NC STATE UNIVERSITY

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Videoconferencing at NC State University: A user guide

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Introduction

NC State's Video Communications Services (VCS) currently manages and operates three videoconference rooms and nine video classrooms with access to others on campus. Videoconferencing allows on-campus videoconference participants to interact with participants at off-campus sites, viewing them on large display monitors. Videoconferencing is used for research collaborations, tutorials, project planning, interviews, and meetings. Interactive conferences can be arranged within the UNC system or with any site in the United States or the world.

These guidelines will help you to make the best use of NC State's videoconferencing facilities.

Choosing a conference format

There are two ways to set up a videoconference. To choose which format is best for you, VCS will consider the type of forum you are participating in and how each site connects.

- **A point-to-point** format connects two sites directly. Each site can see and hear the other site. Each site can send the other site a "snapshot" or "graphics transfer" of document-camera material or computer presentations, or can send this material as a live video feed in place of the image of the presenter. Unless the microphone is on MUTE, the sound from each site is broadcast continuously.

- **A multipoint** format connects three or more sites in a star-type configuration. A main bridging site has multiple connection capabilities to which the other participating sites connect. In most cases, "voice-activated switching" activates the outgoing video signal of whichever site is talking to all other participants in the conference. An alternative to voice-activated switching is "continuous presence," where all participants receive a split-screen image comprising all conference sites.

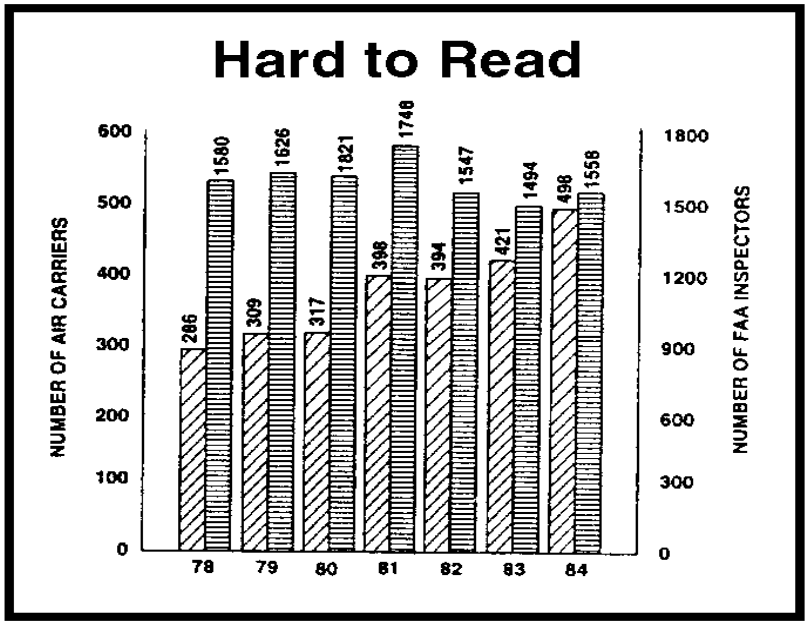
Equipment in the videoconferencing facility

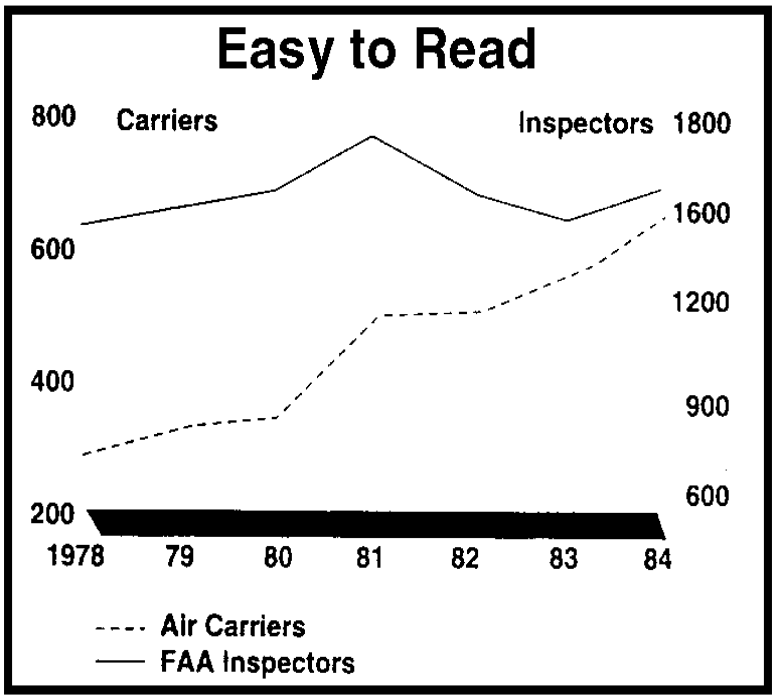
Videoconference rooms at NC State are equipped with a document camera. The document camera captures any document that you place on the camera zone, including a wide range of printed material, three-dimensional objects, and notes that you write on 8-1/2" x 11" pads with a felt tip pen. ELMO units also have a back-light function, which allows you to display 35mm slides, and photographic and X-ray film.

Although the three videoconference rooms are not equipped with computers, they do provide connectivity for your laptop computer.

Preparing effective computer materials for videoconferencing

- **Page layout:** Use a horizontal (landscape) format. The proportions 4:3 are best for the TV screen.
- **Color:** Avoid stark white backgrounds; use at least 20 percent gray. Avoid saturated or bright colors such as reds, yellows, true whites, magentas and yellow-greens.
- **Computer font:** Use sans serif type faces such as Arial or Helvetica (as opposed to serif typefaces such as Times). Choose a font size for the main part of the text that is at least 24 points. Headings should be at least 36 points.
- **Text:** Limit the main text to six lines per page, and use a maximum of ten words to a line. Be concise; use key words or phrases. Use bullets in setting out text.
- **Graphics:** Use clean bold lines for illustrations, graphs, charts, and diagrams. Clearly defined areas of texture usually transmit well.





Participant conduct

Remember that the video camera and microphone are your links to the remote site. Stay within view of the video camera and within pickup range of the microphone.

Speak just as you would if you were addressing a local audience. Take turns speaking so that everyone can be heard. Remember that whispers and private remarks will be picked up by the remote sites. If you don't want your remarks to be transmitted to the other sites, you may be able to mute your microphone. Check with your operator.

Transmission quality

Because live video and audio signals have to be digitized, compressed, and transmitted over narrow bandwidth communications lines, videoconference images are usually not as sharp as images on a normal TV broadcast. The difference in quality will be especially noticeable if people move around.

As a backup, consider sending an electronic file of your computer presentation to the remote sites before your conference.