

# ITS Resource Center Home

## Create a High-Quality Videoconference

### Contact Information

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Regardless of which videoconferencing solution is chosen for communication, it is vitally important to prepare the locations where a call will take place to experience the highest possible quality conversation. The following are suggestions and tips to guide you.

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### General Considerations

- If the conversation is high-risk/high-value, at least one test should be performed with all participants before the actual conversation.
  - It is also very important to ensure that this test is performed with the actual equipment all participants will use. If a participant adds or removes a microphone, video camera, or changes computers, another test should be performed.
- Remember that accidents can happen: pets can meander into the conversation and voice their opinions, cell phones have the potential to ring, and items can fall and clatter. While all participants should attempt to prepare for these eventualities, it is best to accept that these inevitable distractions are a part of the conversation.
- Remember that participants within range of the webcam and the microphone are involved in the videoconference: anything uttered or any act performed within range of either device will be transmitted to all participants. It behooves everyone to be aware (by using Preview features available on all computers/software) of what will be seen and heard before the videoconference begins.

### Lighting

Proper lighting is an essential ingredient for a successful, high-quality videoconference. "A webcam isn't the most flattering piece of technology," according to Stephen Winzenburg in an article for the Winter/Spring 2012 edition of the Chronicle of Higher Education, "[it can] make you appear gaunt, overweight, beady eyed, or narcoleptic. And often you look all those things at the same time." To ensure that all participants see each other in the best possible light, everyone should:

- **Ensure the environment is well-lit--turn on as many lights as possible;**
- **Be mindful of such issues as camera angle, background, and any other light sources that could affect the conversation;**

- A room with a window might be a nice place to have a chat, but the sun streaming in can wreak havoc on the quality of the conversation;
- If you must have a conversation in a room with a window, **be sure to test your setup around the same time you anticipate having the conversation to ensure a uniform experience**;
- **Test, test, test, test, test**: almost all software and computers have the ability to provide participants with a preview and this preview is what other participants will actually see--make sure the contents of the preview are what you want the other participants to see.
- If a high-quality conversation is desired, it may behoove participants to purchase a dedicated webcam instead of using a computer's built-in webcam (if applicable). ITS has enjoyed success with devices like the [Logitech C920](#).

## Sound

Problems with sound are often the cause of videoconferencing woes. In addition to the ambient noise issue covered in the "Location" section, there are other potential problems one should be aware of:

- Echo/Feedback
  - A problem arises whenever a sound input is located near a sound output: If you put a microphone IN FRONT of a speaker, a positive feedback loop will be generated, i.e. loud, screechy, piercing sound that is painful. **Be sure either to place the speaker far away from the microphone, wear headphones, or invest in a microphone with built-in anti-feedback technology**
  - Most laptops, all-in-one desktops (e.g. the iMac), and smartphones have built-in webcams, microphones, and speakers. While they are sometimes configured to interoperate without generating feedback, one cannot rely on them to work perfectly, especially for high-value conversations. **All participants are STRONGLY encouraged to wear headphones to eliminate echoing/feedback.**
- Configuration
  - The peripherals required to perform a videoconference interoperate well, but are susceptible to problems. If participants are unable to hear each other, see each other, or connect, there may be a problem with the configuration of the peripherals, the software for the chat (e.g. Skype, Google Talk), or the software drivers that the computer uses to communicate with the devices. While the configuration may be easier with the built-in microphone, webcam, speaker setup, problems can plague those setups as well. **ITS strongly recommends testing the full setup before any videoconference.** If problems are identified *before* the actual conversation, chances are better that they can be researched and resolved without compromising the actual conversation.

## Accessibility Issues

- Hearing Aids/Lipreaders
  - All communications conducted using these solutions will be affected to varying degrees by synchronicity issues. For example: participants may notice that mouths move independently of the sound they generate. While this is becoming a more common experience, it can be jarring, especially for those who need to read lips to understand what is being said. Proper balancing of audio is also key to ensure that participants whose hearing is impaired can participate equally in the conversation.

## Location

Through the miracle of modern technology, these conversations can now take place at any time and in any location, e.g. cafés, libraries, street corners, dorm rooms, hospitals, vel sim. Just because they can take place in every location does not necessarily mean they *ought* to take place in every location. Both parties should consider:

- The ambient noise in their respective environments--**loud environs equals bad conversations**;
- The people whom they might affect with the conversation--**not everyone needs to be privy to the conversation**;
- The speed of the internet connections at the locations--a low-speed DSL connection will not create a good videoconferencing experience (You can test your bandwidth [here](#).)

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