

How To Maximize The Experience Of Your Videoconference Distance Training / Learning End-Users

(Especially those who long-ago gave up in frustration with this medium)

GETTING STARTED – Success begins before you ever even look at a videoconference system brochure.

Given the technically oriented nature of the video communications at many companies, and the tight weave of video encoders with the obtuse and generally poorly understood area of telecommunications and networking, videoconferencing systems frequently are "owned" by the networking or telecom managers and groups within the organization. These people often are tasked with developing the cost models that justify the purchase of any corporate communications system, and these same people are often also those tasked with analysis of the technology, purchasing and management of the installation and maintenance of the equipment. Given the all-too-often omnipresent incorrect [or at times seemingly intentionally skewed] information supplied to potential buyers, most day-to-day business persons are more than happy to pass planning and purchase responsibilities off to others, themselves being willing to step-in only after the systems are "up and running".

The risk to the organization is that, as a result of commodity low-bid rather than application consideration during the analysis and purchase phase, the new systems may have been improperly or erroneously configured, thus making them useless as tools to reach the ultimate end-user goals for the communication. (Ex: Systems being purchased / deployed to allow the training of PC component design electrical engineers. If the encoders have no inputs for signals from test equipment, then these often expensive videoconference systems will provide little streamlined or useful communications for that application).

Worse yet, and even more subtle and insidious, the approach to deploying the systems within the greater context of "organizational communications" [phone systems, computers, LAN's, PDA's , pagers, faxes, etc.] may be seen primarily as a technical challenge and not one of changing the relationships and communication practices among the various remote sites. From the training professional's point of view, the risk is that you may end up being driven by outside cost decisions to change your practices. Instead, you should be pursuing a strategy for meeting the organization's training challenges effectively.

The trainer's initial task, therefore, is to get involved from the beginning in the planning process that will justify the organization's investment in a videoconferencing system. Most justifications rely on predicted cost savings in travel expenses, particularly training-related travel. The basic assumption is that the programs that are currently run at a central training facility will be run via videoconference, and travel budget demands will drop accordingly or (even) exponentially. There's bad news, however. *It won't happen in anyone's lifetime.*

Planning on cost-savings as the *only* justification for videoconferencing is unrealistic when it assumes, for example, that field salespeople will reduce travel to the home office at a rate equal to their use of videoconferencing. It's more likely they will use videoconferencing to augment travel, not to replace it. Whether the main purpose of a trip is for training or anything else, people travel between headquarters and remote locations for a variety of reasons, only some of which can be accomplished by videoconferencing. Trips are used to build individual and group relationships, for instance. Additionally, trips are often a perquisite that people will resist losing. (*Some people like to travel*).

But, what if the organization could be persuaded to focus on the benefits to be gained instead of the money to be saved? *Videoconferencing removes barriers to communication by improving both its quantity and its quality*. In other words, more training could be done more effectively rather than just the same amount of training done more cheaply. (It's that "vision" thing. Some have it and...)

The other task the training professional must take-on from the beginning of the process is to identify, encourage and support good practice in the use of videoconferencing, whether for meetings, for training or for any other visual communication purpose. This suggests a number of activities:

Advertise the videoconferencing: If you build it, they won't come. If you put high technology tools down in front of someone and they do not know what they are, or what the tools can do, or how to use them, guess what? *They won't use them!* And, if they don't use them, someone just wasted a lot of money and time.

Information sessions and demonstrations, heavy on the hype, fun *and that include direct, simple clear demonstration of the immediate personal and business benefits*, can go a long way toward encouraging people to experiment. Gimmicks work. For example, calling a demonstration area a "Travel Center" and festooning it with trappings borrowed from a local travel agency. During the demo you could pan the camera out the window of your office for a real-time view of downtown in different locations. Or, try using the tools to create a luxurious looking meeting space or the appearance of a calming and relaxing outdoor scene at the beach in the background. It is remarkable how quickly end-users will warm-up to the new systems and communications when they see that there is ample opportunity to use these things creatively.

Appealing to the end-user community solely on the basis of "you will be able to teach more classes in a shorter time" doesn't have much appeal to the natural human need for variety, creativity and exploration. "Those things have nothing to do with teaching our business related classes" you say? Ask any of those folks what they do with their free time. I doubt they spend it staring at a gray wall in a dimly lit room. You will be amazed at their creative use of time as a vehicle to experience new things. *Tap that creativity and you will achieve your goals!*

REMEMBER: Demonstrations also give you an opportunity to ask people about the type of activities they want to conduct via videoconferencing [gee...there's a novel idea – asking people what it is *they* think about how to become more efficient and effective in *their* work].

Likewise, properly planned and delivered demonstrations of the technology / methodology helps to promote classes / workshops *and other opportunities to help them learn how to do these things well*. This last concept is critical. You must work to help people succeed, and that means helping them not just to learn *how*, but to learn *how to do it very well*. People enjoy doing things that they do well. We never hear someone say, “I have been trying to grow roses for 25 years, and as soon as I plant them, they shrivel and die. I have probably planted more than 1,000 rosebushes over the years, and not a single flower to show for all that work. It sure has been a great hobby. I love doing this every day.”

Develop guidelines: Written guidelines for using the system should cover technical procedures for operating the equipment as well as suggestions for using the medium effectively. These will help users decide when it is appropriate to use videoconferencing for a given need and how best to manage and facilitate the resulting application interaction. A user's guide can be a stand-alone document or it can form the basis for a training session, possibly one of the first that the end-user community attends.

Resources for these guidelines should come from your vendor, outside experts, reading and your own hands-on experience. Schedule some videoconference meetings with your counterparts at remote sites to review the possible uses and experiment with the technology. Put the systems and the tools through some paces. Show people how it looks and acts when it is used properly, and also let them see and hear what happens when it is used poorly. The best way to educate end-users on how to dress when their application calls for standing in front of a large whiteboard is to dress yourself in white, stand there on-camera yourself, and let them see you turn into a disembodied floating head. *Go ahead, pumpkin-head. Look stupid!* They will learn from that, have a little fun, and they will appreciate that you took the kidding (and the humiliation) for them.

Conclusion? As a result of various characteristics of video cameras, electronic displays and other VC components, the medium does introduce anomalies and unexpected results. **Another good example (of many):** Unexpectedly, looking at a video screen is actually more draining for participants and facilitators alike than looking at a live presenter. This happens because of the confined area of view (a screen instead of the entire front of the room) and because of the relatively bright character of the video display (relative to normal room lighting). This suggests, for instance, that you may want to [in fact, we would say that you *MUST*] design more breaks and different activities into your videoconference based classes than you would for a standard live in-person training session.

Conduct introductory training sessions: These sessions should follow, and expand upon, the initial demonstrations. The purpose is to give people a feel for the way an actual videoconference works, to provide them with some hands-on experience, and to start introducing prospective users from remote sites to one other and each others style via video. These sessions should be fun as well as educational. Groups should be small--5 -10 people per site--so that everyone gets a chance to experience what it feels like to interact with people at remote sites. If you want users to know how to manipulate the equipment, this training session should let them do that as well. In fact, "hands-on" should be encouraged. *Remember, though* – zooming a camera and switching sources is not communication. It is simply the use of the tools of communication.

Training programs are often developed and organized into three parts: 1) a demo and discussion, 2) an "offline" section during which, although the equipment was on, each site worked independently to let participants practice basic operations of the equipment, and 3) a conclusion with both sites back "online."

Make Your Training Programs Flexible In Terms Of Delivery Times: One of the first things that people often forget is that the technology changes how we use time. When a trainer has to fly to a site, or when employees are all brought together into a common city for specialized meetings or training, there is a clear financial incentive to move as quickly as possible through all of the materials. "Get it all done at once". That's because every day that is off-site is almost three-times more expensive on a per-person basis than a similar day for them in their own home office.

These rapid consumption cost issues go away with videoconference technology. What is more, when you make use of videoconference communication the 8-hour class does not have to be delivered all at once on the same day. Break it up into several 2-hour classes, delivered over the course of a week or more. Offer the same class, in easily consumed smaller portions, several times in a staggered schedule. That way, if Ron in Boston misses part-2 on Wednesday afternoon, he can pick it up again on Friday morning. This approach will not only help individuals obtain their training in a manner that places less pressure on their personal schedules, it will also allow you to account for the time shifts across North America or the globe. For example, if Ron misses part-2 delivered at noon EST, he can pick it up at 5:00 EST because you will be delivering it at that time to make a planned 2:00 PST class schedule for your west-coast offices. Simple.

Also Remember – When you teach via videoconference, you are creating a video and audio event that can be captured, edited and used in other ways: *We are in no way recommending that you think of videoconferencing as TV or as video production.* It is neither of those things. The power of videoconference communication is the real-time visual and auditory exchange of ideas and information. Recorded videoconference based sessions are to the dynamic exchange of ideas what an e-mail summary of the Board-of-Directors

presentation is to the actual presentation as it was delivered on the day of the annual Board meeting. Recorded videoconference events are a pale shadow of the actual event, because any personal interactions and dynamic exchange of ideas have been frozen. These recordings, however, can serve as a refresher or as an adjunct to other meetings or classes. Some companies actually find that the classes they teach can be then placed onto their intranet for later access at the desktop. Some have even found that the particular materials covered are so special that other companies will actually pay for an edited copy of the event. If you invite the only specialist in treatment of a deadly disease into your medical institution for a one-day multi-point videoconference based class, wouldn't recording the class and editing out the empty or ineffective points make sense, and might not others actually have an interest in purchasing a copy of the finished tape? **Just remember** – there is a reason why broadcast quality video production is normally performed by extremely skilled and highly-paid experts. If all you do is record 8 hours of a wide camera shot of the front of the auditorium and all that is seen a tiny blur of a figure and smears on a tiny flipchart behind them, then all you have is really awful TV. It is not useful to or desired by anyone.

Naturally, if record-and-edit capability is considered as a part of the overall videoconference strategy, it has an impact on all elements of the process from the very beginning, including when, where, how, why and in what manner the programs and systems are planned for and deployed. There are also intellectual property issues that come into play, even with your own employees or trainers. Remember – every drunk that is hauled out of the car on “COPS” has signed a release that allows the show to use their face and the details of the arrest on-air. (Indeed, that people actually seem to *want* the entire nation to see them in such a condition is the amazing part of the show).

It is often best to approach this record-and-edit “extension” of an organization's videoconference application very carefully, with professional assistance from a qualified communication and videoconference person or company. Most are best advised to deploy more basic forms of videoconference communication methodology first, and then add other “production” elements at a later time, after the base systems and processes are demonstrably operational. It is, however, something to think about.....

Provide ongoing support: Critical. Be prepared to answer questions and provide guidance on an ongoing basis, especially while the company is learning to communicate with videoconferencing. This may mean setting up a formal help-desk. The additional goal is to support people in the early going, ensuring that their first experiences with videoconferencing are as successful as possible. The goal is to be there for them when they need you. Finding out after their meeting, for instance, how to get the document camera properly in-focus doesn't help them very much, and they may feel completely humiliated as a result of having to say “Sorry...if you were able to see this chart, then you would really understand the evidence” 30 or 40 times during a 2-hour meeting.

TRAINING

"Everything you do face to face can be done via videoconferencing" has become a familiar refrain among enthusiasts and vendors. The claim is largely true, but as we've already suggested, videoconferencing requires different strategies and practices, particularly when used for training.

Traditionally *, the heaviest users of videoconferencing as a training vehicle have been universities and very large corporations. (*Due to technology advancements, in the past 3-4 years, small and medium sized groups have become the majority users). Originally, classes were often "broadcast" live (and may have even been only one-way video through satellite uplink – downlink setups, with a return voice telephone link for Q&A) to large groups of students at remote locations. Certainly, these can be interactive learning events, but they tend to be mostly one-way lecture, more like phone-in TV (QVC, for example). For the most part, what we are discussing in this document is two-way dialup videoconference communication, with full audio and video bi-directional interactivity as a result.

Videoconferencing doesn't always lend itself to conducting a nitty-gritty workshop on, say, coaching skills or team leadership--a workshop in which small groups of people are actually challenged to change their behavior. This sort of thing usually requires close interaction and feedback from the facilitator.

This is not to say, however, that videoconferencing is "the next-best thing to actually being there", as we so often hear from videoconference manufacturers and uninformed intellectuals. (Think about that statement for a minute. Are you prepared to get your organization to spend a lot of money in order to "not quite do something correctly"? Have you spent your entire professional career trying to become second-best ???) In fact, it is possible to end up with a learning event that is more powerful and effective than if you were forced to travel to the remote site to run the session. Properly configured, planned and delivered, a meeting or a class delivered via videoconference can be better than being there in-person. Your standard three-day leadership session, for example, can be run once a week over three weeks instead, giving participants a chance to practice new skills between sessions. Introductory meetings can be held ahead of time (before the actual training begins) to let participants get to know each other and to work on any cultural barriers that may exist. It is even possible that participants' managers will become involved in the training if the class is taking place at or near the work site instead of in some distant city.

As a general rule, all of the standard good practices for the design and delivery of classroom training apply to videoconferencing. With the additional layer of the medium, however, many of the old rules must be followed more rigorously, and a few new ones must be added. These additions, however, are often extremely subtle in nature, and even experienced videoconference users can work with the

medium for years without ever understanding these insidious issues. Result? Their delivery over video will rarely rise above the level of simply “o.k.”. In order to get past “o.k.” to the level of powerful impact, professional help must be sought and the subtleties must be understood and embodied within the organization’s methodological approach to videoconference meetings and classes. A good way to think about this is to understand that how you switch to a document camera or pan-tilt-zoom the instructor camera is much less important than why you would do either of these things, and when you would time such actions.

Given these caveats, here are some guidelines for effective training via videoconference:

Designate and prepare a remote site co-trainer (or co-facilitator): If you make only one change to accommodate the medium, this is the one. Your co-trainer can be another instructor at the remote site or, even better, the sponsoring manager. This person or group of people are critical to your success, and must perform a very difficult task. They must straddle the line between being one of the presenters and being one of the remote audience members. The tasks they will perform vary according to the style of meeting and preference of the main presenter or instructor, and can include:

- * Coordinating pre-session activities such as needs analysis, participant invitations and room setup.
- * Introducing participants at the beginning of the session and translating if there is a language barrier.
- * Managing the remote-site room. The co-trainer should intervene as necessary to ensure that the local perspective is brought in and all participants get heard. It is difficult for you to "read" the remote room through the video monitor.
- * Facilitating breakout sessions and exercises. Managing numerous small groups is almost impossible over the video link.
- * Conducting follow-up activities. This could include work or practice groups, distribution of materials, collection of evaluations and so on.

At a minimum, co-trainers should be involved in a thorough dry run of the training session so that they understand their roles and activities.

Separate the learning objectives into educational (knowledge) and training (skill-development) components:

1. **Educational (knowledge)** aspects of the program--lectures and presentations that introduce facts, concepts and background information--lend themselves well to direct adaptation to the videoconference medium.

2. **Training (skill-development)** is often another matter. Practice and breakout sessions for skill acquisition and feedback are best done "offline" and facilitated by the co-trainer. (This also provides a useful break from staring at the video monitor.) If significant behavioral changes are being asked of participants, they'll need an opportunity to challenge the wisdom of these changes. This suggests a discussion that is led locally, with the primary facilitator involved but taking a less-active role.

Develop new or revised outlines and descriptions of existing programs:

New constraints and new opportunities suggest that you might want to (or, indeed, may even have to) organize some of your training differently.

* As pointed out earlier in this document, think of the element of "time" in new and different ways. Redesign long workshops into several shorter modules. Have you generally squeezed 24 hours of training into three consecutive days? That probably had to do with the expenses and logistics of travel, not to mention the unproductive time for anyone who was away from their own office for even a short period of time. Those logistics no longer apply. Take advantage of the opportunity to travel at the touch of a dialing pad. A meeting can be set up in seconds. Break down that multi-day seminar into smaller more "participant-friendly" chunks. Work with their schedule and they'll work with yours.

* Organize your sessions to allow a maximum of 2 hours of "online" time in each sitting. Within that 2-hour session, give the participants a break every 55 minutes, and make the break a minimum of 10 minutes and a maximum of 15 minutes long. For many different reasons, videoconferencing is a fatiguing medium for both facilitators and participants. It is possible for classrooms full of people to sit riveted for more than an hour before the video image of some famous speaker. But unless you plan to be that dynamic or entertaining or enthralling, break it up.

* Post an easily seen and read timer for each break. Many software programs (many are free downloads on the WWW) are available that will allow you to set and place a countdown timer right on your PC screen. This keeps people (and your meeting or class) timely.

* Allow more time for everything. Because of the extra pauses due to the transmission delay, expect an average session to take about 5 percent to 10 percent longer than it would in a single classroom. If you regularly cover your PowerPoint visuals in 40 minutes, when you deliver them over video it will take you 45-50 minutes.

* Contrary to many claims, the videoconferencing medium does inhibit participation, though not because you are "at-a-distance". If the remote group(s) are not "interacting" with the presenter or instructor, it has nothing to do with the fact that they are connected remotely via a digital telephone line. It may be the result of an improperly or poorly configured system. It may be the result of

intentional approach on the part of the presenter. Often, it is not intended or desired, and nobody has any idea what to do about it. Professional assistance from an outside expert is almost always required at this stage. Every presenter or trainer can, however, remain conscious of the need to draw out participation and interaction, and of the methods that can be employed to achieve that goal. It is important for any trainer, via videoconference or not, to take responsibility for the quality of the experience of the participants. Likewise, students / participants must accept the responsibility of trying this medium with an open mind, and they must be patient as trainers or meeting leaders work out the little bumps that always happen when new technology tools are first put in use. The first time the presenter accidentally hangs-up instead of switching to the document camera is not the time to jump up and say "See? I told everyone! Now we have to waste time while they call us back!!!" You're right. That could take...12-14 seconds!!! Take a deep breath and give everyone a break. Did you get your car keys taken away the first time you backed into the mailbox? And guess whatYou probably won't get them taken away when you do it a second or third time, either. Remember – It's just a presentation. It's only a class on new product rollout. Nobody is going to burst into flames and die in a heap in front of the office when something goes wrong with the videoconference. Relax. VC is rarely brain surgery (though tele-med is a growing application).

* Dry run, practice, then *practice some more*: Practice more than you think you need to, and always practice. This isn't like riding a bike. Even a good presenter will get rusty after a few months of not videoconferencing.

* Develop contingency plans: **Stuff happens**. When you depend on technology, you need to be ready for it to fail. Ever try to install a new printer onto a Windows98 PC? Even Bill Gates failed to do that during his multi-million dollar live intro of Windows98. Everyone should be ready with activities if there is a disruption in the video connection. Usually, any disruption will be temporary.

There is very little you can present in a classroom that can't be delivered via videoconferencing, ***provided you adjust to accommodate the demands of the technology. The medium is not as forgiving as ordinary stand-up training.*** There are enough idiosyncrasies in the technology so as to allow little room for flaws in your design, preparation and presentation. That being said, almost everything you know about how to create a successful learning experience applies directly to videoconferencing. What you already know about training is correct. That's not the problem. It is simply that you do not quite know enough, because videoconferencing brings new sets of requirements to the equation. If you are a good trainer or presenter, you are well ahead of the game. Remember, though, that just because you are good in-person doesn't mean that you are automatically going to succeed at a distance via videoconference. Break some rules, the first of which is to become an old dog that does learn new tricks.

HARDWARE - THE BARE-BONES BASICS

A typical videoconferencing system generally includes most of the following components at each site:

Control panel: The control panel dictates the visual and audio messages to be sent and received -- *a lecturer speaking vs. the image of an overhead transparency, for instance*. Other controls on the panel operate the movement of the main cameras at both the sending and receiving sites. Simpler is better. The fewer buttons you have to press in order to achieve a singular action the better. Perhaps the best available today are those available from PANJA corporation. They are flexible, easy to configure, simple to use, and easily modified as user requirements grow and system components are added or deleted over time.

Monitor station with main camera: Each site has a video monitor station that includes either one or two color monitors and the main camera. Generally, one monitor displays the signal being sent to the remote site and the other displays the image being received. In certain systems, it's also possible to send two or more images to the remote site, though this often requires slightly more expense in the initial hardware layout.

Document camera: The document camera can transmit any kind of image. It looks like an overhead projector and functions similarly. It can display paper documents, overheads, photographs, slides and small three-dimensional objects. It can send images either as "live video," allowing the trainer to manipulate the image in real time, or as a "graphic," which is a still picture. By laying down a sheet of paper and using a moderate thickness marker, this can take the place of a whiteboard or flipchart for simple drawing or writing out short statements or conversation points.

Scan Converter: (*As of Q4 1998, the second most common input used in videoconference training, second only to the main camera*). This is a device that takes that big VGA or Super-VGA computer signal and turns it into a regular little-old video signal that can be sent into the codec and out to the far end. Unless this device is one of the extremely expensive "broadcast" models (\$30,000.00 or higher) it will not deliver images to the far end that are quite as crisp and detailed as the original VGA computer signals (like those that you see on your local VGA monitor). These devices have, over time, become quite good, and many of very reasonable quality are priced at less than \$700.00. By watching font types and sizes, line widths and color choices, much of what you now view on a VGA display during a local meeting can be sent to the far-end of the videoconference connection and used as a viable and valuable adjunct to your other visual source materials. How to "format" computer information for use via scan-converted video is an essential section of any introductory training offered to your end-users.

FOR THE TRAINER ...

Preparation

- * Avoid bright, flashy jewelry or clothing that is boldly colored (bright red, electric blue, sunshine yellow, etc.) or heavily patterned. Stay away from stripes, especially narrow vertical strips. This could cause greater distortion of the video image during movement. By the way - No “big-hair”. Tie it back or mousse it. That also applies to the women.
- * Obtain non-glare lenses for your glasses, or take them off while you are on-camera. Reflections of the monitors in your glasses might be really hip, kind of “MTV-ish”, but this is extremely distracting, and ruins any sense of “eye-contact”.
- * Arrive at least 30 minutes early.
- * Test all equipment you will be using, even if you “used it just yesterday”. Anyone could have done any number of things during the intervening time that will sneak up and bite you at the most critical moment, wasting the audience’s time and making you look foolish and unprepared.
- * Adjust the monitors, cameras, tables, chairs, etc., for minimum movement during the session and unobstructed viewing, and then enter camera presets for both delivering and receiving sites.
- * Adjust lights (if necessary and possible). Lighting should be on the front of participants to avoid distracting shadows.
- * If possible, before dialing into the scheduled call, put the systems into a “loop” call so you can see the images exactly as they will be seen at the remote sites. When you are satisfied with your materials and visuals, disconnect the loop call and dial into your remote site(s).
- * Touch base with your receiving-site facilitator(s).
- * While people are assembling, focus the main camera on some non-distracting visual and make sure the microphone is muted. A good idea is to use a flip chart or white board displaying the agenda or a welcoming message, or put a “Welcome” slide up on your PC, with the name of the meeting, general times, name of the presenter, etc.. Muting the microphone alleviates confusion caused by miscellaneous noise and conversation being transmitted. Remember, though, to treat every system as though the microphones are “hot” or “on”. Never assume that you cannot be heard at the remote side of the conference. Even when you see that the local mic is muted, never say anything that you do not want the rest of the connection to hear. Ever. Smart remarks or off-color comments may have a dramatic impact on your available free-time if reported to your supervisor.

Facilitating the session

* Set the “meeting protocols” at the start. Tell them when and how you will accept questions. Remind them that this is compressed video and subtle gestures may not be noticed – that they must raise their hand fully to be called upon. Let them know that little quips and asides may well be heard by others at the remote site, *even during the break when the connection is active but the presentation has been paused*. Tell them when and how many breaks there will be. Have them turn off pagers and cell phones. Tell them what to do if the call happens to get inadvertently disconnected. Give them a “help” number.

* If in small groups, have all participants introduce themselves, maybe through an ice-breaker exercise. If there are larger groups, at least have the facilitator at each location introduce their “group”. Introductions are critical in this environment to help alleviate its inherently less-intimate and less-personal nature.

* If there are large numbers of participants at both delivering and receiving sites, avoid focusing on one group or the other. And remember – the camera is the eyeball for the people at the remote sites. If it is placed up in a corner and off to the side, then they are forced to “hover” above your local audience and will feel like they are eave-dropping rather than participating as part of the larger “group”.

* Describe the co-trainer's or facilitators role. Remember to always thank everyone who has helped at the conclusion of the meeting.

* Project your voice and speak clearly. If people at the remote site have a different native language, keep yours free of jargon and needlessly complex words. (This also makes a translator's job easier, if you're using one.) All participants need to be able to hear and understand easily. ***And remember- audio is more important than video. You can have a remote meeting with audio and no video, but you cannot have a remote meeting with video and no audio.***

* Keep physical movement to a minimum. Excessive movement of the facilitators, participants or the camera will cause distortion of the video image. Don't pace. No rocking. No “playing” with hair, clothing, jewelry, or any other items. Don't shuffle papers or tap objects near the microphone.

* Remember the transmission delay and allow extended pauses for others to comment. Help them have chances to “interrupt”.

* Repeat every question before answering to be sure that everyone heard it and that you understood it. Always thank someone for asking their question. If you want people to interact, then make them feel good whenever they do.

Also – Listening is not waiting. Answer their question, not yours.

USING VISUAL AIDS

Given that videoconferencing uses a visual medium, the trainer's choice of visual aids deserves special attention. Videoconferencing allows you all the traditional choices, including transparencies, flip charts and white boards. It also introduces another layer of complexity, however, demanding that you think carefully about the visual aids you use and the way you use them.

Regardless of which type of visual aid you choose, always send hard copy to the receiving sites prior to the program. Fax or mail copies of anything you have prepared ahead of time. Videos, in particular, will be clearer when they have accompanying scripts.

Graphics, such as bar and pie charts, are better than text. Tables and matrices can be difficult to read at receiving sites due to the slight distortion of the video signal. Use handouts and your own verbal description to add "text."

Prepare overheads using the same rules that apply in single-site training: Each visual should be limited to one idea or point; no more than seven lines per transparency; use at least a 36-point type font; and so on.

Here are some advantages and disadvantages of various visual aids in a video-conference.

OVERHEAD TRANSPARENCIES

Advantages: Receiving audience can maintain control of what it sees (when using main camera). Ensures consistency between image shown to all sites (when using main camera). Easy to photocopy and mail to receiving sites. Can be written on during use.

Disadvantages: Poorly designed transparencies detract from presentation. Image may not be clear to remote-site participants. Glare is almost always present.

Techniques: Establish camera presets before meeting begins. Send hard copy to remote sites prior to meeting. Use pointer (such as a pencil) to identify each point. Keep trainer's physical movement to a minimum.

A good choice when: Delivering audience is large. Remote-site audiences are relatively small. Focus is on participating in meeting, content of visual aid being secondary. Visual is a "working document" (you plan to write on it during the meeting).

"LIVE VIDEO" (USING THE DOCUMENT CAMERA)

Advantages: Image sent to remote sites will be clearer than using overhead transparency. Can be written on during use.

Disadvantages: Remote sites no longer see the image from the main camera, showing participants at the sending site (they see the graphic on one of their monitors, and their own image on the other). More difficult for remote participants to participate in the discussion, since they can hear, but not see, the sending-site participants. Image will not be as clear as using the document camera to send a graphic.

Techniques: Actively facilitate participation from remote sites by allowing pauses and asking questions. When using a pointer or writing on the document, keep physical movement to a minimum to avoid image distortion.

A good choice when: Visual is a working document. Remote participants don't need to view delivering site and document at the same time. Clear view of the document at remote sites is important. (see "Still-Graphics" below)

"STILL GRAPHICS" (USING THE DOCUMENT CAMERA)

Advantages: Image quality is excellent. Remote participants can join in discussion more easily, since they can see the graphic on one monitor and the delivering site on the other monitor. Good for sending clear images during breaks.

Disadvantages: There is a delay of 10-15 seconds between sending the graphic and having it appear to remote-site participants.

Cannot be written on or pointed to during discussion (unless you resend the graphic image).

Techniques: Meeting must be carefully planned to allow proper timing of sending graphic and discussing it.

A good choice when: Meeting is for the purpose of presenting information, as opposed to discussion. Remote sites need to view delivering site and visual at same time. Visual is not a working document. Clear view of document at remote sites is critical. Visual is used in context of a presentation, as opposed to open discussion or training session.

FLIP CHARTS OR WHITE BOARDS

Advantages: Can be used spontaneously. Flip charts can be posted around room. Takes little preparation or experience to use. Remote sites maintain control over images they see.

Disadvantages: Handwritten images may not be as clear or legible. Usually requires more physical movement of trainer, producing distortion. Difficult to send hard copy to remote sites.

Techniques: Use a black pen to ensure legibility. Make sure the marker draws a wide (1/2" or wider) line. Establish appropriate camera presets before meeting. Verbally check legibility with remote site.

A good choice when: Groups are small and informal. Meeting involves free-flowing discussion. Visuals need to be created during the meeting.

Copyright, June 2000. Do not copy without permission from CDG and LTI.

Acknowledgement: Information and process recommendations drawn from vast experience and a wide variety of resources, with special notice given to a near decade-old article entitled **Videoconference and Distance Learning** by Michael Emery; Margaret Schubert 1992. Many sections in this article are drawn from their original work and have been more fully researched and then updated, greatly expanded and re-written. Much has changed since the time when Emery and Schubert were experiencing and writing about videoconference for training, but the basics almost always apply. We have many benefits, now that the technology has matured, that they did not have in 1992. Some elements got simpler over time. Surprisingly, due to the subtleties involved and the constant and rapidly changing addition of many new multimedia elements, many aspects of videoconference communication got tougher for the non-technical end-user. One thing you can count on - *Everything* remains interesting and challenging.
Scott R. Sharer - President, CDG*

*Communication Design Group is a design and engineering company specializing in digital video communication and videoconference system design and deployment. Along with the CDG sister-company of Logical Transitions Incorporated, specialists in videoconference end-user training, Scott trains videoconference users from all walks of life and in all applications. Over the course of more than 10 years Scott's many classes and the success of his students have made the CDG & LTI methodology recognized around the world as the key to effective and powerful delivery via videoconference.

Communication Design Group – 912-786-0068 (voice) and 912-650-1832 (video)
Logical Transitions Incorporated – toll free @ 877-4LOGICAL www.logicaltransitions.com