

Instructional Strategies for Videoconferencing

from Videoconferencing for Learning

<http://www.kn.pacbell.com/wired/vidconf/instruct/instruct.html>

Set Expectations

Because of vast experience watching television, students may not expect to actively participate in videoconferencing. Use your role as facilitator to help students understand that you expect interaction and active learning.

Import

A simple way to challenge the television preconception issue is to communicate expectations to the learner prior to instruction. A brief letter or a few comments at the beginning of a lesson can go a long way toward helping learners understand differences between broadcast television and two-way compressed video. Consider explaining the difference in audio/visual quality along with a few suggestions to optimize that quality. One might, for example, encourage learners to keep background noise and motion to a minimum and explain ways to deal with the audio delay. A teacher should also prepare learners for an active experience. Assign a pre-session activity or begin the lesson with a discussion. Actively involve learners early and often, using small group or hands-on activity, reading, writing, discussion, and questions to get them out of the passive "viewing" mode.

Here are some additional ideas for communicating expectations:

- At the beginning of each conference, remind students that they are to participate actively.
- Model different types of active learning behavior.
- Remind the students this is two-way video, not one-way TV.
- Discuss etiquette required for two-way video.
- Pre-assign activities to get the students more involved.
- Allow students to participate in equipment operations. This will help you delegate tasks so that you are able to facilitate and monitor interactions as well as manage the classroom.

Provide Supporting Materials

Here are a few suggestions to help improve communication and encourage learner involvement.

- Create and distribute an agenda so participants at both sites will know what to expect.
- Distribute a student guide with clear learning objectives to both the local and distant sites before the conference. Provide sections with key words or phrases left blank for the student to fill in. Allow space for note taking.
- When feasible, include graphics shown during the videoconference in the student guide.
- Sequence all materials in the order presented during class.
- Send a roster of names from your local site, and obtain one from the distant site before the conference so that you may call on specific students to promote interactive discussions.
- When explaining a learner activity or assignment, display a slate with simple, bulleted instructions. Leave the slate displayed during the activity for reference.

Engage Students with Variety and Interaction

Incorporate variety into instruction to keep interest and motivation high. Use relevant visuals or sounds to illustrate points, and if possible, bring in a guest speaker to share a different perspective, answer questions, or provide real-world feedback on student projects. Even with thrilling visuals and instructors, nobody wants to watch a talking head for hours, so make sure learners have an opportunity to focus attention away from the screen. Assign small group activities with a task that can be discussed later. Tag a break onto an activity to give students a chance to stretch and talk. Highly motivated learners in a tightly focused lesson can tolerate lengthy lectures, but as a rule of thumb, don't lecture for more than 15 minutes at one time. Instead, alternate lectures with activities or discussions.

To promote interactivity:

- Include the participants in the conference within the first 5 minutes. Involve them early so they don't turn away. Try a name game, or ask a compelling question that taps their affective domain.
- Devote 30%-65% of each hour to student activity.
- For group work, select individuals at each site to participate on inter-site teams.
- To encourage interactivity, remember the rule: no more than 10-15 minutes of instructor talk without some learner-centered response. This will enable you to put the responsibility of learning back in the learner's hands.
- Using the pre-obtained roster, call on students at both sites by name. Encourage discussion.

- Take as many questions from the distant site as you take from the local site. To answer questions:
 - look into the camera and answer the person who asked the question
 - ask the student asking the question a couple of questions to see if it can be answered by that student or another student
 - if there is more than one site, try to get a discussion going or answer between the remote locations
- Model verbal and visual interaction:
 - interact early and often
 - move and gesture normally rather than wildly; avoid swaying, rocking or pacing
 - avoid interrupting

To increase variety:

- Change the pace to keep learners' attention. Slow the pace for new or different content. Increase the pace for reviewing content.
- For discussions, employ any of the following:
 - Instructor-directed discussions to clarify content, define terms, identify assumptions, motivate participation, and recognize contributions.
 - Group-centered discussions to build on experience, explore hypotheses, strengthen relationships, raise questions, formulate ideas, and examine assumptions.
 - Collaborative discussions to solve problems, share responsibilities, compare alternatives, test hypotheses, and modify assumptions.
- Use others to teach. Vary in format, using:
 - Participant presentations
 - Small and large group work
 - Participant and guest speaker demonstrations
 - Role plays
 - Debates
- Use different methods to deliver content:
 - Instructor-centered to learner-centered teaching
 - Alternate between new content and review
 - Simulations and games
 - Case studies
 - Questions, both factual and complex. Avoid yes-no questions. Instead, ask a question, pause to allow time for student to respond, and call on specific student. Increase attention with perceptual and inquiry arousal questions.

- Use a variety of complementary media to support instruction. Here are some ideas:
 - ❑ book illustrations
 - ❑ cartoons
 - ❑ diagrams or charts
 - ❑ photos
 - ❑ semantic maps (to minimize text and present relations graphically)
 - ❑ slates- single screen displays
 - ❑ PC-generated graphics (these can be shown on many units through a scan converter)
 - ❑ brief video clips (discuss relevance before and after showing the clip)
- Use silence to have learners read or write. Use a slate to explain what to do (e.g. read page 10, and complete the short answer questions).

Reduce Distractions During Learning Activities

Since variety is so engaging, reduce the potential distraction of the screen by posting a still image or slate during a class activity. Don't be afraid to use silence. Though we expect a "busy" screen, music or chatter can distract students from learning.

Encourage Dialog

Asking a question can be daunting for students, especially if it means they must get the attention of a remote teacher and talk to a TV screen. Teachers can help by noting the body language of remote students and taking the time to query when students seem puzzled or disinterested. Eye contact and use of names both help make students feel more comfortable. These people skills are obvious and natural in a "live" classroom, but may seem awkward in a distance learning situation. "Eye contact" means looking at the camera and the monitor rather than local students, and teachers might have to make a special effort to attend to remote learners. To help out introverted students, consider alternative modes for questions and comments. Make a fax machine available or solicit e-mail for questions and comments. Consider holding videoconference office hours or paying a visit to the remote site. Use resources creatively to establish rapport and help all learners participate.