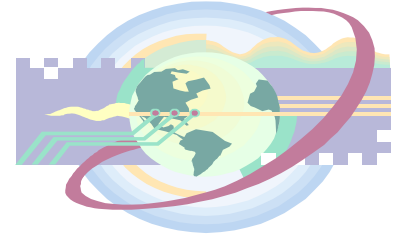


Videoconferencing 101



I. WHAT IS IT?

Videoconferencing is an electronic technology that allows for live, interactive audiovisual communication between two or more places separated by distance. Think of talking to your TV set and having it talk back to you at the same time!

II. HOW DOES IT WORK?

Videoconferencing requires a camera, a microphone, a television monitor with speakers, a codec, a user interface, and a network connection.

Camera/Microphone and Television Monitor/Speakers: Allows the videoconference participants to transmit live audiovisual information to the remote site and also display audiovisual information that has been sent to them.

Codec: An electronic device that encodes and compresses outgoing video and audio signals at one location and decodes and decompresses the incoming video and audio signals at another. This enables the video and audio signals to be transmitted across a network at a fraction of their original size.

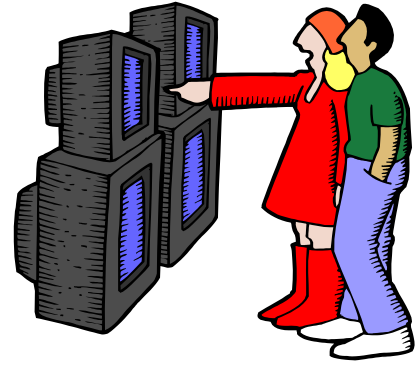
Network: The network will allow for data (i.e., digitized audio and video information) to be transmitted between the different locations. A variety of technologies can be used for this: satellite, microwave, fiber optics, ISDN, or Internet.



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Videoconferencing Etiquette:

Communicating and interacting effectively between distant locations during live videoconferences is very important. All participants need to follow certain guidelines and codes of conduct so that everyone has a meaningful, enjoyable and enriching experience.



How to communicate:

- If you wish to speak, raise your hand first so that the teaching artist can call upon you. Always say your name and possibly your library site location first before proceeding with other comments you would like to make.
- Speak clearly, slowly and distinctly: Talking in a low voice or mumbling will make it difficult for your listeners to hear and understand you at the remote location(s).
- Learn to finish your thoughts completely and with an obvious conclusion. Having your voice trail off in a sentence fragment will cause confusion to your listeners.
- Look at the iris or “eye” of the camera when speaking. This will take a little getting used to but will establish “eye” contact with your listeners on the other side.
- Hint: When speaking, do not look at the television monitor that shows your library site, as this will look like you are looking off to the side and not directly at your listeners on the other end.
- When you are speaking, make sure the camera is focused on you, as you want your listeners to be able to see you as you talk. If the camera is not focused on you, ask the media coordinator or facilitator to make adjustments to the camera position.

How to listen:

- Do not talk while someone else is speaking; Talking to your neighbor when someone else is speaking is called “side talk” and is considered rude and disruptive to the conference. Hint: “Side talk” is not always private, as sometimes it can be picked up by the microphones and heard on the other side!**
- Use visual cues like nodding to let a speaker know you understand what they are saying. Interrupting a speaker with a simple verbal affirmation such as “uh-huh” can throw off the tempo and pacing of a videoconference conversation. Wait until they are finished with their comments before responding.**
- Moving around the room or “off camera” while someone else is talking during a videoconference is considered impolite and distracting. Just as you would not walk around while someone in the same room was talking, the same is true during a videoconference.**

What to wear during a videoconference:

- You want to transmit a good, clear visual image of yourself during a videoconference. Wear solid colors such as blue, pastels, and light gray, as they work very well on video. Avoid busy or complex patterns, white, black, red, or highly reflective clothing, as it will be hard for the remote side to see you properly.**



Videoconferencing Glossary

application sharing	Software that enables people at different sites to edit or change the same document simultaneously during a live videoconference. (Also known as “Document Sharing.”)
bandwidth	The amount of information that can be sent over a given transmission channel through a network, expressed typically as a frequency range or as bits per second.
bit	<u>Binary Digit</u> . The smallest unit of digital information that can be expressed. Usually expressed as 1 or 0, yes or not, on or off.
bps	Bits per second.
broadband	A high-capacity communications circuit or path
camera presets	Software that allows pre-defined camera angles to be programmed into a videoconferencing system.
desktop videoconferencing	Videoconferencing on a personal computer as opposed to a room-based system.
echo cancellation	process of eliminating acoustical echo in a videoconferencing room during a conference.
full-duplex audio	Two-way audio simultaneously transmitted and received without any interference or “clipping.” A common feature of room-based systems.
full-motion video	Equivalent to broadcast television video with a frame rate of 30 fps (frames per second). Images are sent in real time and motion is continuous.
frame rate	Frequency in which video frames are displayed on a monitor, typically described in frames-per-second. Higher frame rates improve the appearance of video motion and smoothness.
handshaking	The electronic process used to establish communications parameters between two videoconferencing sites.

H. 320	An international videoconferencing standard over ISDN. ISDN offers quality of service since it is transmitted over a circuit- switched network.
H. 323	An international videoconferencing standard over IP (packet-switched) networks.
ISDN	Stands for I ntegrated S ervices D igital N etwork, and is a system of digital telephone connections that allows voice and data to be transmitted simultaneously across the globe using end-to-end digital connectivity.
IP	Internet Protocol.
Internet2	A consortium of 200 universities with partnerships in 30 countries that are developing “next-generation” internet applications and networks that will eventually be used on the commodity internet.
ITU	International Telecommunications Union.
MBPS	Mega bits per second.
multipoint	Videoconferencing between more than two sites.
point-to-point	Videoconferencing between only two sites.
public rooms	Videoconferencing services offered to the public on a fee per usage basis.
room-based system	Videoconferences for large groups (Compare with Desktop Videoconferencing.)
videoconferencing	Live, two-way, electronic audiovisual communication between two or more places separated by distance.
virtual classroom	An online learning space where students and instructors interact.

