

# *A Guide to Videoconferencing*

## **The Instructional Use Of Videoconferencing**

Videoconferencing is essentially face-to-face instruction, only, *at a distance*. Any good course can easily and effectively be adapted to a videoconference format while maintaining the dynamic, engaging interaction between the instructor and the participants, as well as among participants, independent, almost, of geographical or time constraints.

GDLN facilities enable the instructor to manage the learning experience, not only in terms of format and content, but also controlling the pace and the interactive dynamic between participants during the session.

As in virtually any traditional classroom, the videoconferencing studios can be configured to hold a panel of experts, present a lecture or interview subject matter specialists. There are visual teaching tools which can include printed texts, video tapes, computer files, photographs and sound. Participants at the remote sites can do the same: present their own video sequences, PowerPoint slides, charts and photographs in the format of their choice.

## **Preparing to Teach With Videoconferencing**

In preparing for a videoconference the instructor will consider many of the same issues when planning a face-to-face session. To choose the most appropriate approach for presentation and discussion the instructor will need to consider:

- The learner' prior experience and knowledge;
- The technological resources at the learners' site.

In videoconferencing, as in any learning environment, choosing the best means of communication is vital for the transmission of information. Instructors may need to hone their awareness of the different features of written and oral language, with regards to distance communication.

- Prepare to build text on-screen when constructing a topic.
- Use charts and animated sequences for brief definitions and outlines.
- Use television presentations for simplifying abstract and complex concepts.
- Write down analytical explanations of concepts (Formulae and Theorems).
- Verbally present arguments.
- Plan to simultaneously use audio visual communication to increase participant attention and learning.
- Ensure that what is to be written on the screen corresponds with what is to be presented verbally.
- Organize main points and present them progressively, sequence by sequence up to their final solution.

More so than in face-to-face teaching, it is vital to allow enough time for participants at a distance to take notes and follow the logical development of the explanation. Instructors may not always be able to see participants or assess the learning environment using traditional strategies. When preparing presentations allocate time for note taking and absorption of material presented.

Finally, plan ahead so visuals and reading material can be sent to facilitators and participants in advance. It is useful for everyone to know what will be covered, what they are expected to read and/or prepared to discuss.

### **Preparing Slides For Videoconferencing**

Speaker support materials, including PowerPoint slides, overhead transparencies, graphs, printed material and images have a tremendous effect on the effectiveness of any presentation. This is especially true for videoconferences.

Materials not adapted for use on television, are not legible and can ruin an otherwise excellent presentation. By following these simple guidelines, your PowerPoint presentations and graphs can easily be adapted for the television medium.

Use the figure below as a template for any slides you plan to use. Do not shade “frame” round your material on the slide, simply leave the 1.5 inch margin blank on the slides to be transmitted.

1 ½ inches

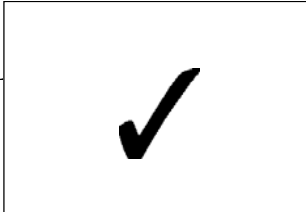
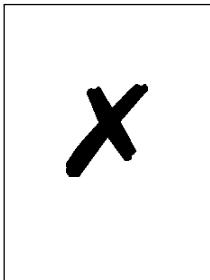
**Safe Area**

- ◆ Font size: **24-36** pts
- ◆ Max: 9 lines
- ◆ Max: 35 character/line
- ◆ Page set-up: Landscape 4x3  
Min. line thickness: 2pt
- ◆ ( no hairline)

Slides can be transmitted by way of the studio computer or can be printed and hard copies placed under the document camera. Either method requires that slides have certain characteristics for successful transmission via television. Please refer to the guidelines in the following table.

**Creating or Adapting Overheads & PowerPoint Slides For Use on Television**

Television is a horizontal medium in a ratio of 3x4. Create all page layouts in a horizontal, “landscape” format.

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Use LARGE, well-spaced characters. Font size should be never less than 24 point. 36 point is ideal.

Examples:

**24 POINT FONT**

**36 POINT FONT**

Font type should be bold and simple. Avoid serifs. Arial is recommended.

Always maintain a blank space of 1.5 inches around all edges of slides.

Keep all diagrams/charts simple. Remember font size minimums.

Medium Blue to light green backgrounds work best. Avoid large areas of white and/or black. If you do use a white background, use 70% white not 100% white. Avoid red, pale yellow typefaces.

Animation in PowerPoint should be used conservatively as any/all types of “motion” can be rendered visually confusing once it is telecast over the limited bandwidth of the GDLN.

**Simple Rule:** Video makes all printed material twice as hard to read, so make your text twice as large.

**When Using Hard Copies of Slides under the Document Camera:**

Always convert Transparencies to a paper copy printout without background.

Use a pastel colored paper (preferably light blue); printing these out on light card stock is better than regular paper which can often be opaque or transparent

**IMPORTANT:** Print out in “landscape” format.

When using the document camera, place documents under the camera lens and avoid touching or moving them. To point at a section, place a pen or pointing device in the spot to be highlighted and refrain from moving it until the next item in a presentation is to be indicated.

### **Teaching in the Studio– The Control Panel**

The tools and the technology may appear daunting to some instructors. The secret to maintaining control over the learning experience is proficient the use of the equipment in the studio.

Mastering the basic function of the equipment is neither difficult nor time consuming. Although instructors are welcome to take control of the cameras during videoconferences, they also have the option of leaving the technological manipulation of slides, video clips and other media up to the producers. Instructors are, however, encouraged to familiarize themselves with the equipment at the podium prior to the first session. Arrangements can be made to access the equipment for half an hour or an hour in order to learn basic functions without being disturbed.

Basic functions of the control panel include selecting and operating the visual source to be transmitted to the learners.

Many instructors will use PowerPoint Slides in teaching tools used in videoconferencing. To run a slide presentation from the podium the instructor simply chooses the PowerPoint Option from the LCD Media Selector Panel which takes him/her to the PowerPoint Slide-Show Panel.

The LCD panel functions much like any slide presentation device. To begin the slide show at the first slide, or a designated slide the instructor touches “Start Slide Show” and continues through the presentation hitting ‘Next Slide’. Instructors wishing to jump to the end of the presentation can hit “Last”.

### **Classroom Management at a Distance**

Where instructors and participants are not present in the same location, communication is one-way for at least part of the time. The instructor in a distance learning environment, must consider the effect volume, tone, clarity , pauses and rhythm will have on the presentation.

Further, the instructor must be mindful of the duration of any presentation and the effect speaking time will have on the overall quality of the interaction.

### **Voice Projection, Tone and Clarity, Pauses and Rhythm**

- The microphone's in the GDLN studios are sensitive to volume, yet instructors must project their voices well in order for the mechanism to receive and transmit a clear signal to the target sites.
- Speakers with a low voice tone and clear enunciation are better communicators who effectively maintain the interest of their audiences, even at a distance. When presenting information verbally or asking a question, instructors in the videoconference need to find and maintain a low voice tone and enunciate clearly.
- To some extent the media forces pauses in participant interaction as the equipment in the GDLN studios is voice activated and does not permit two individuals to speak simultaneously. Because of this delay between transmission and receipt of voice or image information, instructors and learners will need to adapt by incorporating 5 second pauses between exchanges. Pausing between exchanges, enables communication, but it is rhythm and pace which enhance it.
- It is not uncommon for individuals to experience nervousness when teaching with the new media and at a distance. It is important to avoid letting the anxiety affect the speed at which presentations or questions are delivered. It is strongly recommended that speakers vary their speaking tempo and intonation to avoid monotone and hasty presentations.
- While it is advisable to have an introduction segment incorporated into the structure of the video conference, it is strongly recommended that lectures and presentations have a maximum duration of twenty minutes. If more time is needed the presentation should be divided into two sections allowing for discussion or questions from participating sites.
- Sending background material and slides to participants and facilitators is one way to limit presentation time during video conferences.

### **Communication Tips**

- Speaking loudly is not necessarily the same as projecting clearly
- Breathing deeply increases one's voice level and improves tone.
- Pausing after posing a question to an individual or the group, clarifies whose turn it is to speak.
- Limit the number of concepts presented, but present each completely and use examples to illustrate ideas.
- Link concepts and anchor new concepts with prior

**Movement, color, interaction, atmosphere**

**Movement and color** are often distorted by television or video cameras. Movements can appear to falter and colors blend. Presenters are encouraged to wear solid neutral colors, especially pastels and blues which look best on screen. White shirts under suit jackets do not transmit well, nor do bright shades of red, orange, yellow, green or patterns such as paisleys or plaids. Presenters should avoid gesturing excessively or moving their arms or heads too much as even subtle movements can be distorted and transmit poorly.

**Interaction** implies that some degree of communication is going in two directions. Instructors using videoconference especially need to determine the nature of effective interaction in the context of their lesson and the desirable feedback

Assessing the **atmosphere** at the recipients end is sometimes difficult. Participants seeing themselves on the screen for the first time may suffer from shyness or inhibition. This can be anticipated and its impact diminished when structuring a lesson by considering the following tips.

**Tips To Enhance Atmosphere And Interaction**

- Break the lesson into segments
- Build in time slots for interaction
- Delegate part of the presentation to others
- Ask learners questions and remind them to ask the teacher questions
- As often as possible come back to the individual who posed a question to ensure that they are satisfied with the answer
- Consider having discussion sessions as well as question answer sessions
- Allow for the learners to think about a topic, consider having a discussion session at the beginning of the next live session to recap on the topic of the last live session

## **Tips for Successful Videoconferencing**

### **Before**

- Instructor and Facilitator at the remote site should have had extensive interaction. Facilitator should have the agenda and enough information to prepare the group ahead of time, distribute materials (articles, copies of slides) as well as facilitate local, discussions and activities (5-7 Working Days?)
- Interactivity is a key benefit of videoconferencing; encourage questions and discussion from the learning sites. You may wish to think about answers for the type of questions you expect.
- Legibility of support materials which are used in the session is vital (see guidelines for PowerPoint). Copies of these materials should be forwarded to EDIDL about 1 week prior to the events.

### **On The Day Of**

- Wear solid, neutral colors - blue and medium gray look particularly good on camera.
- Avoid black or white, orange, bright green, and bright yellow as well as busy patterns, such as stripes, plaids, and paisley.
- Avoid excessive or dangling jewelry
- Wear eyeglasses only when necessary as this can create a glare on camera.
- Plan to arrive at least 30 minutes prior to the start time, as the Producer may wish to go over the format with the participants and also do voice level checks for the microphones.

### **During**

- Look directly into the cameras above the TV monitors in the classrooms - give the semblance of eye contact with participants.
- Communicate with remote participant by location and/or name.
- Avoid overt hand gestures while speaking.
- Speak at normal voice level, breath deeply.
- Pause (up to 5 seconds) after soliciting comments or asking a question as there is usually some delay in audio transmission.

- ❑ Reiterate the name/location and question posed by participants to ensure clarity and comprehension for each participating site. Occasionally test to make sure that participants can hear you without technical interference.

**If you experience any technical or other difficulties before or during the videoconference, signal the Producers in the control room.**

Keep in mind the following points about preparation, volume, tone, clarity, pauses, rhythm and enthusiasm in order to be effective.

**Preparation.** It is useful to ask yourself questions such as, Who are the participants? What is their prior experience and knowledge of the content? Appreciating the participants' prior knowledge enables you to adjust your approach choose an appropriate vocabulary, ask relevant questions and make references they will understand.

**Volume.** Even though your voice is being transmitted by a microphone, it is important for you to project well since the microphone needs a good, clear signal. Try breathing deeply as a way to increase the level of your voice. You don't need to raise the volume too much though- the people on the screen aren't at the back of the room!

**Tone.** Try to find a low tone you are comfortable with so your voice doesn't sound tight. Tense voices are difficult to listen to for any length of time. Breathing deeply will improve tones as well as volume.

**Clarity.** The quality of your verbal presentation is improved by articulating words clearly and pronouncing them correctly.

**Pauses.** Wait a few seconds (15 is a good target) for a reply to your question or to make a comment after someone else intervenes. The equipment is voice-switched and does not permit two people to speak simultaneously. If you feel the clock is creating a distracting sense of "always watching the clock," count slowly in your mind to 15. Be time-aware, not time-constrained.

**Rhythm.** For many people, an electronic environment creates a fair amount of nervousness and a tendency to talk very quickly in monotone. It is important to speak at a moderate rate and to vary both your tempo and intonation. The pace of your presentation can be varied by changing your tone of voice, by altering your body language and by using pauses, questions and illustrations.

You should alter the pace of your presentation according to the reactions you see among participants. When you are teaching in the point-to-point mode, it is easy to see everyone's reactions. However, when videoconferences are multi-point, reactions are more difficult to see as there is only one television monitor switching among the sites. Therefore, when preparing your session, it is important to develop a plan that varies both pace and rhythm. You could, for example:

- limit the number of concepts presented
- present each concept completely and illustrate it with examples
- make linkages among the concepts
- anchor new concepts in previous ones
- make linkages with other parts of the course or with events in the workplace

**Enthusiasm.** If the subject or teaching process bores you, you can be sure the participants are bored as well. Enthusiasm and passion for the subject matter are contagious.

### **Visual And Verbal Presentation Materials**

To retain learners' involvement, it is critical that both the visual and verbal elements of the presentation are effective and that each conforms to the guidelines discussed in previous sections to prepare documents and visuals appropriately, to use different types of media during a session and to use effective verbal techniques. Equally important, however, is the way in which the visual and verbal elements are combined. We recommend that you focus on duration, synchronization, competition and conflict, coherence and pertinence when deciding how best to combine the various elements of your presentation.

**Duration.** No verbal segment should be more than 15 minutes long. There is abundant evidence that interactive technologies such as videoconferencing are poor conveyers of factual information

and that print is the more appropriate technology to use when information transmission is the primary goal. Resist the temptation to give lectures.

**Synchronization.** Visual aids and documents should be synchronized appropriately with the content and flow of the verbal presentation.

**Competition and Conflict.** The print materials should reinforce and supplement the verbal segments throughout the entire session. Conflicting inputs will impede effective learning.

**Coherence.** The session should not give the impression that different bits of material were pulled together at random just to have a variety of documents.

**Pertinence.** Every document that is used should make a unique contribution to attaining the session's objectives.

## **Presentation Techniques**

How you animate or facilitate Videoconference sessions, how you use the camera and how you dress during a session can affect the quality. Here are some more ideas that describe how you can adapt your presentation style.

### **Animation**

To create a sense of presence at a distance and encourage active learning, we recommend that you welcome the participants at the outset and give them some clear guidelines describing how you plan to facilitate the session. Throughout the session you should:

- refer to and reinforce the session's structure, underline its meaning, summarize and emphasize
- recognize emotions (emotional reactions)
- call upon participants to speak, either individually by name or as a group by site

- encourage and support interaction from each of the sites

### **Camera Techniques**

- If no one is with you at your site, look straight into the camera rather than at the television monitor so that the participants at the other sites feel you are “looking at them” when you talk.
- If participants are with you at your site, try to look straight into the camera as much as possible so that those at remote sites feel included. Depending on how the room is laid out, you may find it challenging to share your eye contact with both the camera and those in the room, but it is vital to establish a sense of shared presence. Some instructors prefer to be alone so that they can focus on the needs of their remote learners.
- Avoid waving your hands as you speak. Mannerisms such as this are distracting.
- Don't move too quickly. When only two phone lines are used, the movement will come across as jerky.
- Don't move too far away from the camera into the corners of the room. The camera will not follow you, and it may be unsettling for others not to see you.
- Try to vary the camera shot. Medium-angle shots, concentrated on one person, and group shots are appropriate. Very wide-angle shots can be useful, but don't use them too often as participants could become frustrated by the poor resolution in such pictures.

### **Clothing**

- Avoid bright, glittery jewelry, striped or bulky clothes and solid colors such as white, black and red.
- Wear pastel colors, not bold ones, as they are easier to look at.
- If you wear glasses, avoid tinted lenses, as they tend to create a “raccoon” look!