner**’

*Theme:-* Writing/Genre/poetry/music

*Context:-* Across a cluster of local schools. This project lends itself to short, one or two session conferences lasting up to 45 minutes each.

*Content:-* A poet is ‘hot seated’ for the session, providing some starting points for children to write different sorts of poems, the introduction being illustrated with examples of the poet’s own work. Children from the participating schools discuss the suggestions and question the poet about technique, starting points and performance.

---

**Transition Projects** – The move from secondary school from primary school is a critical one for many pupils. Equally the move from Infant to Junior school, or from Secondary to University/Higher Education can be deceptively troublesome for some people. Ensuring that this transition is a smooth and as positive as possible has many long term benefits for the pupil and the receiving school. Videoconference projects that focus on the transition period can be extremely valuable in satisfying some of the criteria for a successful transition experience.

### Example One *'Meet Year 7'*

*Theme:-* Transition

*Context:-* Small groups of primary school children videoconference with small groups of Year 7 pupils from the appropriate secondary school. The conferences take place once the primary school children have been allocated their secondary school places.

*Content:-* Children from the primary school introduce themselves and their interests, to the Year 7 children. The primary school children ask pre-prepared questions about the school, its timetable, its facilities and any questions they have that concern them. At the close of the session, the pupils agree to meet in the first week of the Autumn Term in person.

### Example Two *'Playing the Game'*

*Theme:-* Design Technology/Writing/PSME

*Context:-* Small groups of primary school children videoconference with small groups of pupils from the appropriate secondary school. The conferences take place once the primary school children have been allocated their secondary school places. The short conference sessions take place over a number of weeks, leading up to the end of the Summer Term.

*Content:-* Children discuss designing and making a board game based round a theme ('The Game of life', 'School Monopoly' etc.). Over the weeks, the children design the game and discuss the rules. Children in both schools collaborate on the making, dividing the parts to be built across the two schools (one school may be responsible for half the board, the other school, the other half). When the children transfer to the secondary school, time is allocated for the two groups to come together and each half contribute to finally putting the game together and playing it.

---

**Utility Projects** – Many computer based videoconference systems provide software driven tools which provide endless possibilities for interaction across the videoconference session. The tools can be great 'ice-breakers' or can be used as a stimulus for highly structured activities. Projects that exploit videoconference software and hardware tools. Sometimes the tools sit within the PC-based videoconference software (eg Netmeeting, MSN, Skype). Far more ubiquitous are the 'shared applications' available over the internet where pupils from each school can log on to a particular website and invite their partners to join in writing package, a presentation package, a publisher, a spreadsheet, a painting package etc. (visit [www.docs.google.com](http://www.docs.google.com) or [www.zoho.com](http://www.zoho.com))

The tools available can include:-

- a) Virtual whiteboards (where each videoconference participant can use the draw or write on a shared whiteboard)
- b) Shared applications (enabling the host computer to load any software application and share it with the remote site)
- c) Text chat facilities, remote picture capture, file transfer.

In addition, most videoconference systems have the facility to connect a second video source that could be a video camera, a document camera or an electronic microscope. These facilities in particular lend themselves to a multitude of applications that enable children to present to one another over the videoconference system using PowerPoint, pre-prepared documents or video footage.

#### Example One '*Squiggle*'

*Theme:-* Language development/Drawing/ICT

*Context:-* This activity lends itself to very young children using a videoconference facility, or as an 'ice-breaker' for slightly older children. A class of children meet individually across a videoconference link with another class of children.

*Content:-* Before the videoconference link is made, both parties check beforehand that they have a shared whiteboard facility and that it works across the link. Once the connection is made pairs of children take it in turns to make a 'squiggle' (a short series of random lines or shapes) on the virtual whiteboard. The partner at the remote site then proceeds to add to the drawing, turning it into a meaningful picture. While this is happening the child at the host site guesses what it is that the other child is turning the squiggle into.

#### Example Two '*A video commentary*'

*Theme:-* Writing/drama/performance

*Context:-* Children share pre-prepared video footage, with live commentary over a short videoconference link between two classes.

*Content:-* Children in both schools pre-prepare a short piece of video footage which may initially simply be about their school (a 'video brochure'). Later collaborations could be more ambitious and include staged sketches or dramas relating to the theme being studied (e.g. dressed up as Victorian school children, World War II refugees, characters from a children's book etc) The pre-prepared footage is fed into the main Video link, or the additional camera facility of the videoconference equipment, and the children provide live commentary, comment, or introduction. The children in the host school then reciprocate the same.

More ideas can be found in the "Videoconference in the classroom" book which can be accessed from the ATHENA website videoconference section.

### **Guidance for the safe use of videoconference equipment in school environments.**

This document is designed to be used in conjunction with the school's Internet Security policy statement and has been prepared for use in Birmingham Local Education Authority schools.

#### ***Background:-***

The implementation of videoconference equipment in schools, and the creation of a robust and capable information communications infrastructure have reached an important threshold. This threshold was reached when the internet bandwidth accessible by all schools (primary, secondary and special) exceeded 1mb. The next threshold will be reached when over half the potential schools have a videoconference unit installed.

The current LA/City progress for broadband connectivity has ensured that all schools have access to 10mg connectivity, while many have 100mg connections.

As this increased bandwidth is created, the switches and software used to enable the bandwidth to be used fully is regularly being upgraded. In addition, the creation of Regional Broadband Consortia (RBC's) and the JVCS (JANET Video Conference Service) has ensured that pathways have been created that link schools across the country. These pathways are increasingly robust and dependable with equal progress in connection quality and stability.

The creation of this enhanced information superhighway, brings with it the real possibility that all Birmingham schools can have 24/7 videoconference connectivity at high bandwidth, with stable audio and visual signals. The educational potential of this facility is extreme, opening up the possibility of faultless multi-point conferencing, application sharing and live video capture and web streaming as an integral part of the school environment.

Over the past six years ATHENA EICAZ has been trailing and evaluating a range of videoconference applications within a range of school contexts and a wealth of expertise and experience to be developed.

It is from this background that the Guidance for the safe use of videoconference equipment in school environments has emerged.

#### ***Advice to Schools***

Videoconference equipment offers schools huge potential to open up the school and classrooms to new and exciting educational opportunities. It also has the potential to be abused. As with all other Electronic Communication mediums, schools should be aware that they have a responsibility to ensure all computer equipment is used in a way that guarantees the safety of all those involved in its use at all times.

## ***General***

- Do not leave videoconference equipment unattended, or on in locations that are isolated
- Children should never be left to videoconference unsupervised
- Be aware that if the videoconference equipment is ON, it needs to be monitored by an adult.
- Only authorised adults should take responsibility for a videoconference
- Only videoconference with known and approved sources
- Never let children exchange personal information across a videoconference
- Seek parental permission for pupil's to take part in a videoconference
- Be aware that it is possible for the remote location to take pictures via the videoconference equipment and to zoom in on specific individuals
- Do not leave videoconference equipment on 'auto-answer'
- Ensure the videoconference equipment is secure and correctly configured
- Ensure everyone in the school knows how to videoconference safely
- Ensure a procedure is established and known, for the reporting of any miss-use of the videoconference facility

## ***Definition of videoconference equipment.***

There are many products available that claim to offer videoconference facilities. These range from small web-cam devices to full blown videoconference suites complete with conference lectern, microphones and projection facilities.

This guidance refers to any equipment that is capable of capturing live audio and visual information and digitally distributing it.

## ***Installation of videoconference equipment.***

- Decide what the prime use of the equipment will be and where it will be installed
- Decide who will be the named contact in the school for videoconference equipment and use
- Decide how the equipment will be sited and secured
- Establish a procedure for the regular checking of equipment use and configuration

### ***Connectivity***

- Ensure any installations conform to BGfL connectivity standards and is correctly configured and protected
- It is not recommended that schools use ADSL telephone lines to videoconference
- It is not recommended that schools videoconference using ISDN to ISDN connections. External connections should always be made through the BGfL gateway

### ***Benefits of purchasing videoconference equipment recommended by Birmingham City Council:-***

- The equipment complies with Birmingham's Quality of Service Standards
- The equipment is capable of connecting to the BGfL and integrating with internal and external sites.
- A current list of approved suppliers is available from Link2ICT

### ***Management and Training***

- Decide how the use of videoconference will be managed - for classroom use; for the use of senior managers in school; for other groups within, and external to the school; for curriculum; for training; for instruction
- Ensure all school staff are trained in the use of the videoconference equipment and understand the safe procedures required

### ***Videoconference***

- All videoconference sessions should be planned and approved
- Wherever possible, meet with the videoconference provider beforehand via the videoconference equipment and check who is going to be delivering material, the content and format for the videoconference.
- Take note of, and implement the guidance given, in the document "Best Practice in the use of videoconference in Schools"

Copy of 'Best Practice...' can be found on the ATHENA website - [www.ATHENA.bham.org.uk](http://www.ATHENA.bham.org.uk)

Updated July 2007

## *Good Practice in the use of videoconferencing*

---

by Geoff Turrell – Director ATHENA

After using videoconference technology in the school environment for the past ten year, it has been possible to make judgements about which factors improve the chances of success and make for a meaningful, educationally rich experience for pupils and teachers.

The following are some of those judgements!

### **The key to successful video conferencing is in the planning**

Like most educational activity, the same criteria for effective practice apply. Starting with the planning.

- Ensure the purpose of the videoconference link/project is clear.
- Be clear what you, the children and the remote location expect the learning outcomes to be.
- Decide how many videoconference sessions are needed.
- Decide how long each videoconference session will be.
- Decide what content is planned for each session, and agree what work will take place between sessions.
- Have a pre-conference conference. Meet the key professionals involved. Develop a dialogue and partnership with them. Plan the videoconference lessons together. Agree the exact timing of the lesson – for far away locations ensure the time difference is taken into account.

## Well before the conference session:-

- Let the pupil's parents know what the school is doing and encourage their involvement.
- Across the sites, share the lesson plans and any handouts or computer files being used in the lesson.
- If pupils are presenting during the conference, rehearse them in front of the camera, in the relevant location and position. Note timings, speech clarity and lighting. Ensure any research to be completed by the children before the session has been done thoroughly and is understood.
- Have an alternative lesson ready – just in case the technology goes on strike.
- Make sure a list is available that contains:-
  - The names of the schools involved and their telephone and fax numbers
  - The names of the people involved and a list of pupils taking part
  - Any mobile phone numbers that will be available on the conference day
- Develop a technical 'trouble-shooting' check list. It may include a step-by-step, what to check if:-
  - There is no sound at the local site
  - There is no sound at the remote site
  - There is sound but no picture at the local site
  - There is sound but no picture at the remote site
  - Feedback from the speakers occurs
  - No connection takes place
  - Poor picture and sound quality occurs
- If it is an international conference, learn something about the locality and some opening and closing phrases in the country's language.
- If it is a multipoint conference (with more than two sites connecting at once), clarify who will lead the session and establish a protocol for interaction between the sites and for any discussions across the conference.

## Just before the conference session:-

- Check any battery requirements (particularly if using a radio microphone). In many remote controls, when the battery is close to exhausted, the remote will work if it is closer to the equipment. This may give the impression the battery has plenty of charge left.
- Check all equipment is working and connected correctly (this may involve making a connection with a 'test site'). This could take as little as three or four minutes.
- If using a camera with pre-set position capability, set the presets before the session.
- Check the camera picture. Minimise reflective surfaces (polished floors etc). Reduce clutter or distracting objects in the background. Check the camera is in the best position to capture everything that will happen during the session.
- Check your clothing on screen for colour and pattern clashes.
- Have some spare A4 pieces of paper, a pencil and a large black marker available (the latter being useful if initial sound problems are encountered and the local site resorts to writing messages to the remote site).
- When the pupils are in situ, prepare them for the conference. Settle them down, explain again what will happen and how the session will be structured and conducted.
- Make sure you are familiar with the 'mute' button on the videoconference remote control handset.
- Check volume levels and ensure the volume is not too loud or that the speakers are not too near the microphone.

## **At the beginning of the session:-**

- Introduce yourself and the pupils at the appropriate time.
- Exchange brief information about your location, describe the room, the time, the weather, how many and who the pupils and teachers are.
- Introduce the lesson focus and any procedural information.
- If it is a multipoint conference, establish any suitable protocols. Many multi-point conferences use sound levels to determine which site is viewed across the conference. In this instance it may be appropriate to reinforce the importance of each site switching on their mute facility to allow a broadcast to take place.

## **During the session:-**

- Talk naturally, at an even pace, with expression and clarity (emphasise pitch, tone, volume pausing and pacing).
- Keep instructions clear; check all participants understand what is expected of them.
- Remember that an animated, energetic, enthusiastic presence is critical when motivating, holding attention and emphasising teaching points.
- Look at the camera, not the screen.
- Involve the remote site and the local site equally. Think of the camera as another pupil.
- Share work across the sites and encourage participation. Encourage contributions from teachers and support staff as well as pupils.

- Do not talk for more than ten minutes without a break
- Keep changing the pace. Use a variety of teaching styles and methods. Utilise direct teaching, display materials, kinaesthetic activities, tasks and teaching.
- Be sensitive to the 'public' dimension of the camera. Some pupils do not enjoy this potential exposure and regard the camera as akin to a live television broadcast. Enable these pupils to participate indirectly until they feel ready to take centre stage.
- Manage the 'mute' button. Many multi-point conferences are automatically managed by giving the 'floor' to the site making the most noise. If all the sites connected are sending a lot of noise across the videoconference network there will be confusion. Wherever possible get used to switching your videoconference system to mute whenever your location is not directly contributing anything. Only take off the 'mute' when someone at your location wished to speak.

### **At the end of the session:-**

- Summaries the lesson and its key teaching points and features
- Take time to thank the participants and close

### ***After the session***

- Phone, e-mail or Videoconference with the remote site. Thank them for their participation. Share opinions, discuss technical and pedagogical issues. Seek to improve further the learning experience, the teaching experience and the management of the videoconference session
- Critically evaluate the session and the additionality contributed by the use of Video Conferencing and an assessment of the impact the session has had on learning. This may involve e-mailing an evaluation form to the participating sites.

## Useful tips:-

- Be aware of child protection issues that may cause the system to be open to abuse. Do not leave the Videoconference system on 'auto-answer'. Do not leave it in conference and unattended. Make sure parents are informed when a videoconference session is to take place and that they are happy for their child to take part.
- Make sure audio and visual displays are clear. Interactive whiteboard displays, Overhead Projectors, posters and objects can all be used to enhance the learning experience. It is important to check that print can be clearly read at the remote site. Displays of this kind should be created with increased contrast between backgrounds and foregrounds, and with bold outlines.
- Consider a screen switch. During a videoconference session, seeing the other site on a screen will often fixate pupils. This can result in them becoming distracted from the work in hand. Consider having two screens with a screen switch between them, or a screen that can be easily swiveled so that it can be viewed by the teacher and away from the pupils when needed.
- Place a viewing screen below the videoconference camera. It is much easier and natural to conference when the camera is placed just above of below the viewing screen. This enables the participants to both view the remote sites reactions while at the same time appearing to look directly into the camera.
- Place written information below the camera. Again, this enables the teacher to easily view lesson notes, key pointers and lists, while at the same time maintaining visual and facial contact with the remote site.
- As in any good lesson, vary the pace, involve the participants, and give shape and clarity to the lesson with a clear beginning, middle and end.
- Cameras. Pan and tilt cameras/ preset cameras offer valuable variations, which can add interest to the viewing. If possible, have another adult in the room to control the zoom and panning of the camera.

- Consider at least one session that brings everyone together from both the localities e.g. a tour or special presentation
- Be aware of what the viewer is seeing and prepare beforehand for minimum distractions. If the background is fussy or cluttered, change the view or provide a plain cloth backdrop.
- Avoid leaving the camera in a static position for too long. If using pre-sets on the camera, have some that zoom in on a pupil or the presenter from time to time.

Title of videoconference session	<b>Videoconference checklist</b>	
Date of videoconference session:-		
Time of session (local time)		Time of session (remote location time)
Lead person (local)		Lead person (remote)
Names of additional support (local)		Names of additional support (remote)
Telephone number (local)		Telephone number (local)
Mobile number (local)		Mobile number (remote)

ISDN number(s) (local)	ISDN number(s) (remote)
E164 number (local)	E164 number (remote)
IP address (local)	IP address (remote)

## CHECKLIST

Pre planning session taken place?	
Lesson plans, files, handouts etc. shared?	
Test connection taken place?	
Parents informed about session?	
Alternative lesson planned?	
Batteries checked?	
Connections checked (including volume)	
Pres-set camera positions checked?	
A4 piece of paper and pen available?	
Anything else?	

## VIDEOCONFERENCE- Initial audit for teachers

Name..... school ..... Date .....

The idea of using of videoconferencing to support teaching and learning may be new to you. This is understandable. Videoconferencing is an emerging tool for teachers.

This questionnaire is designed to gauge your initial level of confidence and experience in the use of this technology and to help in the design of training and support that meets your individual needs.

There are no wrong or right answers so please answer with as much detail and honesty as you are able!

Have you taken part in a videoconference in the classroom? – if so, please give a brief description

Have you seen videoconference in use? – if so describe when, where and what it was being used for

How would you describe your confidence in using videoconferencing in the classroom?

None at all ----- fully confident

Do you have any apprehensions or concerns about using videoconferencing in the classroom?

No concerns ----- extremely concerned

If so, please list your concerns

What do you think the benefits of using videoconferencing in the classroom will be?  
(please list any)

What level of benefits do you see?

No benefit -----very many benefits

How do you think videoconferencing may affect the way you teach?  
(please list)

What level of impact do you see?

No impact ----- transforming impact

Can you briefly describe any ways you foresee videoconferencing being used in the classroom?

What do you think your training needs will be with regard to videoconferencing?